# STATE OF RHODE ISLAND INVESTMENT COMMISSION MEETING

DATA AT September 30, 2016

October 26, 2016 MEETING

#### MEMBERS OF THE STATE INVESTMENT COMMISSION

#### Honorable Seth Magaziner, Chair

Mr. Robert K. Benson
Mr. J. Michael Costello
Mr. Thomas P. Fay
Mr. Thomas Mullaney
Mr. Frank J. Karpinski
Ms. Marie Langlois
Ms. Sylvia Maxfield
Ms. Paula M. McNamara
Mr. Thomas Mullaney
Ms. Marcia Reback



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, October 26th 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 September 28th\*
- Recommendation to update the Investment Policy Statement\*
  - Crisis Risk Offset overview
- Asset Allocation Transition Update
  - Systematic Trading Update
  - Private Equity Performance and Illiquid Pacing update Cliffwater LLC, Thomas Lynch
  - Recommendation on Hedge Fund Redemptions \*/\*\*
     Cliffwater LLC, Thomas Lynch
- Consideration of expanding the scope of services of Pension Consulting Alliance contract to include assistance with manager searches\*
- Consideration of Extension to Capital Cities Contract\*
- Legal Counsel Report
- Chief Investment Officer Report
  - Performance Update
  - ABLE update
  - Issuance of Consulting RFP for 401(a) and 457 Plans
- Treasurer's General Comments

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

<sup>\*\*</sup> Commission members may elect to go into executive session pursuant to Rhode Island General Laws §42-46-5 (a) (7).

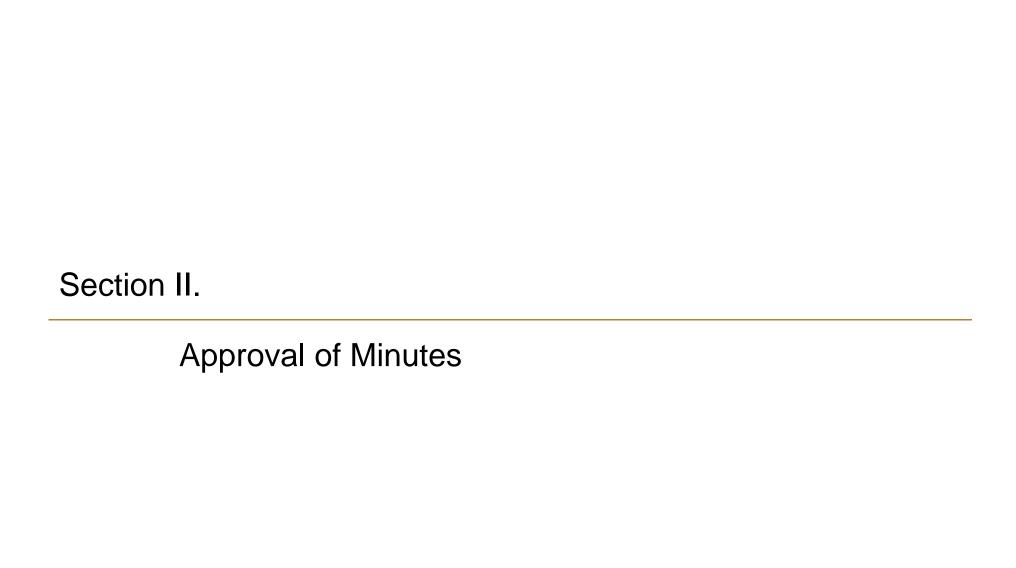


#### State of Rhode Island and Providence Plantations Office of the General Treasurer

Seth Magaziner General Treasurer

#### POSTED ON October 21, 2016

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.





#### **State Investment Commission**

Monthly Meeting Minutes September 28, 2016 9:00 a.m. Room 205, State House

The Monthly Meeting of the State Investment Commission (SIC) was called to order at 9:00 a.m., Wednesday September 28, 2016 in Room 205 of the State House.

#### I. Roll Call of Members

The following members were present: Mr. Michael Costello, Mr. Thomas Fay, Ms. Marie Langlois, Ms. Sylvia Maxfield, Ms. Paula McNamara, Mr. Thomas Mullaney, Ms. Marcia Reback, and Treasurer Seth Magaziner. Mr. Frank Karpinski arrived at 9:01

Also in attendance: Mr. David Iden and Mr. Larry Brown of TIAA; Mr. Dillon Lorda, Mr. John Burns and Mr. Allen Emkin of Pension Consulting Alliance (PCA), general consultants; Ms. Sally Dowling of Adler Pollock & Sheehan P.C., legal counsel; Mr. Tim Nguyen, Chief Investment Officer (interim); and members of the Treasurer's staff.

Treasurer Magaziner called the meeting to order at 9:00 a.m.

## II. Approval of Minutes

On a motion by Ms. Reback and seconded by Mr. Mullaney, it was unanimously **VOTED: to approve the draft of the minutes of the August 1st 2016 meeting of the State Investment Commission.** 

## III. Approval of Minutes

On a motion by Ms. Reback and seconded by Mr. Mullaney, it was unanimously VOTED: to approve the draft of the minutes of the September 8th 2016 meeting of the State Investment Commission.

## IV. TIAA Quarterly Performance Review

Mr. Iden summarized the results for TIAA's second quarter, results ending June 30. Mr. Iden noted the plan is growing well and that plan participation has increased since 2015.

Mr. Brown then spoke about investment performance, saying the year has been a pleasant surprise. He stated that although presenting a quarterly review, the investment numbers have been updated through August 31. He notes all investment portfolios are in line with their relative indices. In reference to midcap, he explains that the state has met the minimum to move to the next lowest share class (from 8 basis points to 7 basis points), a transition that will take place in October.

### V. Recommendation to the AEW Core Fund

Mr. Lorda explained there is a tactical opportunity to exchange class shares within the AEW exposure to add \$11 million to its allocation in exchange for reducing fees by \$135,000 a year. He stated this was an opportunity to meet strategic goals of reducing management costs while increasing allocation to core

portfolio. AEW, established in 2009, invests in core properties, which are income producing, high quality real estate, similar to other core managers within the portfolio, with a major difference being AEW invests in small properties and in markets that complement existing holdings.

The board asked questions.

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

VOTED: to approve an additional \$11-million-dollar commitment to AEW and change the share class to allow for lower fees

## VI. Asset Liability Model Output and Asset Allocation Adoption

Mr. Emkin reviewed the parameters in which PCA ran the second model, parameters in which the Board provided at the September 8<sup>th</sup> meeting. The key priorities were to continue progress toward total plan funding, avoid funding level dropping below 50% and avoid employer contribution rising to more than 30% of payroll. Furthermore, U.S. Equity and non-U.S. Equity were equally weighted and Crisis Risk Offset (CRO) was set to 8%, with half placed in long duration U.S. Treasuries and half placed in systematic trend following. The model was run under various stress tests, which included both inflation and deflation scenarios. Mr. Emkin presented that the transition would mainly take place over the next 12-18 months but full implementation would not occur for 5 years. Treasurer Magaziner told the board it will be important to take time and care during implementation as it is necessary to do it well, not do it quickly.

Ms. McNamara asked if it were a concern that another Asset Liability study would come around in 5 years when the changes made during this study would not be fully observed. Treasurer Magaziner said the timeline is not mandated and can be adjusted. Additionally, the long-term incremental changes would only be to private equity; all other classes would have transitioned well before that time.

Ms. Maxfield asked about the approach to reducing hedge funds. Treasurer Magaziner stated that staff is still making determinations as to which hedge funds will be kept but going forward the litmus test for retaining a hedge fund will be that it provides returns and that it offers true protection against market volatility - they must be non-correlated to the market.

The board reviewed the model output and portfolio transition plan. It was advised if adopted, the next steps would be to make revisions to the Investment Policy Statement and conduct policy benchmark and investment manager reviews.

The board asked questions.

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

**RESOLVED:** That following an intensive Asset Liability Review, the Commission deems it prudent to adopt the strategic asset allocation policy referred to as the "Focus Portfolio" in today's presentation by the Pension Consulting Alliance; and,

**RESOLVED:** That the transition of the current investment allocation to the strategic asset allocation policy be implemented over such a time period as to inure maximum benefit to the fund and as prudence requires; and,

**RESOLVED:** That Treasury staff revise the appropriate Investment Policy Statements previously adopted by the Commission to incorporate the new strategic asset allocation policy and the implementation

timetable and forward the revised Investment Policy Statements to the Commission for review, discussion and approval.

## **VII. Legal Counsel Report**

There was no legal counsel to report.

## VIII. Chief Investment Officer Report

Mr. Nguyen began by noting oil prices bounced back in August, causing energy stocks to rise from their July slide. He also observed the Fed again declined to raise interest rates but economic conditions are ripe for a hike soon. Against this backdrop, developed equities were flat while Emerging Markets continued their strong performace. U.S. Treasury yields inched higher but returns within Fixed Income were down slightly.

On the month, the total portfolio rose by 0.44%, significantly beating its 0.33% benchmark and the 60/40 0.16%. All disciplines posted positive returns on the month with the exception of TIPS which posted a -0.48% return versus its 0.51% benchmark. Over a 3-year time frame, when comparing to the 5.96% return of the 60/40, the portfolio slightly underperformed at 5.89% However, during a 5-year timeframe, the portfolio considerably outperformed at 7.17% when the 60/40 posted a 6.49% return; all of this was accomplished with significantly less risk.

Mr. Nguyen said with the Asset Liability concluding, more time can be devoted to investment manager performance reviews, which will begin to occur more regularly at the October meeting.

#### IX. Treasurer's General Comments

Treasurer Magaziner expressed his gratitude to the Board, to Treasury staff and to PCA for their diligence, engagement and hard work throughout the Asset Liability study process. He said he felt good about the changes being made to the portfolio as it is a measured and thoughtful approach that provides diversification. He cautioned, however, that the hard work had just begun as its execution will require continued commitment and support.

Treasurer Magaziner told the board about a recent staffing survey that had been conducted that showed the Investments team was woefully understaffed; for every \$1 billion dollars of a pension plan, the average \$5 - \$15 billion public pension fund has 1 investment staff member – Treasury has three for a nearly \$8-billion-dollar fund. It will be necessary to have a discussion with the Retirement Board to fund additional analyst positions to assist not only the implementation phase but to ensure the plan is operating and performing to its best capability at all times.

There being no other business to come before the Board, on a motion by Mr. Fay and seconded by Ms. Reback the meeting adjourned at 10:41 a.m.

Respectfully submitted,

Seth Magaziner, General Treasurer Section III.

**Staff Summary** 

# **Portfolio Highlights**

#### PORTFOLIO PERFORMANCE

#### September 2016

US financial markets were largely unchanged during the month of September. While US Equities and Fixed Income ended the month where they started, Emerging Markets Equities continued their year-long rally while Non-Developed Market Equities over 70% of their yearly gains during the month

For the month, the total portfolio value increased by approximately \$23.1 million to rest at \$7.67 billion. The month's increase comes from \$45.8 million of positive investment performance reduced by \$22.7 million of transfers to meet pension payroll in excess of pension contributions. On a percentage basis, the portfolio rose by 0.60% exceeding the plan benchmark of 0.59% and the 0.34% return from the basic 60% global equity/40% fixed income allocation.

Calendar year-to-date, the total portfolio value has increased by \$100.1 million, with portfolio gains of \$379.3 million offset by \$279.2 million in pension payments. The portfolio's 6.20% investment gain exceeds the benchmark's 5.77%, but lagged the 60/40 allocation's 6.43% return.

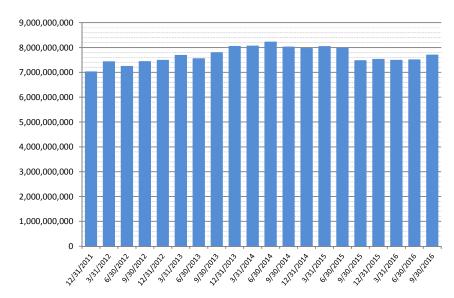
#### From a quarterly perspective

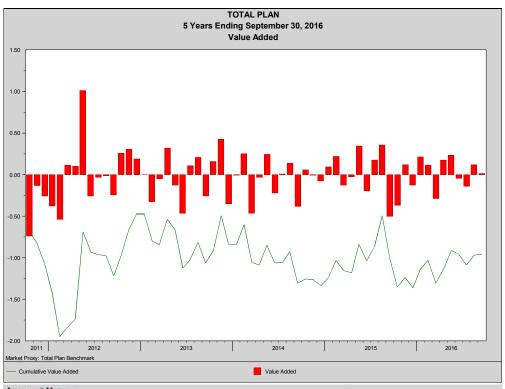
Although US economic growth remains far below its long-term average, the economy continues to move forward in one of the longest expansions in modern history. Equity and bond markets around the world were shocked with the British vote to leave the EU. The Bank of England telegraphed its intention to help address uncertainty in the country's financial system. However, for the rest of the EU, Brexit opens a Pandora's Box of potential problems. On the immediate horizon, the uncertainty is likely to slow already low levels of economic growth. Like many other peripheral EU countries, Italy has yet to address the billions of euros of bad loans dating back to the 2008 financial crisis. Brexit may bring these problems to the forefront along with the EU's limited political cohesion and inability to address conditions in a consistent manner.

Fiscal year-to-date, the total portfolio has increased by 172.2 million, with portfolio gains of 233.3 million offset by 61.1 million in pension payments. The portfolio's 3.45 % return matched the 3.45% benchmark and surpassed the 3.35% 60/40 return.

Over a 3-year time frame and when comparing against a 60/40 portfolio, we outperformed at 5.05% when the 60/40 portfolio earned 4.88%. Over a 5-year time frame and when comparing against a 60/40 portfolio, we significantly outperformed at 8.34% when the 60/40 portfolio posted 7.75%.

#### **GRAND TOTAL - Market Value**





Account Name Benchmark Name	Market Value (M)	Month	Fiscal YTD
US Public Equity	1,217.24	0.14	4.39
Non-US Public Equity	1,174.97	1.27	7.19
Equity Hedge Funds	572.90	0.86	3.55
Private Equity	544.56	1.00	2.35
Traditional Fixed Income	1,067.85	-0.04	0.74
Real Estate	521.14	0.94	2.62
Real Return Hedge Funds	496.95	0.17	1.55
Publicly Traded Infrastructure	178.38	1.99	4.19
Priv Listed Infrastructure	85.34	2.38	2.22
Credit Aggregate	427.54	0.70	2.55
Inflation-Linked Bonds	275.28	0.79	0.61
Total Cash	58.73	0.04	0.24
TOTAL PLAN	7,697.48	0.60	3.45

BNY MELLON ASSET SERVICING



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

#### **Seth Magaziner**

**General Treasurer** 

October 20, 2016

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

This is to certify that the amounts so listed below belong to the credit of the Employees' Retirement, Municipal Employees', State Police and Judicial Retirement Systems of the State of Rhode Island at the close of business on September 30, 2016.

## Employees' Retirement System of Rhode Island Composite Reporting Investment Valuation September 30, 2016

Asset Class	Base Market Value
Grand Total	7,697,477,891
CASH EQUIVALENT*	137,956,515
<b>EQUITY HEDGE FUNDS**</b>	571,441,688
GLOBAL PUBLIC EQUTIY	3,439,135,737
CREDIT	401,149,672
INFLATION-LINKED BDS	277,413,464
PRIVATE EQUITY**	544,561,908
REAL ESTATE**	521,135,408
REAL RET HEDGE FUNDS**	496,948,603
INFRASTRUCTURE**	261,117,088
US TRADITIONAL FIXED	1,046,617,808

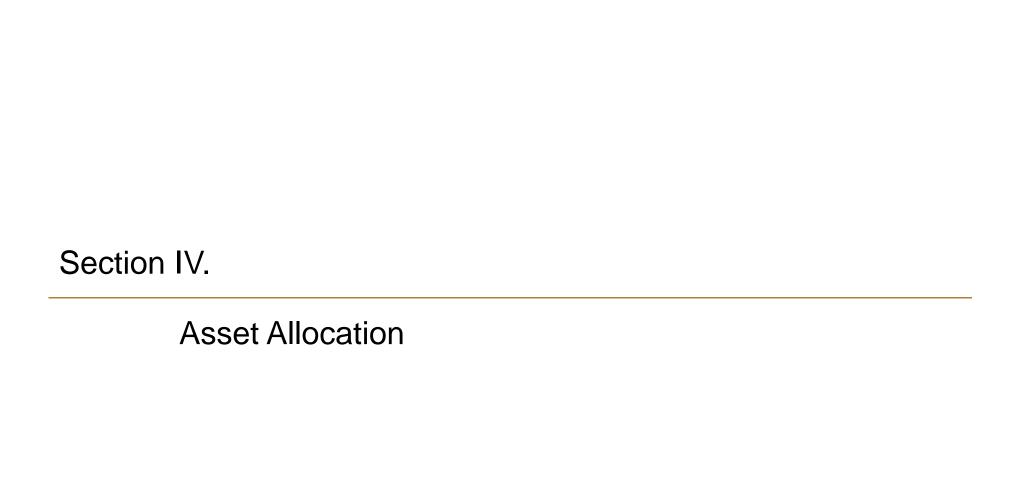
Plan Allocations	%	Base Market Value
Grand Total	100.00%	7,697,477,891
STATE EMP RET PLAN	75.67%	5,811,722,049
MUNI EMP RET PLAN	17.94%	1,382,856,671
TEACHER'S SURVIVOR BENEFIT	3.80%	292,942,141
STATE POLICE RET PL	1.55%	119,780,992
JUDICIAL RET PLAN	0.81%	62,296,887
NON-CONTRIB JUD RET	0.01%	615,661
NON-CONT ST POL RET	0.22%	27,263,490

<sup>\*</sup> 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.

Respectfully submitted,

Kerri Baker Cash Manager

<sup>\*\*</sup> 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.



# **Asset Summary**

Balance Date: 9/30/2016



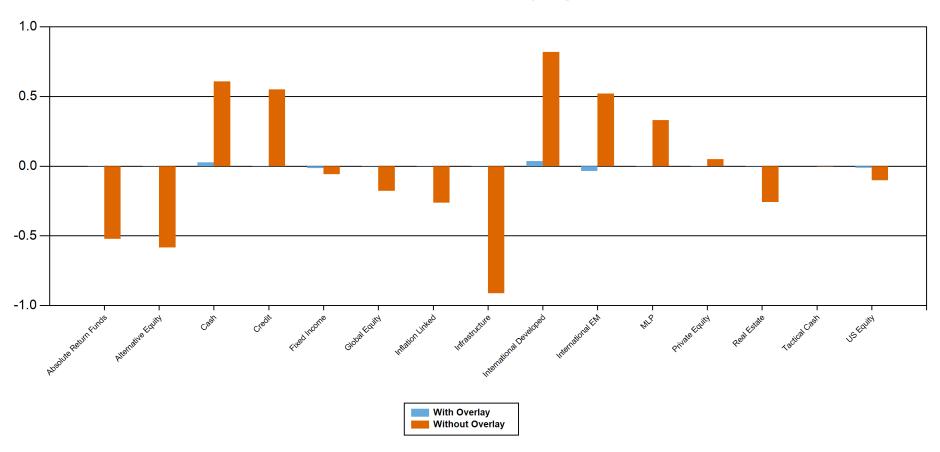
Asset Class	Physical E	xposure	Synthetic Ex	(posure	Net Po	sition	Overlay	<u>Target</u>	Policy Ta	arget
Total Market Value	7,659.2	100.0 %	0.0	0.0 %	7,659.2	100.0 %	7,659.3	100.0 %	7,659.3	100.00 %
Cash	46.6	0.6 %	-39.9	-0.5 %	6.7	0.1 %	4.7	0.1 %	0.0	0.00 %
Cash	46.6	0.6 %	-39.9	-0.5 %	6.7	0.1 %	4.7	0.1 %	0.0	0.00 %
Equity	4,559.2	59.5 %	21.7	0.3 %	4,580.9	59.8 %	4,581.8	59.8 %	4,519.0	59.00 %
Alternative Equity	568.0	7.4 %	0.0	0.0 %	568.0	7.4 %	568.0	7.4 %	612.7	8.00 %
Global Equity	1,058.6	13.8 %	0.0	0.0 %	1,058.6	13.8 %	1,058.6	13.8 %	1,072.3	14.00 %
International Developed	828.7	10.8 %	-20.8	-0.3 %	807.9	10.5 %	805.1	10.5 %	765.9	10.00 %
International EM	346.2	4.5 %	-26.9	-0.4 %	319.4	4.2 %	322.0	4.2 %	306.4	4.00 %
Private Equity	540.0	7.0 %	0.0	0.0 %	540.0	7.0 %	540.0	7.0 %	536.1	7.00 %
US Equity	1,217.7	15.9 %	69.4	0.9 %	1,287.1	16.8 %	1,288.1	16.8 %	1,225.5	16.00 %
Fixed	1,067.8	13.9 %	18.2	0.2 %	1,086.0	14.2 %	1,087.2	14.2 %	1,072.3	14.00 %
Fixed Income	1,067.8	13.9 %	18.2	0.2 %	1,086.0	14.2 %	1,087.2	14.2 %	1,072.3	14.00 %
Other	1,985.6	25.9 %	0.0	0.0 %	1,985.6	25.9 %	1,985.6	25.9 %	2,068.0	27.00 %
Absolute Return Funds	496.1	6.5 %	0.0	0.0 %	496.1	6.5 %	496.1	6.5 %	536.1	7.00 %
Credit	425.1	5.6 %	0.0	0.0 %	425.1	5.6 %	425.1	5.6 %	383.0	5.00 %
Inflation Linked	286.3	3.7 %	0.0	0.0 %	286.3	3.7 %	286.3	3.7 %	306.4	4.00 %
Infrastructure	83.4	1.1 %	0.0	0.0 %	83.4	1.1 %	83.4	1.1 %	153.2	2.00 %
MLP	178.4	2.3 %	0.0	0.0 %	178.4	2.3 %	178.4	2.3 %	153.2	2.00 %
Real Estate	516.3	6.7 %	0.0	0.0 %	516.3	6.7 %	516.3	6.7 %	536.1	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: 9/30/2016



#### **Percent Deviation from Overlay Target**



**Total Absolute Notional Value: 135.3 (USD)** 

# **Asset Summary**

Balance Date: 9/30/2016



							Others Menters Veloce			
<u>Manager</u>	<u>Total Market</u>	<u>Value</u>	Equity Market	<u>Value</u>	Fixed Market	<u>Value</u>	Other Market	<u>Value</u>	<u>Cash Balan</u>	<u>ce</u>
Total Assets	7,659.3	100.0 %	4,559.2	59.5 %	1,067.8	13.9 %	1,985.6	25.9 %	46.6	0.6 %
Cash	46.6	0.6 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	46.5	0.6 %
Cash Acct (Pooled Trust)	29.1	0.4 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	29.0	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	17.5	0.2 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	17.5	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 %
Equity	4,559.2	59.5 %	4,559.2	59.5 %	0.0	0.0 %	0.0	0.0 %	0.1	0.0 %
Alternative Equity	568.0	7.4 %	568.0	7.4 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
Ascend Partners Fund II, LP	68.7	0.9 %	68.7	0.9 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
Davidson Kempner	78.7	1.0 %	78.7	1.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
Elliot Associates, LP	90.4	1.2 %	90.4	1.2 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
ESG	40.8	0.5 %	40.8	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	5.5	0.1 %	5.5	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	105.3	1.4 %	105.3	1.4 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
Viking Global Equities	101.1	1.3 %	101.1	1.3 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
Global Equity	1,058.7	13.8 %	1,058.6	13.8 %	0.0	0.0 %	0.0	0.0 %	0.1	0.0 %
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	1,058.6	13.8 %	1,058.6	13.8 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
International Developed	828.7	10.8 %	828.7	10.8 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
SSgA MSCI Canada	99.3	1.3 %	99.3	1.3 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
SSgA MSCI EAFE	729.4	9.5 %	729.4	9.5 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
International EM	346.2	4.5 %	346.2	4.5 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
SSgA Emerging Mkts	346.2	4.5 %	346.2	4.5 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
Private Equity	540.0	7.0 %	540.0	7.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
Combined Private Equity	540.0	7.0 %	540.0	7.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
US Equity	1,217.2	15.9 %	1,217.2	15.9 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
Rhode Island Transition Acct	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
SSgA Russell 3000	1,217.2	15.9 %	1,217.2	15.9 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
US Large Cap	0.4	0.0 %	0.4	0.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
Shott Capital	0.4	0.0 %	0.4	0.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
Fixed	1,067.8	13.9 %	0.0	0.0 %	1,067.8	13.9 %	0.0	0.0 %	0.0	0.0 %
Fixed Income	1,067.8	13.9 %	0.0	0.0 %	1,067.8	13.9 %	0.0	0.0 %	0.0	0.0 %
MacKay Shields Core	527.4	6.9 %	0.0	0.0 %	527.4	6.9 %	0.0	0.0 %	0.0	0.0 %
Pyramis Core	540.4	7.1 %	0.0	0.0 %	540.4	7.1 %	0.0	0.0 %	0.0	0.0 %
Other	1,985.6	25.9 %	0.0	0.0 %	0.0	0.0 %	1,985.6	25.9 %	0.0	0.0 %
Tactical Cash	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
Tactical Cash Template	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
	0.0	2.2 /0	3.0	2.2.0	2.0	0	2.0			2.2 /0

<sup>3</sup> Copyright © 2016 Russell Investments.
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#### Rhode Island - Rhode Island

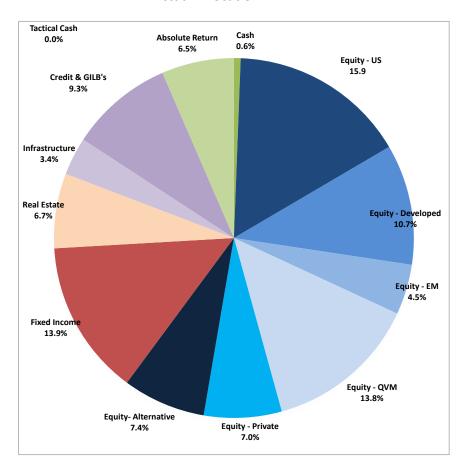
# **Asset Summary**

Balance Date: 9/30/2016

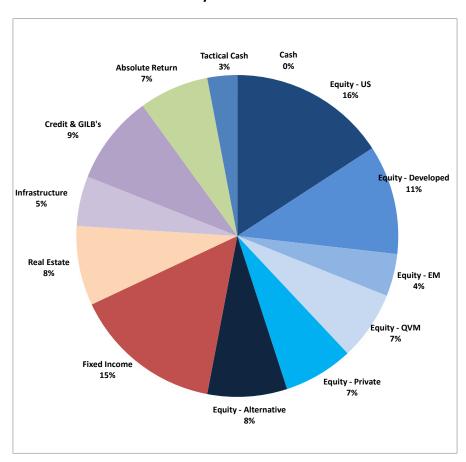


<u>Manager</u>	Total Market V	Total Market Value		<u>Value</u>	Fixed Market V	/alue	Other Market \	/alue	Cash Balan	ce
Absolute Return Funds	496.1	6.5 %	0.0	0.0 %	0.0	0.0 %	496.1	6.5 %	0.0	0.0 %
Brevan Howard LP	76.4	1.0 %	0.0	0.0 %	0.0	0.0 %	76.4	1.0 %	0.0	0.0 %
Brigade Levered Capital	59.1	0.8 %	0.0	0.0 %	0.0	0.0 %	59.1	0.8 %	0.0	0.0 %
Capula Global Relative Value	65.3	0.9 %	0.0	0.0 %	0.0	0.0 %	65.3	0.9 %	0.0	0.0 %
Claren Road Cr Fund	6.1	0.1 %	0.0	0.0 %	0.0	0.0 %	6.1	0.1 %	0.0	0.0 %
D.E. Shaw Composite Fund	94.6	1.2 %	0.0	0.0 %	0.0	0.0 %	94.6	1.2 %	0.0	0.0 %
Graham Global	55.5	0.7 %	0.0	0.0 %	0.0	0.0 %	55.5	0.7 %	0.0	0.0 %
Oz Domestic Partners II	102.4	1.3 %	0.0	0.0 %	0.0	0.0 %	102.4	1.3 %	0.0	0.0 %
Winton Futures Ltd Fund	36.7	0.5 %	0.0	0.0 %	0.0	0.0 %	36.7	0.5 %	0.0	0.0 %
Credit	425.1	5.6 %	0.0	0.0 %	0.0	0.0 %	425.1	5.6 %	0.0	0.0 %
PIMCO	215.4	2.8 %	0.0	0.0 %	0.0	0.0 %	215.4	2.8 %	0.0	0.0 %
WAMCO	209.7	2.7 %	0.0	0.0 %	0.0	0.0 %	209.7	2.7 %	0.0	0.0 %
Inflation Linked	286.3	3.7 %	0.0	0.0 %	0.0	0.0 %	286.3	3.7 %	0.0	0.0 %
Brown Brothers Harriman-GILBS	286.3	3.7 %	0.0	0.0 %	0.0	0.0 %	286.3	3.7 %	0.0	0.0 %
Infrastructure	83.4	1.1 %	0.0	0.0 %	0.0	0.0 %	83.4	1.1 %	0.0	0.0 %
Combined Priv. Infrastructure	83.4	1.1 %	0.0	0.0 %	0.0	0.0 %	83.4	1.1 %	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 %
MLP	178.4	2.3 %	0.0	0.0 %	0.0	0.0 %	178.4	2.3 %	0.0	0.0 %
Harvest Fund Advisor	178.4	2.3 %	0.0	0.0 %	0.0	0.0 %	178.4	2.3 %	0.0	0.0 %
Real Estate	516.3	6.7 %	0.0	0.0 %	0.0	0.0 %	516.3	6.7 %	0.0	0.0 %
Combined Real Estate	516.3	6.7 %	0.0	0.0 %	0.0	0.0 %	516.3	6.7 %	0.0	0.0 %

#### **Actual Allocation**

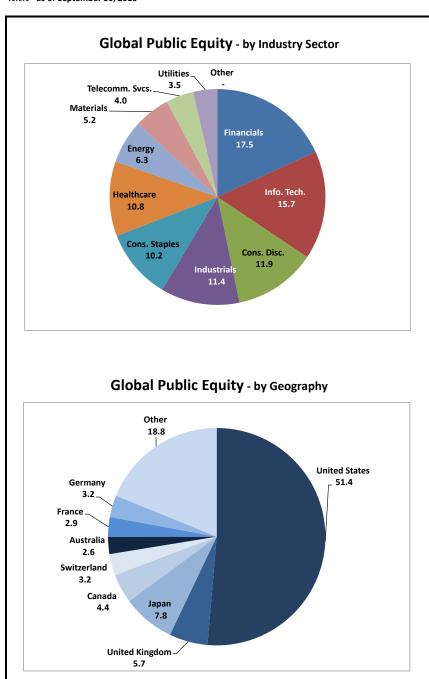


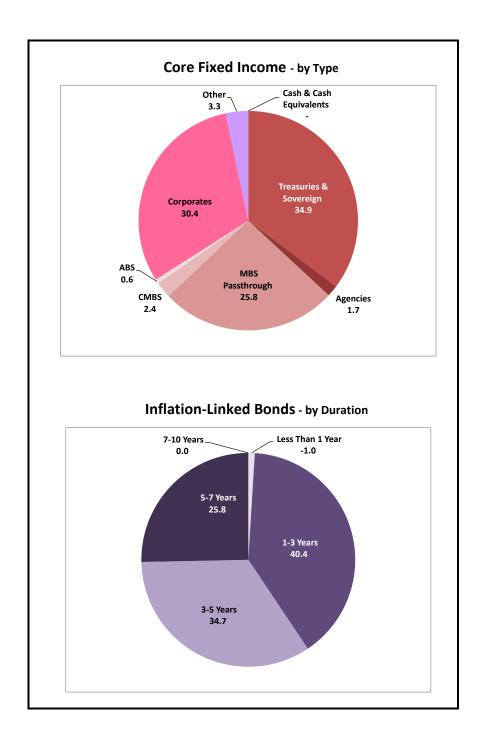
#### **Policy Allocation**



# ERSRI Asset Allocation Public-Asset Portfolios

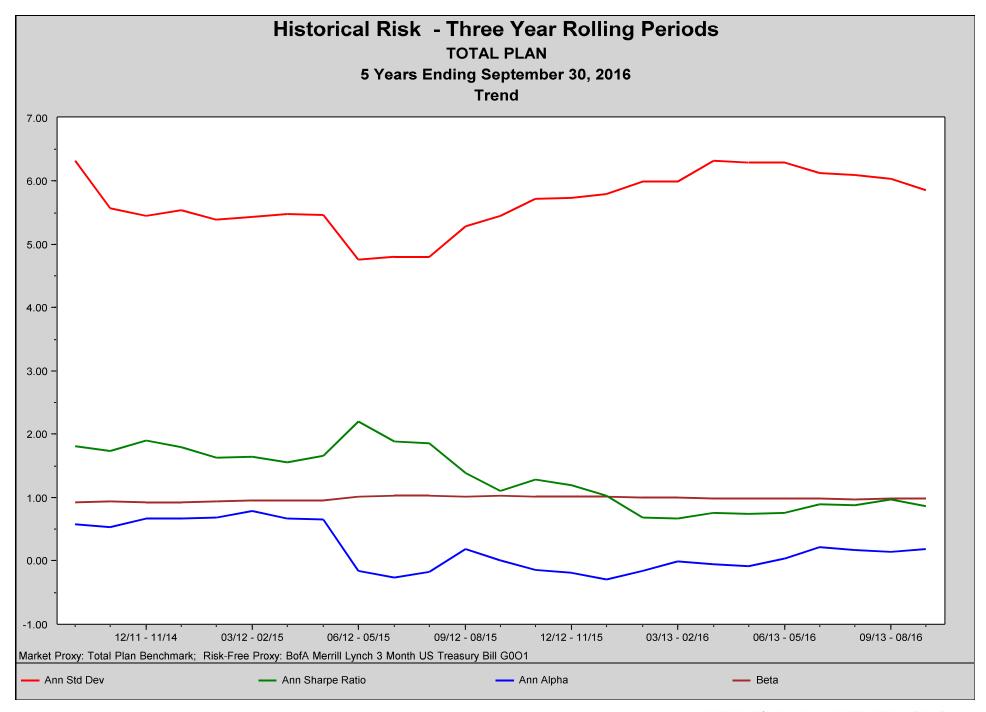
%%% - as of September 30, 2016







**Risk Overview** 



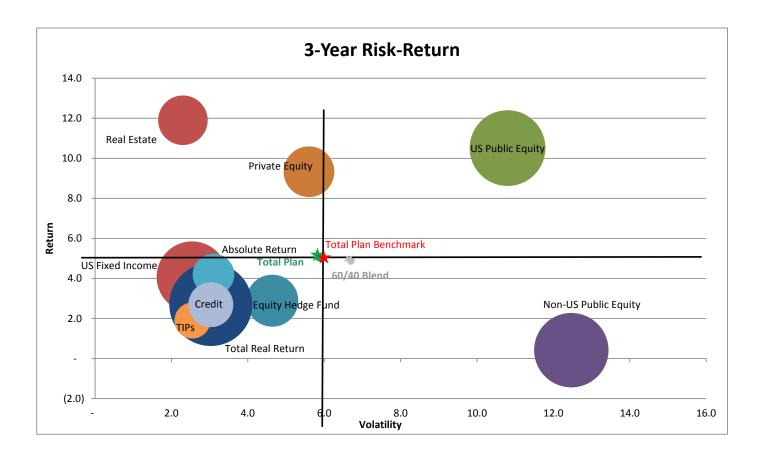
# Risk Exposures 3 Years Ending September 30, 2016

	Annualized Return	Ann Std Dev	Beta (ACWI)	Beta (BC AGG)	Beta (GSCI)	Beta (CPI)
US Public Equity	10.51	10.80	0.9	2 -0.31	0.14	0.70
Non-US Public Equity	0.42	12.48	1.0	8 -0.13	0.28	1.91
Equity Hedge Funds	2.89	4.65	0.23	3 -0.47	0.04	0.38
Private Equity	9.33	5.56	0.0	1 -0.43	0.08	1.58
Traditional Fixed Income	4.08	2.55	0.0	1 0.98	-0.02	-0.21
Real Estate	11.91	2.33	0.0	3 0.36	-0.02	-0.46
Real Return Hedge Funds	3.73	2.59	0.0	0.10	-0.01	-0.02
Inflation-Linked Bonds	1.95	2.56	0.0	3 0.80	0.02	0.29
Cash	0.68	0.37	0.0	0 -0.03	-0.00	-0.04
Russell Overlay Fd	-0.01	0.09	-0.0	0.00	-0.00	-0.02
TOTAL PLAN	5.05	5.85	0.5	2 0.02	0.12	0.80

# 5 Years Ending September 30, 2016 Comparison

	TOTAL PLAN	Total Plan Benchmark	60/40 Blend
Ann Return	8.34	8.54	7.75
Ann Ex Ret vs Mkt	-0.19		
Ann Tracking Error	0.99		
Ann Std Dev	6.38	6.75	7.37
Beta	0.94		
R-Squared	0.98		
Ann Alpha	0.32		
Ann Sharpe Ratio	1.27	1.24	1.04

#### % - as of September 30, 2016





## 3 Years Ending September 30, 2016 Correlation

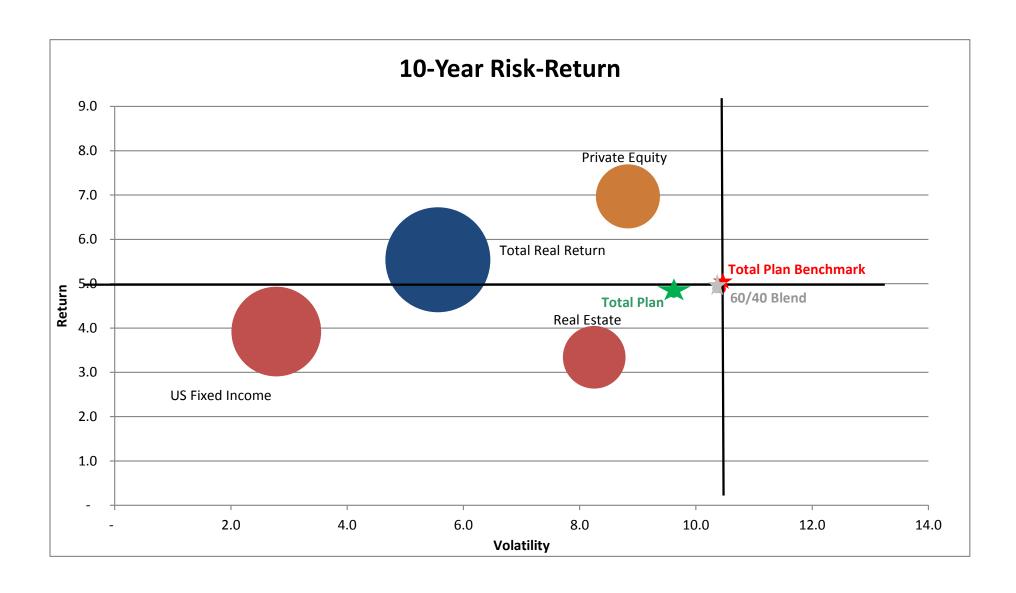
#### Ann Return

	US Pub EQ	Non-US Pub EQ	Eq HF	PE	FI	RE	RR HF	TIPS	Cash	Overlay	Total
US Pub	1.00										
Non-US P	0.86	1.00									
Eq HF	0.59	0.48	1.00								
PE	0.05	0.01	0.06	1.00							
FI	0.03	0.09	-0.19	-0.21	1.00						
RE	0.08	0.17	0.01	-0.27	0.39	1.00					
RR HF	0.35	0.30	0.66	-0.05	0.15	-0.11	1.00				
TIPS	0.00	0.23	-0.26	-0.12	0.83	0.34	0.06	1.00			
Cash	0.13	0.08	0.05	-0.11	-0.13	-0.27	0.16	-0.26	1.00		
Overlay	-0.36	-0.17	-0.43	-0.17	0.07	0.06	-0.30	0.04	0.02	1.00	
Total	0.95	0.96	0.59	0.07	0.13	0.14	0.39	0.18	0.09	-0.30	1.00
Tot BM	0.95	0.97	0.55	0.02	0.11	0.13	0.35	0.16	0.09	-0.25	0.99

## 5 Years Ending September 30, 2016 Correlation

#### Ann Return

	US Pub Eq	Non-US Pub Eq	Eq HF	PE	FI	RE	RR HF	TIPS	Cash	Overlay	Total
US Pub	1.00										
Non-US P	0.85	1.00									
Eq HF											
PE	0.09	0.09		1.00							
FI	0.10	0.26		-0.23	1.00						
RE	0.14	0.22		-0.10	0.34	1.00					
RR HF											
TIPS	0.07	0.24		-0.14	0.77	0.22		1.00			
Cash	0.04	0.01		-0.09	-0.07	-0.04		-0.15	1.00		
Overlay	0.36	0.43		0.05	0.05	0.12		0.09	-0.08	1.00	
Total	0.94	0.96		0.12	0.25	0.21		0.24	0.02	0.40	1.00
Tot BM	0.95	0.96		0.08	0.24	0.19		0.20	0.01	0.45	0.99



## 10 Years Ending September 30, 2016 Correlation

#### Ann Return

	US Pub Eq	Non-US Pub Eq	Eq HF	PE	FI	RE	RR HF	GILBS	Cash	Overlay	Total
US Pub Eq											
Non-US P											
Eq HF											
PE				1.00							
FI				-0.01	1.00						
RE				0.30	-0.17	1.00					
RR HF											
GILBS											
Cash				0.12	0.05	0.14			1.00		
Overlay											
Total				0.22	0.46	0.01			0.03		1.00
Tot BM				0.14	0.45	-0.02			0.03		0.99



Performance Overview

Report ID: IPM0005 **Reporting Currency: USD** 

**TOTAL NET OF FEES** 

							Annualized				
Account Name Benchmark Name	Market Value	% of Total	Month	YTD	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	ITD	Inception Date
SSGA R3000 INDEX Russell 3000 Index	1,217,238,237	16	0.14 <i>0.16</i>	8.25 8.18	4.39 <i>4.40</i>	15.07 14.96	10.51 <i>10.44</i>			13.18 13.13	10/1/2012 10/1/2012
US Public Equity Russell 3000 Index	1,217,238,312	16	<b>0.14</b> 0.16	<b>8.25</b> 8.18	<b>4.39</b> <i>4.40</i>	<b>15.07</b> <i>14.96</i>	<b>10.51</b> 10.44	<b>16.11</b> <i>16.36</i>		<b>6.86</b> 6.86	<b>8/1/2007</b> 8/1/2007
SSGA MSCI EAFE  MSCI EAFE Net Dividend Index	729,367,958	9	1.26 1.23	1.99 1.73	6.47 6.43	6.81 <i>6.5</i> 2	0.72 <i>0.48</i>			6.76 <i>6.49</i>	9/1/2012 9/1/2012
SSGA MSCI CANADA MSCI Canada Net Dividend Index	99,314,251	1	1.17 1.10	21.10 20.64	4.93 <i>4.8</i> 5	15.04 <i>14.47</i>	-0.56 -1.15			1.21 <i>0.58</i>	9/1/2012 9/1/2012
SSGA MSCI EM MSCI Emerging Markets Net Dividend Index	346,230,174	5	1.31 1.29	15.73 16.02	8.98 <i>9.0</i> 3	16.53 <i>16.78</i>	-0.74 -0.56			1.06 1.27	9/1/2012 9/1/2012
Non-US Public Equity Total International Equity BM	1,174,968,684	15	<b>1.27</b> 1.23	<b>6.46</b> 5.82	<b>7.19</b> 6.91	<b>9.67</b> 9.26	<b>0.42</b> 0.18	<b>6.22</b> 5.90		<b>7.91</b> 7.04	<b>5/1/2009</b> 5/1/2009
QVM Tilt  MSCI World Net Dividend Index	1,058,647,716	14	0.43 <i>0.5</i> 3	5.15 <i>5.55</i>	4.28 <i>4.8</i> 7	11.27 <i>11.</i> 36				11.27 <i>11.</i> 36	10/1/2015 10/1/2015
Global Public Equity  MSCI All Country World Net Index	3,450,854,712	45	<b>0.61</b> 0.61	<b>6.93</b> 6.60	<b>5.27</b> 5.30	<b>12.09</b> 11.96	<b>5.32</b> 5.17	<b>11.59</b> <i>10.63</i>	<b>4.99</b> 4.34	3.87	<b>7/1/2000</b> 7/1/2000
Private Equity ILPA All Fds Custom BM 1Q Lag	544,561,898	7	1.00 1.00	7.06 <i>4.14</i>	2.35 2.38	3.59 2.56	9.33 10.83	9.16 <i>16.9</i> 3	6.97 9.10	9.08	2/1/1989 2/1/1989
Equity Hedge Funds HFRI Equity Hedge (Total) Index	572,895,381	7	<b>0.86</b> 1.00	<b>-0.76</b> <i>4.</i> 19	<b>3.55</b> <i>4.63</i>	<b>-0.55</b> 6.00	<b>2.89</b> 3.22			<b>5.38</b> <i>4.67</i>	<b>11/1/2011</b> 11/1/2011
Total Equity	4,568,311,991	59	0.69	5.87	4.69	9.29	5.44	10.67	5.00	8.83	6/1/1996
MACKAY SHIELDS  Bloomberg Barclays U.S. Aggregate Bond Index	527,408,465	7	-0.05 -0.06	5.76 5.80	0.56 <i>0.4</i> 6	5.03 <i>5.19</i>	4.09 <i>4.03</i>			2.64 2.57	11/1/2012 11/1/2012
PYRAMIS GLOBAL ADV Bloomberg Barclays U.S. Aggregate Bond Index	540,436,834	7	-0.02 -0.06	6.43 5.80	0.90 <i>0.46</i>	6.05 5.19	4.07 4.03			2.62 2.57	11/1/2012 11/1/2012
<b>Traditional Fixed Income</b> <i>Bloomberg Barclays U.S. Aggregate Bond Index</i>	1,067,847,325	14	<b>-0.04</b> -0.06	<b>6.10</b> 5.80	<b>0.74</b> 0.46	<b>5.55</b> <i>5.19</i>	<b>4.08</b> <i>4.03</i>	<b>3.92</b> 3.08	<b>4.82</b> 4.79	<b>5.52</b> 5.40	<b>7/1/2000</b> 7/1/2000

Report ID: IPM0005 **Reporting Currency: USD** 

**TOTAL NET OF FEES** 

Account Name Benchmark Name	Market Value	% of Total	Month	YTD	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	ITD	Inception Date
Real Return Hedge Funds HFRI Fund of Funds Composite Index	496,948,603	6	<b>0.17</b> 0.45	<b>3.16</b> -0.25	<b>1.55</b> 2.39	<b>3.21</b> 0.47	<b>3.73</b> 2.16			<b>4.31</b> 3.00	<b>11/1/2011</b> 11/1/2011
PIMCO 30%BoA1-3BB-BHY/70% JPMB/BBLLI	216,547,430	3	0.50 <i>0.65</i>	5.89 <i>7.40</i>	2.25 2.80	4.95 6.38	3.32 <i>4.</i> 10			3.02 3.98	5/1/2013 5/1/2013
WAMCO 30% BoA 1-3 BB-B HY/70% CS LLI	210,997,034	3	0.90 <i>0.74</i>	8.25 7.91	2.86 3.05	5.04 <i>6.3</i> 2	2.08 3.83			2.27 3.86	4/1/2013 4/1/2013
Credit Aggregate Credit Aggregate	427,544,464	6	<b>0.70</b> <i>0.69</i>	<b>7.04</b> 7.66	<b>2.55</b> 2.93	<b>4.99</b> 6.35	<b>2.70</b> 4.01			<b>2.57</b> 3.90	<b>5/1/2013</b> 5/1/2013
BROWN BROTHERS HARR BBH Inflation-Linked Custom BM	275,278,046	4	0.79 <i>0.7</i> 6	5.58 5.57	0.61 <i>0.</i> 57	5.01 <i>4.83</i>	1.95 2.12			0.89 <i>0.85</i>	11/1/2012 11/1/2012
Inflation-Linked Bonds Total Inflation Linked Custom	275,278,046	4	<b>0.79</b> 0.76	<b>5.58</b> 5.57	<b>0.61</b> 0.57	<b>5.01</b> <i>4.83</i>	<b>1.95</b> 2.12	<b>2.60</b> 2.61		<b>4.41</b> <i>4.</i> 37	<b>11/1/2009</b> <i>11/1/2009</i>
Harvest Fund Advisor Alerian MLP Index	178,380,545	2	1.99 1.85	18.78 <i>15.94</i>	4.19 1.07	13.70 <i>12.74</i>				-10.75 -13.14	1/1/2015 1/1/2015
Priv Listed Infrastructure CPI + 4%	85,343,934	1	2.38 <i>0.55</i>	9.32 5.07	2.22 1.13	11.21 <i>5.4</i> 6				3.48 5.79	3/1/2015 3/1/2015
Total Real Return	1,463,495,593	19	0.79	7.01	2.01	6.31	2.73	3.77	5.55	5.46	6/1/2004
Real Estate NFI-ODCE Index	521,135,408	7	0.94 <i>0.94</i>	7.77 7.87	2.62 2.62	10.75 <i>11.5</i> 8	11.91 <i>12.3</i> 3	10.33 12.35	3.34 8.33	2.92 9.99	1/1/2005 1/1/2005
ERSRI CASH BofA Merrill Lynch 3 Month US Treasury Bill G0O1	40,033,583	1	0.05 <i>0.05</i>	0.88 <i>0.24</i>	0.24 <i>0.10</i>	1.02 <i>0.27</i>	0.70 <i>0.11</i>	0.46 <i>0.10</i>	2.07 0.92	13.08 <i>1.69</i>	7/1/2000 7/1/2000
Total Cash	58,729,845	1	0.04	0.85	0.24	0.97	0.68	0.46	1.48	2.37	4/1/2004
Russell Overlay Fd	17,517,350	0	-0.01	0.04	0.03	0.06	-0.01	0.11		-0.06	9/1/2008
TOTAL PLAN Total Plan Benchmark 60/40 Blend	7,697,477,891	100	<b>0.60</b> 0.59 0.34	<b>6.20</b> 5.77 6.43	<b>3.45</b> 3. <i>4</i> 5 3.35	<b>8.27</b> 8.22 9.43	<b>5.05</b> 5.01 4.88	<b>8.34</b> 8.54 7.75	<b>4.79</b> 4.88 4.89	4.63	<b>7/1/2000</b> 7/1/2000 7/1/2000
Total Plan ex PE,RE & Priv Inf Total Plan BM ex PE RE	6,546,436,651	85	<b>0.52</b> 0.53	<b>6.01</b> 5.76	<b>3.62</b> 3.58	<b>8.48</b> 8.46	<b>4.32</b> 4.24	<b>7.87</b> 8.05	<b>4.54</b> <i>4.5</i> 2	6.16	<b>4/1/1996</b> 4/1/1996

Report ID: IPM0005

**Reporting Currency: USD** 

## **TOTAL NET OF FEES**

				Cumu	ılative					
Account Name Benchmark Name	Market Value	% of Total	Month	8/1/2016 - 8/31/2016	7/1/2016 - 7/31/2016	YTD	2015	2014	2013	Inception Date
SSGA R3000 INDEX Russell 3000 Index	1,217,238,237	16	0.14 <i>0.16</i>	0.26 <i>0.</i> 26	3.97 3.97	8.25 <i>8.18</i>	0.60 <i>0.4</i> 8	12.59 12.56	33.49 33.55	10/1/2012 10/1/2012
US Public Equity Russell 3000 Index	1,217,238,312	16	<b>0.14</b> 0.16	<b>0.26</b> 0.26	<b>3.97</b> 3.97	<b>8.25</b> 8.18	<b>0.60</b> <i>0.48</i>	<b>12.57</b> 12.56	<b>33.48</b> 33.55	<b>8/1/2007</b> 8/1/2007
SSGA MSCI EAFE  MSCI EAFE Net Dividend Index	729,367,958	9	1.26 1.23	0.08 <i>0.07</i>	5.06 5.07	1.99 1.73	-0.59 -0.81	-4.64 -4.90	23.08 22.78	9/1/2012 9/1/2012
SSGA MSCI CANADA MSCI Canada Net Dividend Index	99,314,251	1	1.17 1.10	0.35 <i>0</i> .32	3.36 3.38	21.10 20.64	-23.70 -24.16	2.17 1.51	6.35 5.63	9/1/2012 9/1/2012
SSGA MSCI EM  MSCI Emerging Markets Net  Dividend Index	346,230,174	5	1.31 1.29	2.47 2.49	4.99 5.03	15.73 16.02	-15.16 <i>-14.92</i>	-2.34 -2.19	-2.81 -2.60	9/1/2012 9/1/2012
Non-US Public Equity Total International Equity BM	1,174,968,684	15	<b>1.27</b> 1.23	<b>0.79</b> <i>0.63</i>	<b>5.02</b> <i>4.</i> 95	<b>6.46</b> 5.82	<b>-5.77</b> -5.66	<b>-3.63</b> -3.87	<b>15.18</b> <i>15.29</i>	<b>5/1/2009</b> 5/1/2009
QVM Tilt  MSCI World Net Dividend Index	1,058,647,716	14	0.43 <i>0.5</i> 3	-0.01 <i>0.08</i>	3.85 <i>4.</i> 22	5.15 <i>5.55</i>				10/1/2015 10/1/2015
Global Public Equity  MSCI All Country World Net Index	3,450,854,712	45	<b>0.61</b> <i>0.61</i>	<b>0.36</b> 0.34	<b>4.26</b> <i>4.31</i>	<b>6.93</b> <i>6.60</i>	<b>-2.48</b> -2.36	<b>4.35</b> <i>4.</i> 16	<b>23.90</b> 22.80	<b>7/1/2000</b> 7/1/2000
Private Equity ILPA All Fds Custom BM 1Q Lag	544,561,898	7	1.00 1.00	0.91 <i>0.91</i>	0.43 <i>0.4</i> 5	7.06 <i>4.14</i>	7.08 7.14	8.02 16.40	14.86 25.14	2/1/1989 2/1/1989
Equity Hedge Funds HFRI Equity Hedge (Total) Index	572,895,381	7	<b>0.86</b> 1.00	<b>1.34</b> <i>0.90</i>	<b>1.31</b> 2.67	<b>-0.76</b> <i>4.19</i>	<b>1.27</b> -0.97	<b>2.64</b> 1.81	<b>17.11</b> 14.28	<b>11/1/2011</b> 11/1/2011
Total Equity	4,568,311,991	59	0.69	0.54	3.42	5.87	-0.95	4.51	21.95	6/1/1996
MACKAY SHIELDS  Bloomberg Barclays U.S. Aggregate Bond Index	527,408,465	7	-0.05 -0.06	0.01 -0.11	0.60 <i>0.6</i> 3	5.76 5.80	0.48 <i>0.55</i>	6.00 5.97	-1.79 <i>-2.0</i> 2	11/1/2012 11/1/2012
PYRAMIS GLOBAL ADV Bloomberg Barclays U.S. Aggregate Bond Index	540,436,834	7	-0.02 -0.06	0.04 -0.11	0.88 <i>0.6</i> 3	6.43 5.80	0.01 <i>0.55</i>	5.83 5.97	-1.93 -2.02	11/1/2012 11/1/2012
<b>Traditional Fixed Income</b> Bloomberg Barclays U.S. Aggregate Bond Index	1,067,847,325	14	<b>-0.04</b> -0.06	<b>0.03</b> -0.11	<b>0.75</b> 0.63	<b>6.10</b> 5.80	<b>0.25</b> 0.55	<b>5.91</b> 5.97	<b>-1.86</b> <i>-2.0</i> 2	<b>7/1/2000</b> 7/1/2000

Report ID: IPM0005

**Reporting Currency: USD** 

#### TOTAL NET OF FEES 9/30/2016

		Cumi	ulative							
Account Name Benchmark Name	Market Value	% of Total	Month	8/1/2016 - 8/31/2016	7/1/2016 - 7/31/2016	YTD	2015	2014	2013	Inception Date
Real Return Hedge Funds HFRI Fund of Funds Composite Index	496,948,603	6	<b>0.17</b> 0.45	<b>0.75</b> 0.41	<b>0.63</b> 1.51	<b>3.16</b> -0.25	<b>0.86</b> -0.27	<b>4.70</b> 3.37	<b>6.96</b> 8.96	<b>11/1/2011</b> 11/1/2011
PIMCO 30%BoA1-3BB-BHY/70% JPMB/BBLLI	216,547,430	3	0.50 <i>0.</i> 65	0.42 <i>0.7</i> 8	1.32 1.34	5.89 7.40	1.13 1.00	1.22 2.11		5/1/2013 5/1/2013
WAMCO 30% BoA 1-3 BB-B HY/70% CS LLI	210,997,034	3	0.90 <i>0.74</i>	0.69 <i>0.87</i>	1.25 1.41	8.25 7.91	-3.69 -0.18	0.10 2.03		4/1/2013 4/1/2013
Credit Aggregate Credit Aggregate	427,544,464	6	<b>0.70</b> <i>0.69</i>	<b>0.55</b> <i>0.83</i>	<b>1.28</b> <i>1.38</i>	<b>7.04</b> 7.66	<b>-1.29</b> 0.49	<b>0.66</b> 2.11		<b>5/1/2013</b> 5/1/2013
BROWN BROTHERS HARR BBH Inflation-Linked Custom BM	275,278,046	4	0.79 <i>0.7</i> 6	-0.48 -0.51	0.31 <i>0</i> .32	5.58 <i>5.57</i>	-0.26 -0.15	1.72 2.04	-5.03 -5.13	11/1/2012 11/1/2012
Inflation-Linked Bonds Total Inflation Linked Custom	275,278,046	4	<b>0.79</b> <i>0.7</i> 6	<b>-0.48</b> -0.51	<b>0.31</b> 0.32	<b>5.58</b> 5.57	<b>-0.26</b> -0.15	<b>1.72</b> 2.04	<b>-5.03</b> -5.13	<b>11/1/2009</b> 11/1/2009
Harvest Fund Advisor Alerian MLP Index	178,380,545	2	1.99 1.85	1.29 -1.32	0.85 <i>0.56</i>	18.78 <i>15.94</i>	-31.01 -32.59			1/1/2015 1/1/2015
Priv Listed Infrastructure CPI + 4%	85,343,934	1	2.38 <i>0.5</i> 5	-0.38 <i>0.41</i>	0.23 <i>0.17</i>	9.32 <i>5.07</i>				3/1/2015 3/1/2015
Total Real Return	1,463,495,593	19	0.79	0.45	0.76	7.01	-2.76	2.74	3.39	6/1/2004
Real Estate NFI-ODCE Index	521,135,408	7	0.94 <i>0.94</i>	0.50 <i>0.50</i>	1.16 <i>1.16</i>	7.77 7.87	14.22 13.86	10.90 <i>12.26</i>	5.65 12.00	1/1/2005 1/1/2005
ERSRI CASH BofA Merrill Lynch 3 Month US Treasury Bill G0O1	40,033,583	1	0.05 <i>0.05</i>	0.10 <i>0.0</i> 2	0.10 <i>0.0</i> 3	0.88 <i>0.24</i>	0.40 <i>0.05</i>	0.75 0.03	0.14 <i>0.07</i>	7/1/2000 7/1/2000
Total Cash	58,729,845	1	0.04	0.10	0.10	0.85	0.38	0.74	0.13	4/1/2004
Russell Overlay Fd	17,517,350	0	-0.01	0.00	0.05	0.04	0.00	-0.02	0.17	9/1/2008
TOTAL PLAN  Total Plan Benchmark  60/40 Blend	7,697,477,891	100	<b>0.60</b> 0.59 0.34	<b>0.44</b> <i>0.32 0.16</i>	<b>2.37</b> 2.51 2.84	<b>6.20</b> 5.77 6.43	<b>-0.28</b> -0.25 -0.98	<b>4.52</b> 5.05 4.96	<b>14.06</b> 14.47 12.32	<b>7/1/2000</b> 7/1/2000 7/1/2000
Total Plan ex Overlay Total Plan Benchmark	7,679,960,541	100	<b>0.62</b> 0.59	<b>0.44</b> 0.32	<b>2.33</b> 2.51	<b>6.17</b> 5.77	<b>-0.28</b> -0.25	<b>4.54</b> 5.05	<b>13.87</b> <i>14.47</i>	<b>8/1/2008</b> 8/1/2008



Report ID: IPM0005

Reporting Currency: USD

#### **TOTAL NET OF FEES**

	Cumu	ılative									
Account Name Benchmark Name	Market Value	% of Total	Month	8/1/2016 - 8/31/2016	7/1/2016 - 7/31/2016	YTD	2015	2014	2013	Inception Date	
Total Plan ex PE,RE & Priv Inf	6,546,436,651	85	0.52	0.41	2.66	6.01	-1.68	3.98	14.33	4/1/1996	
Total Plan BM ex PE RE			0.53	0.27	2.76	5.76	-1.64	3.90	14.57	4/1/1996	



Report ID: IPM0005

Reporting Currency: USD

#### **END NOTES**

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





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

Hedge Fund Portfolio Portfolio Performance Summary Estimated as of September 30, 2016

						Ret	urns					Sharpe	Incep
Fund	Market Value	Actual %	Sep	QTD	YTD	FYTD	1 Year	3 Year	5 Year	Incep	Std Dev	Ratio	Date
Global Equities													
Ascend ERSRI Fund LP	69,174,061	6.5%	0.77%	1.57%	-5.61%	1.57%	-4.59%	2.19%	-	2.94%	3.39%	0.76	Nov-11
Davidson Kempner Institutional Partners, L.P.	79,708,226	7.4%	1.24%	2.79%	5.63%	2.79%	5.89%	4.48%	-	5.95%	2.10%	2.59	Nov-11
Elliott Associates, L.P.	92,084,093	8.6%	0.90%	3.07%	8.57%	3.07%	8.41%	7.75%	-	9.10%	3.79%	2.23	Nov-11
ESG Cross Border Equity Fund LP	41,110,928	3.8%	0.70%	0.00%	-6.43%	0.00%	-4.03%	-	-	-8.02%	7.99%	-1.06	Jun-14
Indus Asia Pacific Distribution Holding Company II, 06.30.14 Series													
(liquidating trust)	304,794	0.0%	0.00%	1.55%	-32.81%	1.55%	-37.57%	-27.15%	-	-16.64%	17.82%	-0.93	Jan-12
Luxor Capital Partners, LP - Holdback	1,453,695	0.1%	0.00%	0.00%	-	0.00%	-	-	-	0.00%	0.00%	-	Jul-16
Luxor Capital Partners, LP - Liquidating SPV	4,053,651	0.4%	0.00%	-4.10%	-	-4.10%	-	-	-	-4.10%	4.72%	-	Jul-16
PFM Diversified Fund, L.P.	79,025,314	7.4%	2.44%	5.37%	-5.05%	5.37%	-5.04%	4.50%	-	6.23%	9.06%	0.67	Mar-12
Samlyn Onshore Fund, L.P.	106,005,895	9.9%	0.70%	3.89%	-0.84%	3.89%	-1.31%	5.19%	-	7.47%	6.50%	1.09	Jan-12
Viking Global Equities, LP	101,923,250	9.5%	0.80%	5.79%	-0.40%	5.79%	3.68%	9.90%	-	11.59%	7.52%	1.45	Dec-11
Total Global Equities	574,843,908	53.6%	1.06%	3.46%	-0.54%	3.46%	-0.39%	2.98%	-	5.39%	4.43%	1.12	Nov-11
MSCI AC World Index Free - Net			0.61%	5.30%	6.60%	5.30%	11.96%	5.17%	-	8.55%	11.55%	0.74	Nov-11
Russell 3000 Index (DRI)			0.16%	4.40%	8.18%	4.40%	14.96%	10.44%	-	14.10%	10.54%	1.27	Nov-11
HFRI Equity Hedge (Total) Index			1.05%	4.66%	4.22%	4.66%	6.03%	3.23%	-	4.68%	6.30%	0.70	Nov-11
Real Return													
Brevan Howard LP	75,723,947	7.1%	-0.89%	-2.25%	-3.39%	-2.25%	-5.51%	-1.68%	_	0.20%	5.19%	-0.01	Nov-11
Brigade Leveraged Capital Structures Fund LP	59,660,417	5.6%	0.98%	5.68%	19.64%	5.68%	11.99%	3.23%	_	3.93%	5.79%	0.63	Mar-12
Capula Global Relative Value Fund Ltd.	65,839,430	6.1%	0.86%	1.88%	4.99%	1.88%	6.21%	7.15%	_	5.86%	1.83%	2.90	Dec-11
Claren Road Credit Fund, Ltd.	5,989,945	0.6%	-0.72%	-2.94%	-3.10%	-2.94%	-4.89%	-6.22%	_	-5.33%	7.05%	-0.79	Apr-13
DE Shaw Composite Fund LLC	94,470,168	8.8%	*** = / *	2.45%	5.71%	2.45%	10.08%	13.18%	_	13.82%	4.25%	2.98	Nov-11
Graham Absolute Return Trading Ltd.	55,727,735	5.2%	0.33%	0.02%	0.63%	0.02%	0.61%	2.45%	_	2.30%	4.35%	0.46	Jan-12
OZ Domestic Partners II, L.P.	103,296,625	9.6%	0.66%	3.55%	1.21%	3.55%	2.99%	3.52%	_	6.73%	4.72%	1.32	Nov-11
Winton Futures Fund Limited	36,480,217	3.4%	-0.51%	-0.94%	-1.03%	-0.94%	-1.86%	6.39%	_	4.13%	8.82%	0.46	Dec-11
Total Real Return	497,188,485	46.4%	0.18%	1.61%	3.33%	1.61%	3.28%	3.63%	-	4.31%	2.60%	1.49	Nov-11
ML 3-month T-Bills	,, 100		0.05%	0.10%	0.24%	0.10%	0.27%	0.12%	-	0.10%	0.04%	-	Nov-11
HFRI Fund of Funds Composite Index			0.56%	2.53%	-0.11%	2.53%	0.62%	2.20%	-	3.03%	3.56%	0.75	Nov-11
, , , , , , , , , , , , , , , , , , ,										- 7-7-			
Total Hedge Fund Portfolio	1,072,032,392	100.0%	0.65%	2.59%	1.23%	2.59%	1.29%	3.28%	-	4.90%	3.31%	1.35	Nov-11
HFRI Fund of Funds Composite Index			0.56%	2.53%	-0.11%	2.53%	0.62%	2.20%	-	3.03%	3.56%	0.75	Nov-11



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

Hedge Fund Portfolio Portfolio Performance Summary Estimated as of September 30, 2016

		Returns										Sharpe	Incep
Fund	Market Value	Actual %	Sep	QTD	YTD	FYTD	1 Year	3 Year	5 Year	Incep	Std Dev	Ratio	Date
Market Indices													
Libor3Month			0.07%	0.20%	0.52%	0.20%	0.64%	0.38%	-	0.38%	0.05%	-	Nov-11
Barclays Aggregate Bond Index			-0.06%	0.46%	5.81%	0.46%	5.22%	4.03%	-	3.12%	2.68%	1.02	Nov-11
Barclays High Yield Credit Bond Index			0.67%	5.55%	15.11%	5.55%	12.73%	5.29%	-	7.21%	5.74%	1.18	Nov-11
S&P 500 TR			0.02%	3.85%	7.84%	3.85%	15.43%	11.16%	-	14.24%	10.31%	1.31	Nov-11
MSCI EAFE - Net			1.23%	6.43%	1.73%	6.43%	6.52%	0.47%	-	5.52%	13.71%	0.43	Nov-11
MSCI EMF (Emerging Markets Free) - Net			1.29%	9.03%	16.02%	9.03%	16.78%	-0.56%	-	0.51%	16.47%	0.09	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

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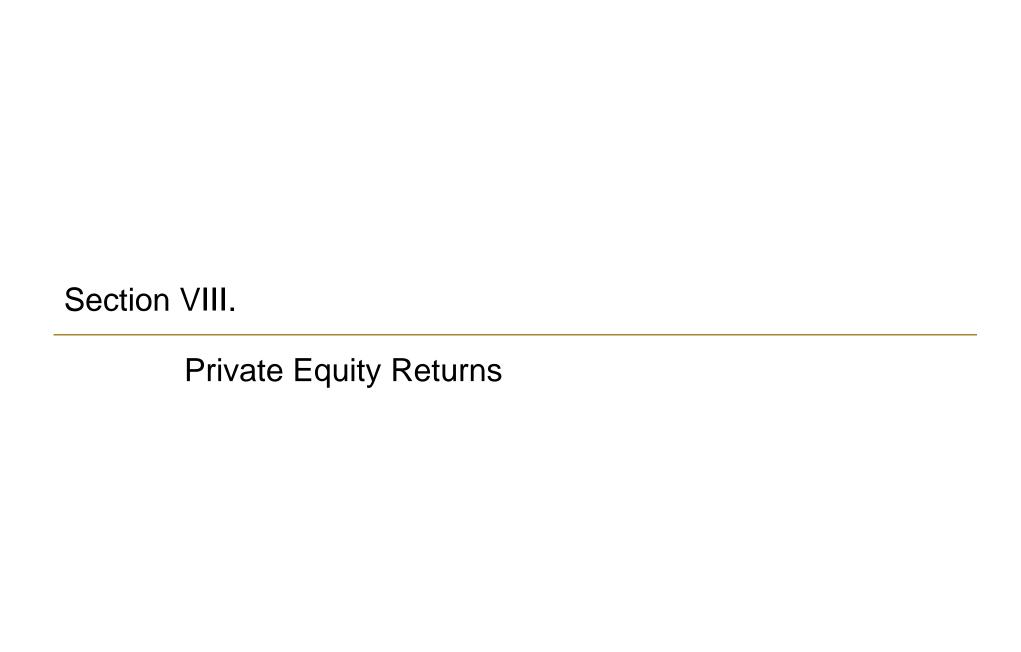


### Employees' Retirement System of the State of Rhode Island

Hedge Fund Portfolio Fund Level Performance Report Estimated as of September 30, 2016

						Tra	ailing Retur	'ns		Calen	dar Year Re	eturns		5 Yr		Sharpe Rat	io	Start
Fund	QTD	YTD	Sep	Aug	Jul	1 Year	3 Year	5 Year	2015	2014	2013	2012	2011	Std Dev	3 yr	5 yr	Incep.	Date
Global Equities																		
Ascend Partners Fund II LP	1.20%	-3.63%	0.56%	0.52%	0.12%	-2.15%	3.07%	3.46%	2.66%	5.09%	12.22%	2.50%	-3.02%	2.93%	0.81	1.04	0.96	Jan-04
Davidson Kempner Institutional Partners, L.P.	2.64%	5.38%	1.24%	0.63%	0.75%	5.65%	4.38%	5.83%	1.51%	4.45%	9.52%	6.87%	1.27%	2.09%	1.78	2.55	1.56	Mar-96
Elliott Associates, L.P.	3.13%	8.38%	0.90%	1.20%	1.00%	8.16%	7.33%	8.66%	2.51%	8.24%	12.44%	13.18%	3.94%	3.59%	1.76	2.23	1.91	Jan-90
ESG Cross Border Equity Fund LP	0.00%	-6.48%	0.70%	-0.20%	-0.50%	-4.15%	-5.34%	-0.35%	-5.06%	-7.16%	13.59%	6.74%	9.45%	7.03%	-0.73	-0.07	0.67	Jan-04
Indus Asia Pacific Fund, LP	1.55%	-32.81%	0.00%	0.00%	1.55%	-37.57%	-27.01%	-16.04%	-33.23%	-15.60%	4.97%	8.21%	-7.18%	17.57%	-1.36	-0.91	-0.03	Dec-00
Luxor Capital Partners, LP	4.15%	-4.10%	1.06%	2.49%	0.55%	-14.75%	-9.52%	-2.86%	-19.05%	-9.83%	19.53%	5.21%	-2.89%	8.47%	-1.05	-0.34	0.73	Apr-02
PFM Diversified Fund, L.P.	5.40%	-4.97%	2.44%	0.61%	2.27%	-4.92%	4.43%	5.94%	8.10%	2.84%	22.17%	5.59%	-3.35%	8.64%	0.48	0.67	0.83	Nov-04
Samlyn Onshore Fund, L.P.	3.84%	-0.98%	0.70%	1.75%	1.34%	-1.61%	4.84%	7.83%	-1.29%	9.24%	18.93%	10.49%	-5.05%	6.69%	0.65	1.10	1.00	Mar-07
Viking Global Equities, LP	5.59%	-0.36%	0.80%	1.90%	2.80%	3.68%	9.82%	12.36%	8.27%	13.47%	22.65%	12.75%	7.71%	7.44%	1.05	1.56	1.45	Oct-99
Real Return																		
Brevan Howard LP	-2.25%	-3.38%	-0.89%	-0.20%	-1.17%	-5.50%	-1.66%	0.14%	-1.98%	-0.78%	2.68%	3.91%	12.21%	5.28%	-0.37	-0.02	0.90	Sep-05
Brigade Leveraged Capital Structures Fund LP	5.68%	19.64%	0.98%	2.46%	2.14%	11.96%	3.23%	3.94%	-10.73%	0.61%	6.13%	6.91%	2.55%	5.60%	0.44	0.65	0.68	Jan-07
Capula Global Relative Value Fund Ltd.	1.87%	4.98%	0.86%	0.49%	0.51%	6.22%	7.14%	5.91%	7.54%	8.14%	7.60%	0.41%	6.19%	1.86%	4.71	2.89	1.87	Oct-05
Claren Road Credit Fund. Ltd.	-4.73%	-13.10%	-1.75%	-1.01%	-2.04%	-15.60%	-10.10%	-5.27%	-7.96%	-10.10%	5.43%	1.49%	6.88%	7.01%	-1.33	-0.79	0.36	Jan-06
DE Shaw Composite Fund LLC	2.21%	5.19%	1.7570	1.01/0	2.0470	9.33%	12.28%	12.34%	13.68%	15.57%	11.51%	13.94%	3.69%	4.06%	2.71	2.80	1.57	Mar-01
Graham Absolute Return Trading Ltd.	-0.06%	0.48%	0.33%	-0.58%	0.19%	0.50%	6.71%	6.38%	1.50%	10.42%	10.50%	9.29%	4.64%	7.40%	0.80	0.82	1.00	Jan-05
OZ Domestic Partners II, L.P.	3.41%	1.08%	0.66%	2.25%	0.48%	2.89%	3.26%	6.33%	-0.44%	5.45%	14.20%	12.01%	0.17%	4.55%	0.56	1.29	1.02	Jan-04
Winton Futures Fund Limited	-0.95%	-1.04%	-0.51%	-1.57%	1.15%	-1.86%	6.39%	3.72%	0.95%	13.88%	9.43%	-3.56%	6.29%	8.78%	0.67	0.42	0.69	Oct-97
									0.0075			0.007	0.20,0					
Benchmark																		
HFRI Fund of Funds Composite Index	2.53%	-0.11%	0.56%	0.44%	1.52%	0.62%	2.20%	3.19%	-0.27%	3.37%	8.96%	4.79%	-5.72%	3.54%				Jan-90
HFRI Fund Weighted Composite Index	2.96%	4.19%	0.62%	0.44%	1.88%	4.93%	3.16%	4.43%	-1.12%	2.98%	9.13%	6.36%	-5.25%	4.28%				Jan-90
Market Indices																		
3 Month Libor - BOM	0.20%	0.52%	0.07%	0.07%	0.06%	0.64%	0.38%	0.38%	0.33%	0.23%	0.27%	0.42%	0.35%	0.05%				Jan-87
Barclays Aggregate Bond Index	0.46%	5.81%	-0.06%	-0.11%	0.63%	5.22%	4.03%	3.09%	0.57%	5.94%	-2.02%	4.23%	7.86%	2.66%				Jan-76
Barclays High Yield Credit Bond Index	5.55%	15.11%	0.67%	2.09%	2.70%	12.73%	5.29%	8.34%	-4.46%	2.46%	7.46%	15.81%	4.98%	6.18%				Jul-83
S&P 500 (TR)	3.85%	7.84%	0.02%	0.14%	3.69%	15.43%	11.16%	16.37%	1.38%	13.69%	32.39%	16.00%	2.11%	11.12%				Jun-88
MSCI EAFE - Net - USD	6.43%	1.73%	1.23%	0.07%	5.07%	6.52%	0.47%	7.39%	-0.81%	-4.90%	22.78%	17.31%	-12.13%	14.19%				Dec-69
MSCI EMF (EMERGING MARKETS FREE) - Net - USD	9.03%	16.02%	1.29%	2.49%	5.03%	16.78%	-0.56%	3.03%	-14.92%	-2.19%	-2.60%	18.23%	-18.42%	17.34%				Dec-87
modition (Emeronia minimero ince obb	3.3370	10.02/0	2.2370	,5/0	3.3370	1 20.7070	3.5070	3.3370	15270	2.1370	5070	10.2370	10.42/0	17.5470	l			1 200 07

Note: The above is manager composite history.



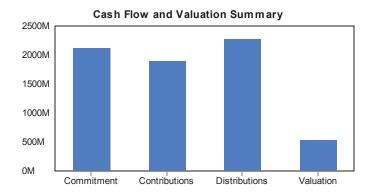
# **Portfolio Summary**

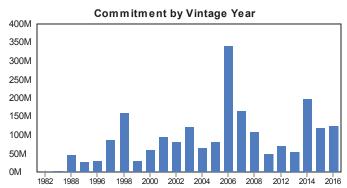
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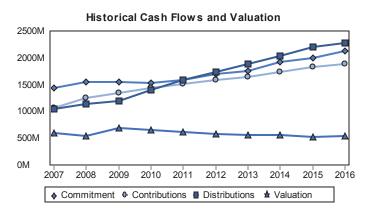
All Investments

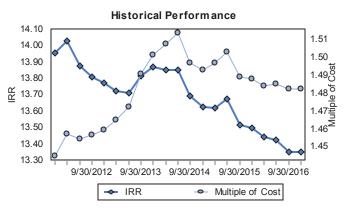
### Performance Summary

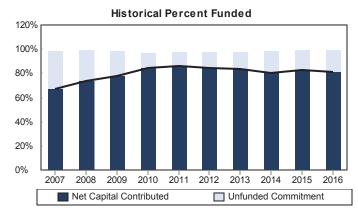
Asset Class	Investment Type	Number of Investments	Commitment	Contributions	Distributions	Adjusted Valuation	Multiple of Cost	IRR	TWR
Private Equity Fun	ds								
. ,	Agriculture	1	30,000,000	6,808,863	0	5,362,070	0.79	-19.92	-85.07
	Buyout	75	1,241,079,211	1,150,395,646	1,478,466,271	285,673,010	1.53	13.02	13.08
	Direct Lending	3	75,000,000	39,800,860	16,517,623	28,538,168	1.13	8.15	7.81
	Distressed Debt	14	238,000,000	213,978,869	224,030,943	69,302,017	1.37	10.21	9.83
	Energy	8	148,000,000	133,969,783	178,392,073	23,792,231	1.51	23.82	6.77
	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	9,627,126	1.24	6.30	4.82
	Venture Capital	22	281,250,000	248,626,227	207,434,076	113,906,108	1.29	5.16	1.99
Total: Private Eq	uity Funds	128	2,118,329,211	1,893,489,813	2,270,149,464	536,200,730	1.48	13.35	10.79
Total:		128	2,118,329,211	1,893,489,813	2,270,149,464	536,200,730	1.48	13.35	10.79

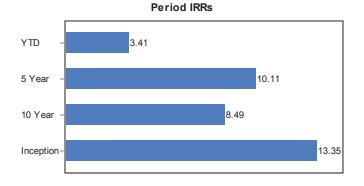












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# Employees' Retirement System of Rhode Island Private Equity Performance 6/30/2016

Cumulative Cash Flows (\$)

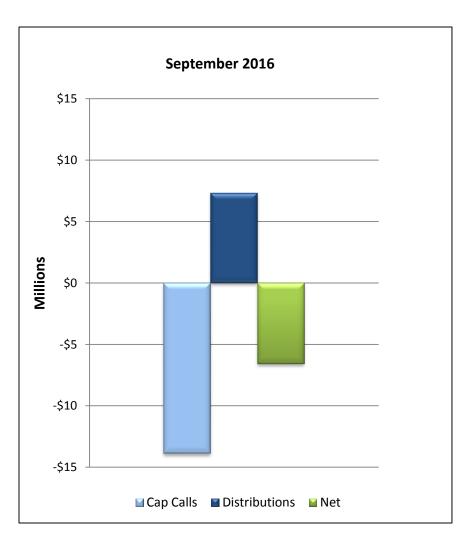
Cumulative Performance\*

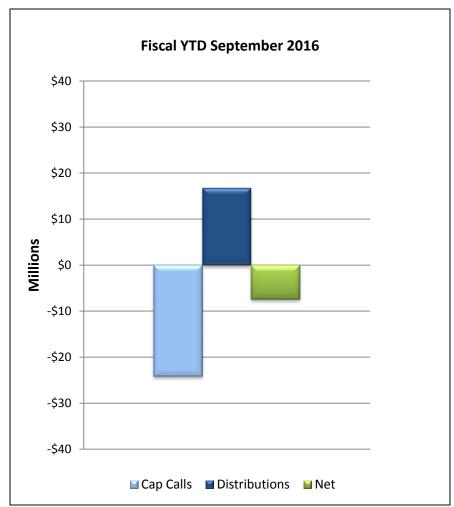
Current Partnerships	Vintage Year	Amount Committed (In \$ unless otherwise noted)	Amount Drawn	Amount Distributed	Amount Unfunded	Valuation (\$)	Net IRR (%)	Net Multiple of Investment
Advent International GPE VII	2012	20,000,000	17,070,000	2,670,000	2,930,000	19,955,275	15.2	1.3
Alta BioPharma Partners III	2003	15,000,000	14,250,000	20,297,956	750,000	465,595	5.8	1.5
Alta Partners VIII	2006	15,000,000	15,000,000	22,518,408	· · · ·	8,733,659	16.3	2.1
Aurora Equity Partners III	2004	15,000,000	16,242,296	26,640,090	835,850	1,694,298	15.7	1.7
Avenue Special Situations Fund IV Avenue Special Situations Fund V	2006	20,000,000	25,179,595 20,329,267	32,706,000	-	157,965	8.3	1.3
Bain Capital Fund X	2007 2008	20,000,000 25,000,000	20,329,267	26,322,021 20,784,576	- 762,500	155,110 13,012,976	10.6 7.5	1.3 1.4
Baring Asia Private Equity Fund VI	2015	15,000,000	4,540,598	22,568	10,459,402	4,370,200	-5.3	1.0
Birch Hill Equity Partners III	2005	CAD 18,000,000	18,887,577	29,210,055	259,500	4,784,745	12.1	1.8
Carlyle Asia Partners IV	2014	30,000,000	15,704,798	565,712	14,902,324	14,389,013	-3.9	1.0
Castile Ventures III	2006	5,000,000	5,009,730	1,396,371	· · · · ·	1,600,291	-10.4	0.6
Centerbridge Capital Partners	2006	15,000,000	23,535,297	34,677,517	1,095,594	8,322,384	20.6	1.8
Centerbridge Capital Partners III	2015	25,000,000	6,656,949	263,547	18,606,598	7,013,139	12.3	1.1
Centerbridge Special Credit Partners II	2012	25,000,000	22,500,000	7,253,714	2,500,000	15,913,507	1.0	1.0
Charterhouse Capital Partners VIII	2006	€15,000,000	18,183,957	17,390,855	628,404	18,364	-0.7	1.0
Coller International Partners IV	2002	15,000,000	13,294,667	17,554,435	150,000	598,175	11.7	1.4
Coller International Partners V	2006	15,000,000	12,520,679	14,140,282	3,270,000	3,693,692	8.5	1.4 2.6
CVC European Equity Partners III CVC European Equity Partners IV	2001 2005	20,000,000 €16,500,000	23,158,043 21,266,657	59,551,716 35,417,941	899,966 2,131,657	534,033 3,779,253	41.1 16.5	1.8
CVC European Equity Partners V	2008	€ 20,000,000	28,689,148	28,271,379	1,030,900	14,413,682	12.6	1.5
CVC Capital Partners VI	2014	€15,000,000	6,622,932	338,759	10,622,700	6,175,853	-1.8	1.0
EnCap Energy Capital Fund IX	2013	18,000,000	14,351,520	2,892,000	4,991,745	14,232,915	13.9	1.2
EnCap Energy Capital Fund X	2015	25,000,000	5,326,516	-,,	19,673,484	4,837,696	-22.0	0.9
Fenway Partners Capital Fund II	1998	15,000,000	18,513,234	20,153,002	232,336	1,962,582	4.9	1.2
Fenway Partners Capital Fund III	2006	15,000,000	16,976,092	13,254,579	1,266,241	5,821,492	2.4	1.1
First Reserve Fund X	2004	20,000,000	19,999,999	36,485,800	-	80,287	31.0	1.8
First Reserve Fund XI	2006	20,000,000	22,125,580	13,820,741	-	2,083,148	-8.9	0.7
Focus Ventures III	2006	15,000,000	15,000,000	5,411,619	·	4,614,109	-7.4	0.7
Garrison Opportunity Fund IV	2014	30,000,000	15,562,346	(498,315)	14,382,700	16,145,362	0.6	1.0
Granite Global Ventures II	2004	15,000,000	14,333,510	15,007,914	675,000	7,260,497	5.9	1.6
Granite Global Ventures III	2006	15,000,000	14,625,503	21,339,969	375,000	11,129,280	15.9	2.2
Green Equity Investors V Industry Ventures Partnership Holdings III	2007 2014	20,000,000 25,000,000	20,422,385 16,562,702	24,644,326 833,921	1,731,092 8,437,298	13,567,844 18,707,829	17.5 15.8	1.9 1.2
Industry Ventures Partnership Holdings III C	2014	15,000,000	1,987,500	033,921	13,012,500	1,920,537	-5.4	1.0
Industry Ventures Partnership Holdings IV	2016	10,000,000	400.000	-	9,600,000	372,837	-23.4	1.0
Kayne Anderson Energy Fund III	2005	15,000,000	15,965,344	14,983,550	366,426	440,276	-1.9	0.9
Kayne Anderson Energy Fund IV	2007	15,000,000	16,605,519	16,345,850	-	1,483,763	2.5	1.1
Leapfrog Ventures II	2005	10,000,000	9,490,000	6,811,564	510,000	4,178,082	2.7	1.2
Leeds Equity Partners IV	2003	10,000,000	10,209,327	11,467,347	1,099,639	2,203,215	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	1,449,663	7.3	1.5
LNK Partners	2006	12,500,000	12,045,398	16,651,771	456,855	2,583,736	10.7	1.6
MHR Institutional Partners III	2006	20,000,000	20,800,000	20,133,259	6,974,396	8,050,952	6.6	1.4
Nautic Partners V	2000	20,000,000	20,325,743	40,372,953	641,735	1,629,540	17.2	2.1 2.2
Nautic Partners VI Nautic Partners VII	2007 2014	20,000,000 20,000,000	23,972,088 11,551,361	43,204,817 5,135,745	609,669 9,506,519	9,532,328 14,887,223	17.6 87.8	1.7
Nordic Capital Fund V	2014	€ 14,615,550	21,434,529	57,872,857	9,500,519	902,822	21.1	2.7
Nordic Capital Fund VI	2006	€15,000,000	22,435,404	22,681,256	_	10,945,583	6.9	1.5
Nordic Capital Fund VII	2008	€15,000,000	20,175,973	6,010,358	1,591,454	18,692,529	4.1	1.2
Nordic Capital Fund VIII	2013	€15,000,000	9,830,680	368,111	8,050,273	9,173,710	-1.8	1.0
Oaktree European Principal Fund III	2011	20,000,000	17,150,000	2,432,019	5,271,496	18,575,064	7.9	1.2
Paine & Partners Capital Fund IV	2015	30,000,000	6,633,397	-	23,373,462	5,186,604	-25.3	0.8
Paladin III	2008	10,000,000	12,370,215	5,639,262	283,343	10,139,277	7.1	1.3
Parthenon Investors II	2001	23,960,000	23,409,381	37,045,489	1,821,022	631,237	12.3	1.6
Point 406 Ventures I	2006	10,000,000	10,271,265	4,123,844	580,000	13,860,886	11.0	1.8
Point Judith Venture Fund II Providence Equity Partners IV	2006 2000	5,000,000	5,991,513	2,085,239	255,572	3,225,362 203,088	-2.5 23.9	0.9 1.9
Providence Equity Partners V	2000	25,000,000 25,000,000	35,971,884 31,133,327	68,445,391 32,208,167	1,995,291 2,196,745	5,895,246	23.9	1.9
Providence Equity Partners VI	2007	25,000,000	28,657,449	24,789,809	1,837,853	13,684,440	6.4	1.3
Providence Equity Partners VII	2012	25,000,000	18,227,449	3,960,222	10,746,960	16,453,069	8.9	1.1
Riverside Capital Appreciation Fund VI	2013	20,000,000	11,331,287	13,598	8,668,713	13,113,126	11.0	1.2
Riverside Micro-Cap Fund III	2014	20,000,000	17,758,317	(4,719)	2,241,683	21,388,821	13.5	1.2
Sorenson Capital Partners III	2014	30,000,000	10,794,339	- '	19,447,569	9,772,049	-9.4	0.9
Southvest Partners VII	2016	30,000,000	497,149	-	29,502,851	37,388	-92.5	0.1
Tenex Capital Partners II	2016	25,000,000	1,885,611	-	23,114,052	1,669,954	-10.6	0.9
TPG Partners IV	2003	15,000,000	16,672,684	29,927,322	64,421	2,618,764	15.8	2.0
TPG Partners V	2006	20,000,000	20,697,887	19,695,327	1,774,959	8,610,997	5.2	1.4
TPG Partners VI	2008	10,000,000	13,533,484	11,301,211	938,203	6,404,640	8.9	1.3
Trilantic Capital Partners IV	2007	11,098,351	11,528,514	15,849,474	1,229,733	2,139,815	14.0	1.6
W Capital Partners	2004	15,000,000	14,197,500	10,229,777	802,500	988,340	-7.3	0.8
W Capital Partners II WLR Recovery Fund IV	2007 2007	15,000,000 8,000,000	14,896,718	16,296,457 8,303,459	1,596,691 765,256	4,685,623 1,577,495	11. <u>2</u> 8.0	1.4 1.4
Other funds in aggregate**	2007 various	120,000,000	7,277,318 112,035,382	8,303,459 95,443,499	13,533,231	1,577,495 54,349,254	8.0	1.4
Total		\$ 1,413,745,688	\$ 1,231,605,013					
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\*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.

<sup>\*\*</sup>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, McNerney & Partners, Thomas McNerney & Partners II and Wellspring Capital Partners III.

# **Private Equity Cash Flows**







### **PORTFOLIO SUMMARY**

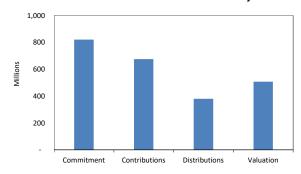
6/30/2016

All Portfolio Investments - Real Estate

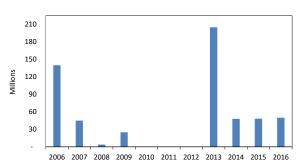
### Performance Summary

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	433.732.187	242.810.890	396.430.061	1.5x	5.3%	5.5%
rical Estate range	Non-Core	21	415,260,817	295,727,920	137,640,396	111,550,091	0.8x	-4.6%	0.7%
Total: Real Estate Funds		29	820,260,817	729,460,107	380,451,286	507,980,152	1.2x	3.6%	4.6%
Total:		29	820,260,817	729,460,107	380,451,286	507,980,152	1.2x	3.6%	4.6%

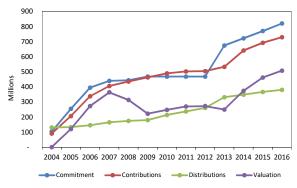
### **Cash Flow and Valuation Summary**



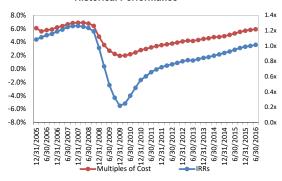
### Commitment by Vintage Year



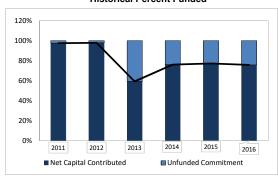
### **Historical Cash Flows and Valuation**



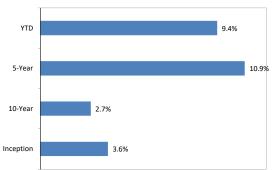
### Historical Performance



### Historical Percent Funded



### Period IRRs



# Employees' Retirement System of Rhode Island Real Estate Performance 6/30/2016

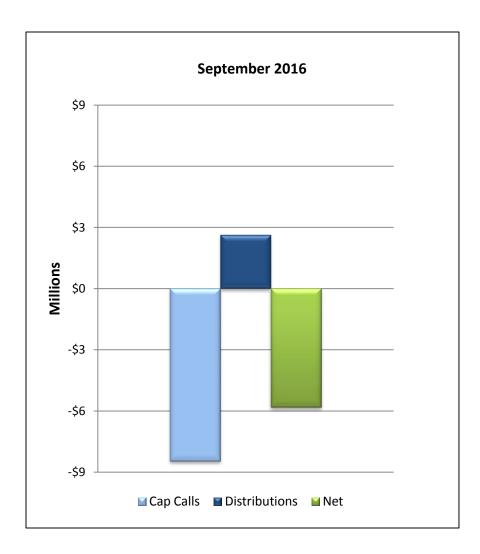
Cumulative Cash Flows (\$)

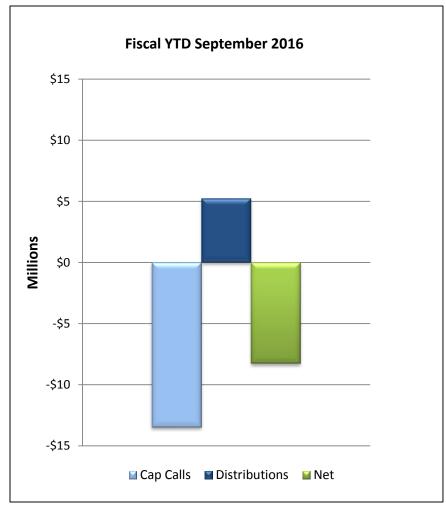
Cumulative Performance\*

Current Partnerships	Vintage Year	Amount Committed (In \$ unless otherwise noted)	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	-	89,661,874	12.7%	1.7
Crow Holdings Retail Fund	2015	24,000,000	11,861,234	-	12,138,766	11,986,797	n/a	1.0
Exeter Industrial Value Fund III	2014	30,000,000	16,500,000	1,012,285	13,500,000	18,247,855	16.9%	1.2
GEM Realty Fund V	2013	50,000,000	23,809,133	4,385,000	26,190,867	25,802,455	14.9%	1.2
Heitman America Real Estate Trust	open-end	60,000,000	60,000,000	4,726,288	-	73,924,304	13.6%	1.2
IC Berkeley Partners III	2013	18,000,000	16,038,326	4,361,760	1,961,674	15,101,639	22.4%	1.2
IC Berkeley Partners IV	2016	30,000,000	3,087,000	-	26,913,000	2,932,214	n/a	0.9
JP Morgan Strategic Property Fund	open-end	75,000,000	75,000,000	22,218,543	-	100,968,151	6.2%	1.5
JP Morgan Alternative Property Fund	2006	20,000,000	20,000,000	14,727,125	-	189,400	-4.6%	0.7
Lone Star Real Estate Fund IV	2015	24,260,817	6,723,540	-	17,537,277	6,763,509	0.5%	1.0
Magna Hotel Fund III	2008	4,000,000	3,403,043	4,413,302	596,957	1,745,654	16.8%	1.8
Morgan Stanley Prime Property Fund	open-end	35,000,000	35,000,000	18,186,006	-	58,763,133	7.1%	1.9
Prudential (PRISA)	open-end	50,000,000	50,000,000	15,937,240	-	73,112,599	5.1%	1.6
TriCon Capital Fund VII	2005	15,000,000	14,571,533	3,692,644	428,467	1,319,598	-19.8%	0.3
Waterton Fund XII	2014	35,000,000	23,644,184	1,772,825	11,355,816	27,460,971	26.0%	1.2
Total		\$ 530,260,817	\$ 419.637.993	\$ 105.913.465	\$ 110.622.824	\$ 507.980.153		

<sup>\*</sup>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**







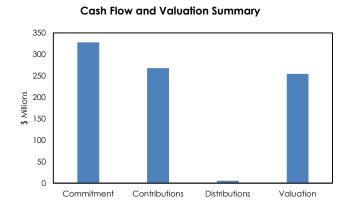
### **Portfolio Summary**

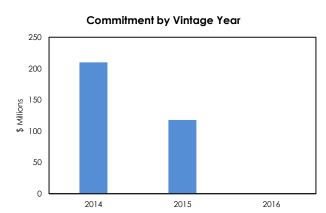
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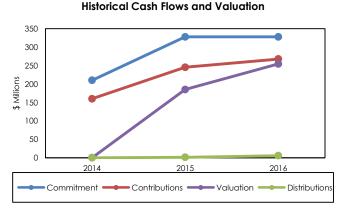
### All Portfolio Investments - Infrastructure

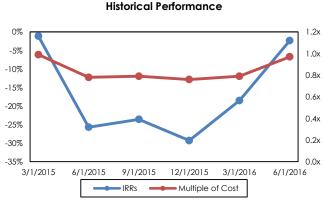
						Since		
Investment	Commitment	Contributions	Distributions	Adjusted Valuation	Multiple of Cost*	Inception IRR*	1-yr IRR*	YTD IRR*
Harvest MLP Alpha Strategy	185,000,000	185,000,000	0	171,210,851	0.93	-14.8	-17.2	14.2
IFM Global Infrastructure	50,000,000	50,000,000	770,923	53,491,936	1.09	7.3	7.3	4.6
ISQ Global Infrastructure Fund	50,000,000	21,448,994	4,791,186	16,571,713	1.00	-0.8	23.5	27.0
Stonepeak Infrastructure Fund II	43,000,000	11,367,535	19,785	13,340,949	1.18	25.3	N/A	41.6
Total	328,000,000	267,816,529	5,581,894	254,615,449	0.97	-2.4	20.3	26.5

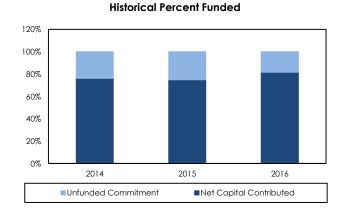
<sup>\*</sup>Net of Fees and Expenses

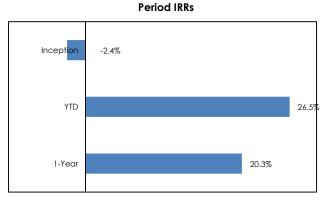












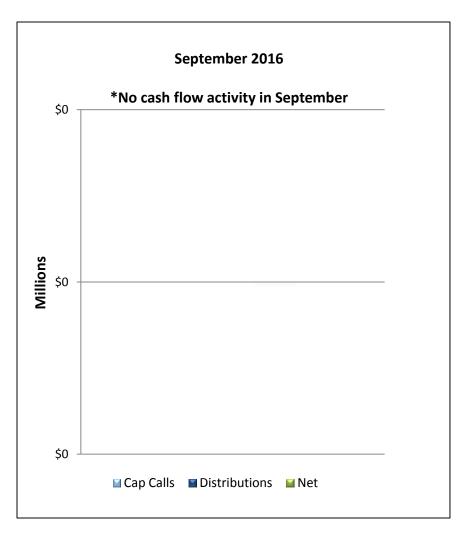
# Employees' Retirement System of Rhode Island Private Infrastructure Performance 6/30/2016

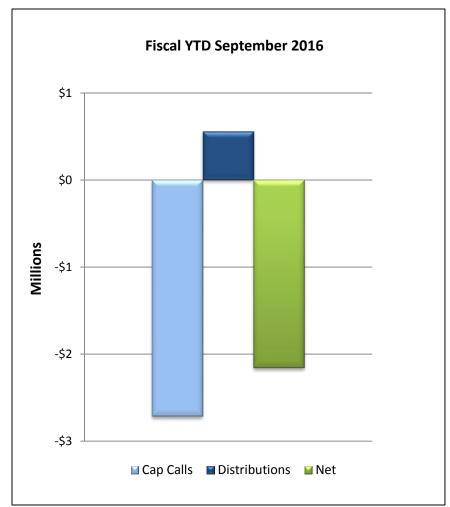
Cumulative Cash Flows (\$)

Cumulative Performance\*

Current Partnerships	Vintage Year	Amount Committed (In \$ unless otherwise noted)	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	770,923	-	53,491,936	7.6	1.1
ISQ Global Infrastructure Fund, L.P.	2015	50,000,000	16,657,808	3,521,126	33,342,192	16,571,713	n/a	1.2
Stonepeak Infrastructure Fund II, L.P.	2016	43,000,000	11,367,535	19,785	31,632,465	13,340,949	n/a	1.2
Total		\$ 143,000,000	\$ 78.025.343	\$ 4.311.834	\$ 64.974.657 \$	83.404.598		

# **Infrastructure Cash Flows**







Cash Flow



# Monthly Valuation Change

Period: 2016-09-01 - 2016-09-30

0-1	Course Account Name	Clasina Palanas	Manhat Value Incorporation	T	On anima Palana
Category	Source Account Name	Closing Balance	Market Value Increase/(Decrease)	Transfer In/(Out)	Opening Balance
Grand Total		7,697,477,891.05	45,874,425.73	(22,715,892.00)	7,674,319,357.3
Total Global Equity		4,023,693,717.17	25,766,977.93	58.68	3,997,926,680.5
Global Equity		3,450,798,335.90	20,856,175.68	58.68	3,429,942,101.5
	SSGA R3000 INDEX	1,217,238,237.38	1,642,625.16	12.79	1,215,595,599.4
	SSGA MSCI EAFE	729,367,957.58	9,097,598.12	18.86	720,270,340.6
	SSGA MSCI CANADA	99,314,251.34	1,146,340.80	2.45	98,167,908.0
	SSGA MSCI EM	346,230,173.76	4,462,508.78	24.58	341,767,640.4
	QVM TILT	1,058,647,715.84	4,507,102.82	0.00	1,054,140,613.0
Global Equity Hedge Funds		572,895,381.27	4,910,802.25	0.00	567,984,579.0
	DAVIDSON KEMPNER	79,708,226.18	1,022,923.24	0.00	78,685,302.9
	ELLIOTT ASSOCIATES	90,147,784.60	(268,031.08)	0.00	90,415,815.6
	INDUS ASIA PACIFIC	304,438.69	(355.76)	0.00	304,794.4
	PFM DIVERSIFIED	79,020,811.14	1,853,568.15	0.00	77,167,242.9
	SAMLYN ON/OFFSHORE	105,998,536.87	729,524.81	0.00	105,269,012.0
	VIKING GLOBAL EQUITI	101,923,249.84	800,906.22	0.00	101,122,343.6
	LUXOR CAP PTNS LP	5,507,344.64	256.41	0.00	5,507,088.2
	ESG CBE FUND LP	41,110,927.93	269,834.72	0.00	40,841,093.2
	ASCENT ERSRI FUND LP	69,174,061.38	502,175.54	0.00	68,671,885.8
Private Equity		544,561,897.96	5,169,316.04	6,588,193.58	532,804,388.3
Private Equity		544,561,897.96	5,169,316.04	6,588,193.58	532,804,388.3
	PRIVATE EQUITY	544,561,897.96	5,169,316.04	6,588,193.58	532,804,388.3
Total Fixed Income		1,067,845,298.72	(378,882.91)	0.00	1,068,224,181.6
Fixed Income		1,067,845,298.72	(378,882.91)	0.00	1,068,224,181.6
	MACKAY SHIELDS	527,408,464.61	(275,818.44)	0.00	527,684,283.0
	PYRAMIS GLOBAL ADV	540,436,834.11	(103,064.47)	0.00	540,539,898.5
Total Real Return		1,463,495,592.71	11,493,390.53	(11,000,000.00)	1,463,002,202.1
Alternative Absolute Return		365,697,087.08	66,004.36	0.00	365,631,082.7
	BREVAN HOWARD	75,723,946.57	(666,949.27)	0.00	76,390,895.8
	DE SHAW	94,470,168.03	(172,537.46)	0.00	94,642,705.4
	OZ DOMESTIC PTRS	103,296,625.46	874,154.46	0.00	102,422,471.0
	WINTON FUTURE FD	36,478,612.30	(188,607.51)	0.00	36,667,219.8
	GRAHAM ABS RETURN	55,727,734.72	219,944.14	0.00	55,507,790.5
Alternative Fixed Income		131,251,515.57	755,262.79	0.00	130,496,252.7
	BRIGADE LEV CAP	59,685,492.58	604,073.47	0.00	59,081,419.1
	CAPULA GLOBAL	65,839,430.50	560,780.36	0.00	65,278,650.1
	CLAREN ROAD CR. FUND	5,726,592.49	(409,591.04)	0.00	6,136,183.5
Credit		427,544,464.06	2,961,091.61	0.00	424,583,372.4
	PIMCO	216,547,430.43	1,083,209.91	0.00	215,464,220.5
	WAMCO	210,997,033.63	1,877,881.70	0.00	209,119,151.9
GILBs		275,278,046.30	2,239,950.40	(11,000,000.00)	284,038,095.9
	BROWN BROTHERS HARR	275,278,046.30	2,239,950.40	(11,000,000.00)	284,038,095.9
Publicly Traded Infrastructure		263,724,479.70	5,471,081.37	0.00	258,253,398.3
	PRIV INFRASTR AGGR	85,343,934.41	1,982,399.00	0.00	83,361,535.4
	HARVEST FUND ADVISOR	178,380,545.29	3,488,682.37	0.00	174,891,862.9
Real Estate		521,135,407.70	4,822,221.06	5,835,058.85	510,478,127.7
Real Estate		521,135,407.70	4,822,221.06	5,835,058.85	510,478,127.79
	REAL ESTATE	521,135,407.70	4,822,221.06	5,835,058.85	510,478,127.7
Total Cash		58,729,844.57	(58,743.51)	(24,139,203.11)	82,927,791.1



# Monthly Valuation Change

Period: 2016-09-01 - 2016-09-30

Category	Source Account Name	Closing Balance	Market Value Increase/(Decrease)	Transfer In/(Out)	Opening Balance
Cash Accounts		58,729,844.57	(58,743.51)	(24,139,203.11)	82,927,791.19
	ERSRI CASH	40,033,582.57	(58,743.51)	(38,023,311.11)	78,115,637.19
	CITIZENS CASH	18,696,262.00	0.00	13,884,108.00	4,812,154.00
Total Other		17,517,350.11	(963,614.85)	0.00	18,480,964.96
Other		17,517,350.11	(963,614.85)	0.00	18,480,964.96
	RUSSELL OVERLAY FD	17,517,350.11	(963,614.85)	0.00	18,480,964.96
Total Miscellaneous		498,782.11	23,761.44	0.00	475,020.67
Miscellaneous Accounts		498,782.11	23,761.44	0.00	475,020.67
	RI TRANS ACCT	5,142.40	(8.63)	0.00	5,151.03
	SHOTT CAPITAL	435,237.63	22,252.43	0.00	412,985.20
	DOM EQUITY TRANS	74.25	0.00	0.00	74.25
	NON-US EQUITY TRANS	56,301.81	1,551.82	0.00	54,749.99
	FIXED INC TRANS	2,026.02	(34.18)	0.00	2,060.20

### **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	Projected January 2017	Projected December	Projected November	Projected October	Actual September	Actual August	Actual July 2016
							2017						2010
MEMBER BENEFITS	849,321,027	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	69,638,749	80,260,148	69,422,131
ADMINISTRATIVE EXPENSES	10,310,265	1,402,923.56	718,107	1,403,401	1,327,462	490,334	490,349	1,455,574	415,373	920,437	642,177	670,460	373,667
INVESTMENT EXPENSES	9,013,057	109,133	1,202,775	290,754	1,489,542	391,688	449,787	(6,984)	1,354,605	517,439	1,260,447	1,476,800	477,072
TOTAL OUTFLOW	868,644,349	71,512,056	71,920,881	71,694,154	72,817,004	70,882,023	70,940,136	71,448,589	71,769,978	71,437,876	71,541,373	82,407,407	70,272,870
CONTRIBUTIONS	499,340,604	25,172,944	40,513,703	36,341,134	44,799,731	37,789,948	42,154,006	51,049,618	43,254,275	37,105,170	40,690,939	53,520,677	46,948,459
OTHER INCOME*	79,526,207	6,214,325	15,712,147	3,394,010	6,136,870	6,008,319	3,843,075	10,795,323	5,469,260	12,649,680	4,338,494	1,605,841	3,358,861
TOTAL INCOME	578,866,811	31,387,269	56,225,850	39,735,144	50,936,601	43,798,267	45,997,081	61,844,941	48,723,535	49,754,850	45,029,433	55,126,518	50,307,320
DIFFERENCE	(289,777,538)	(40,124,787)	(15,695,031)	(31,959,011)	(21,880,402)	(27,083,755)	(24,943,055)	(9,603,648)	(23,046,443)	(21,683,026)	(26,511,940)	(27,280,889)	(19,965,550)

### **Municipal Employees Retirement System**

	TOTAL	Projected June	Projected May	Projected April	Projected March	Actual February	Projected January 2017	Projected December	Projected November	Projected October	Actual September	Actual August	Actual July 2016
MEMBER BENEFITS	94,693,515	7,700,000	7,700,000	7,700,000	7,700,000	7,700,000	7,700,000	7,700,000	7,700,000	7,700,000	7,634,888	10,139,174	7,619,454
ADMINISTRATIVE EXPENSES	2,225,637	303,792	155,113	302,293	285,305	105,032	108,534	321,127	91,498	202,078	144,969	122,026	83,870
INVESTMENT EXPENSES	1,763,172	23,632	259,802	62,628	320,139	83,902	99,556	(1,541)	298,392	113,602	284,540	111,440	107,080
TOTAL OUTFLOW	98,682,325	8,027,424	8,114,915	8,064,921	8,305,444	7,888,934	7,908,089	8,019,586	8,089,891	8,015,680	8,064,397	10,372,640	7,810,403
CONTRIBUTIONS	61,744,036	302,987	4,051,743	4,513,754	5,412,174	4,816,573	5,669,644	5,706,992	6,283,320	4,631,697	5,550,861	7,700,000	7,104,291
OTHER INCOME*	17,385,570	1,345,664	3,393,857	731,070	1,318,966	1,287,012	850,625	2,381,654	1,204,769	2,777,190	979,396	361,465	753,901
TOTAL INCOME	79,129,606	1,648,651	7,445,600	5,244,824	6,731,140	6,103,585	6,520,269	8,088,646	7,488,089	7,408,887	6,530,257	8,061,465	7,858,192
DIFFERENCE	(19,552,719)	(6,378,773)	(669,314)	(2,820,097)	(1,574,304)	(1,785,349)	(1,387,820)	69,060	(601,802)	(606,793)	(1,534,140)	(2,311,175)	47,789

### **CASH FLOW ANALYSIS - INCOME & EXPENSES**

State Police
Retirement System

Retirement System	TOTAL	Projected June	Projected May	Projected April	Projected March	Actual February	Projected January 2017	Projected December	Projected November	Projected October	Actual September	Actual August	Actual July 2016
MEMBER BENEFITS	4,653,229	385,000	385,000	385,000	385,000	385,000	385,000	385,000	385,000	385,000	393,280	410,224	384,724
ADMINISTRATIVE EXPENSES	185,606	25,127	12,771	24,801	23,304	8,553	9,202	26,978	7,672	16,913	12,525	10,543	7,216
INVESTMENT EXPENSES	147,730	1,955	21,391	5,138	26,150	6,833	8,441	(129)	25,019	9,508	24,584	9,628	9,212
TOTAL OUTFLOW	4,986,564	412,082	419,163	414,940	434,454	400,386	402,643	411,848	417,691	411,421	430,389	430,396	401,152
CONTRIBUTIONS	6,122,837	441,275	393,221	415,000	395,000	485,000	445,000	1,220,000	405,000	412,382	533,942	592,292	384,724
OTHER INCOME*	1,449,629	111,301	279,439	59,980	107,736	104,808	72,121	200,081	101,017	232,436	84,619	31,230	64,861
TOTAL INCOME	7,572,466	552,576	672,660	474,980	502,736	589,808	517,121	1,420,081	506,017	644,818	618,561	623,523	449,585
DIFFERENCE	2,585,901	140,495	253,497	60,040	68,282	189,422	114,478	1,008,233	88,325	233,397	188,172	193,127	48,433

Judicial	
Potiromont	System

Retirement System	TOTAL	Projected June	Projected May	Projected April	Projected March	Actual February	Projected January 2017	Projected December	Projected November	Projected October	Actual September	Actual August	Actual July 2016
MENADED DENIETIC	2.762.022	220,000	220.000	220,000	220,000	220.000	220,000	220.000	220,000	220,000	227.044	226 244	227.044
MEMBER BENEFITS	2,762,022	230,000	230,000	230,000	230,000	230,000	230,000	230,000	230,000	230,000	227,841	236,341	227,841
ADMINISTRATIVE EXPENSES	96,057	12,912	6,598	12,804	12,022	4,410	4,768	14,034	3,987	8,786	6,545	5,442	3,748
INVESTMENT EXPENSES	76,573	1,004	11,051	2,653	13,490	3,523	4,373	(67)	13,004	4,939	12,847	4,969	4,786
TOTAL OUTFLOW	2,934,652	243,917	247,649	245,457	255,512	237,934	239,141	243,966	246,991	243,726	247,233	246,752	236,375
CONTRIBUTIONS	3,760,349	291,448	263,142	280,000	270,000	270,000	280,000	430,000	290,000	290,000	436,053	431,866	227,841
OTHER INCOME*	750,881	57,197	144,363	30,965	55,579	54,043	37,366	104,081	52,503	120,750	44,220	16,119	33,694
TOTAL INCOME	4,511,229	348,645	407,505	310,965	325,579	324,043	317,366	534,081	342,503	410,750	480,273	447,984	261,534
DIFFERENCE	1,576,578	104,728	159,856	65,509	70,067	86,110	78,225	290,115	95,512	167,025	233,040	201,233	25,160

<sup>\*</sup>includes income from Real Estate Investments, Private Equity, and Cash Accounts

FISCAL YEAR 2017

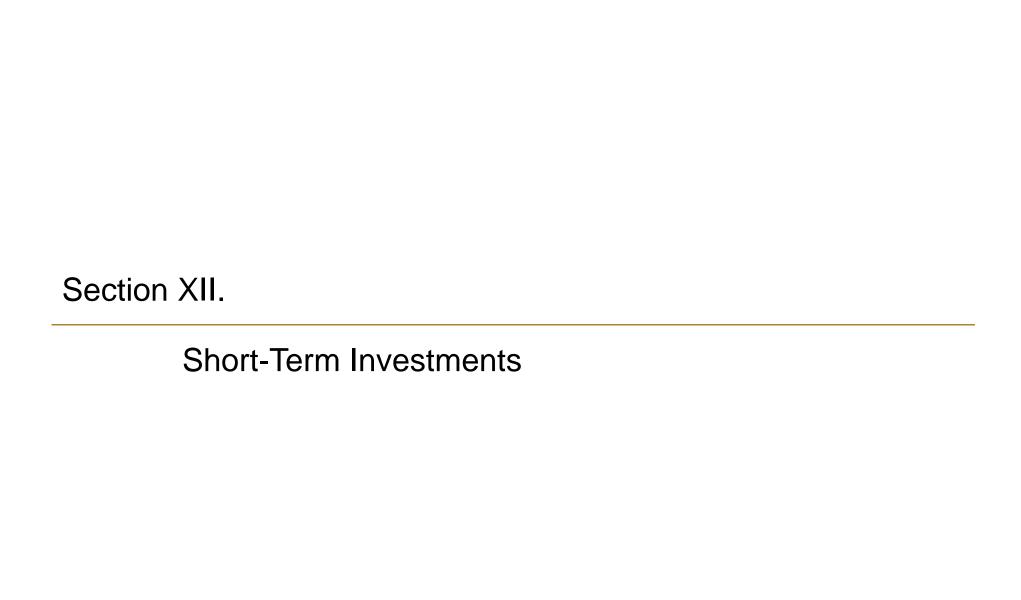
### DIRECT BILLED INVESTMENT MANAGER FEES, PROFESSIONAL FEES & OPERATING EXPENSES

ERSRI & MERSRI

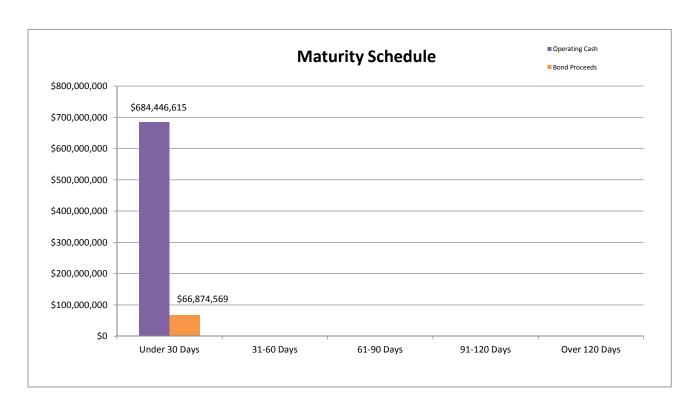
ACCRUAL BASIS

	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected
	Jul 16	Aug	Sept	Oct	Nov	Dec	Jan 17	Feb	Mar	Apr	May	June	TOTAL
FOURTIES US													
EQUITIES US SSGA Russell 3000			42,000			42,000			42,000			42,000	168,000
Shott Capital/Hamilton Lane			30,000			1,000			1,000			1,000	33,000
SSGA QVM Tilt			70,000			70,000			70,000			70,000	280,000
33GA QVIVI TIIC			142,000			113,000			113,000			119,800	207,800
													,
FIXED INCOME			400.000			400 000			400.000			400.000	720,000
Pyramis			180,000			180,000			180,000			180,000	720,000
Mackay Shields			180,000			180,000			180,000			180,000	720,000
Brown Bros.TIPS/GILB			<u>84,000</u>			84,000			84,000			84,000	336,000
			444,000			444,000			444,000			444,000	1,776,000
INT'L EQUITIES													
SSGA MSCI EAFE			65,000			65,000			65,000			65,000	260,000
SSGA MSCI CAD			8,000			8,000			8,000			8,000	32,000
SSGA MSCI Emerg Mkts			80,000			80,000			80,000			80,000	320,000
			153,000			153,000			153,000			153,000	612,000
CREDIT													
WAMCO			100,000			100,000			100,000			100,000	400,000
PIMCO			130,000			130,000			130,000			130,000	<u>520,000</u>
			230,000			230,000			230,000			230,000	920,000
Infrastructure													
Harvest Partners			220,000			220,000			220,000			220,000	880,000
REAL ESTATE													
Direct Billed Real Estate	331,011	192,928	0	480,045	174,409	0	493,165	91,634	0	79,200	104,358	0	1,946,750
ALTERNATIVE INVESTMENTS													
Direct Billed Private Equity	267,199	428,254	1,586,067	165,487	1,516,731	(8,723)	69,034	507,595	1,245,019	673,084	1,231,877	135,737	7,817,362
<b>-</b>		,	_,,,,,,,,,			(5): 25)				0.0,00			1,521,552
SUB TOTAL-INV MGMT FEES	598,210	621,182	2,775,067	645,532	1,691,140	1,151,277	562,199	599,228	2,405,019	752,284	1,336,235	1,302,537	14,159,911
PROFESSIONAL FEES													
Legal	3,488	5,000	2,665	12,190	8,418	3,357	0	7,964	18,469	12,347	5,960	9,763	89,620
BNY Mellon - Custodial	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	396,000
Cliffwater	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	37,500	450,000
PCA/Russell	14,583	14,583	18,750	14,583	33,333	63,695	14,583	14,583	82,263	14,583	14,583	33,333	333,457
PCA Real Estate	10,417	10,417	10,417	10,417	10,417	10,417	10,417	10,417	10,417	10,417	10,417	10,417	125,004
	98,988	100,500	102,332	107,690	122,668	147,969	95,500	103,464	181,650	107,848	101,460	124,013	1,394,081
OPERATING EXPENSE	,	,	,	,	_,	,	,3	,	,	,	·-,·	.,	,,,,,,,,,
Retirement Transfers	359,498	596,617	701,368	677,969	330,009	1,625,828	512,091	865,046	920,987	823,990	442,116	1,303,711	9,159,231
Other Expense	<u>0</u>	<u>0</u>	4,375	<u>1,125</u>	<u>0</u>	<u>38,335</u>	1,625	<u>0</u>	49,974	<u>0</u>	<u>0</u>	1,000	96,434
	359,498	596,617	705,743	679,094	330,009	1,664,163	513,716	865,046	970,961	823,990	442,116	1,304,711	9,255,665
TOTAL:	1,056,696	1,318,298	3,583,141	1,432,316	2,143,817	2,963,409	1,171,416	1,567,738	3,557,630	1,684,122	1,879,811	2,731,261	24,809,657

Note: Numbers in bold are actual.



### Short-Term Investment Maturity Schedule & SIC Compliance Report at September 30, 2016



Vendor	CP	CD	Agency	Money Mkt	PIP	Repo	GID	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	345,419,021	345,419,021
	0%	0%	0%	0%	0%	0%	0%	50%	50%
Bank RI	0	15,271,375	0	15,093,828	0	0	0	0	30,365,203
	0%	2%	0%	2%	0%	0%	0%	0%	4%
Santander Bank	0	0	0	0	87,093,069	0	0	0	87,093,069
	0%		0%	0%	13%	0%	0%	0%	13%
Citizens Bank	0% 0%		0	0	59,386,642	0	0	0	59,386,642
	0%	0%	0%	0%	9%	0%	0%	0%	9%
Webster Bank	0	0	0	0	4,876,745	0	0	0	4,876,745
	0%	0%	0%	0%	1%	0%	0%	0%	1%
Customers Bank	0	0	0	0	83,996,349	0	0	0	83,996,349
	0%	0%	0%	0%	12%	0%	0%	0%	12%
Washington Trust	0	0	0	60,731,120	0	0	0	0	60,731,120
	0%	0%	0%	9%	0%	0%	0%	0%	9%
TD Bank	0	0	0	0	12,578,466	0	0	0	12,578,466
	0%	0%	0%	0%	2%	0%	0%	0%	2%
TOTALS	-	15,271,375	-	75,824,948	247,931,271	-	-	345,419,021	684,446,615
(%) PORTFOLIO	0.00%	2.23%	0.00%	11.08%	36.22%	0.00%	0.00%	50.47%	100.00%

Note: PIP + CD must be under 75%.

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

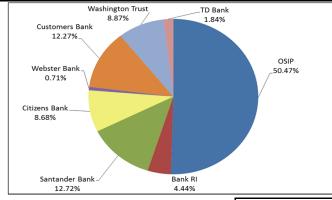
# State of Rhode Island Short Term Cash Monthly Performance Performance for September 01, 2016 to September 30, 2016

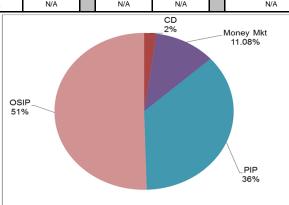
Fund Name	В	eginning Balance	Ending Balance	A	verage Daily Balance	Earnings	Yield(Annual)
GENERAL FUND	\$	440,988,640.25	\$ 366,386,287.56	\$	432,915,306.92	\$ 197,647.31	0.5555%
H.A.V.A	\$	297.09	\$ 297.21	\$	297.09	\$ 0.12	0.4914%
GENERAL FUND (HIST PRES)	\$	540,687.36	\$ 540,966.70	\$	540,687.36	\$ 279.34	0.6286%
HISTORIC TAX CREDITS	\$	2,919,919.70	\$ 2,921,374.44	\$	2,919,919.70	\$ 1,454.74	0.6062%
HIGHWAY FUND	\$	44,294,656.10	\$ 60,620,094.61	\$	55,461,322.77	\$ 25,438.51	0.5580%
T.D.I. RESERVE (DET)	\$	119,913,216.35	\$ 103,158,689.44	\$	111,129,883.01	\$ 45,473.09	0.4978%
RICAP GL FUND 21	\$	38,908,876.13	\$ 69,028,466.36	\$	49,595,542.80	\$ 19,590.23	0.4806%
BOND CAPITAL FUND	\$	61,959.32	\$ 863,184.75	\$	2,995,292.65	\$ 1,225.43	0.4978%
R.I. CLEAN WATER ACT	\$	3,199,995.35	\$ 3,201,554.48	\$	3,199,995.35	\$ 1,559.13	0.5928%
STATE LOTTERY FUND	\$	53,054,141.92	\$ 48,376,224.98	\$	48,997,475.25	\$ 22,083.06	0.5483%
ASSESSED FRINGE BEN ADM	\$	415,211.24	\$ 415,413.75	\$	415,211.24	\$ 202.51	0.5934%
AUTO EQUIPMENT SERVICE	\$	1,252.96	\$ 1,253.47	\$	1,252.96	\$ 0.51	0.4952%
HEALTH INSURANCE FUND	\$	24,639,267.02	20,050,217.20		22,255,933.69	10,950.18	0.5986%
FLEET REVOLVING LOAN FUND	\$	3,764,199.08	3,765,402.62		3,764,199.08	1,203.54	0.3890%
EMPLOYEES RETIREMENT	\$	19,290.27	127,724.01		20,579,290.27	8,433.74	0.4986%
MUNICIPAL EMPLOYEES RET.	\$	86,665.11	137,721.56		2,581,665.11	1,056.45	0.4979%
RETIREE HEALTH FUND	\$	240,842.12	240,960.04		240,842.12	117.92	0.5957%
BOG RETIREE FUND	\$	62,840.51	62,872.95		62,840.51	32.44	0.6281%
RIPTA HEALTH FUND	\$	35,921.57	35,940.13		35,921.57	18.56	0.6286%
PERMANENT SCHOOL FUND	\$	1,945,709.85	1,946,715.00		1,945,709.85	1,005.15	0.6285%
TEACHER RETIREE HEALTH FUND	\$	579,440.07	579,692.35		579,440.07	252.28	0.5297%
RI ST POL RETIREE HEALTH	\$	123,846.52	123,897.60		123,846.52	51.08	0.5018%
RI LEG RETIREE HEALTH	\$	90,758.13	90,795.33		90,758.13	37.20	0.4987%
RI JUDICIAL RETIREE HEALTH	\$	40,453.00	40,469.58		40,453.00	16.58	0.4987%
UNIVERSITY COLLEGE	\$	12,215.36	12,221.41		12,215.36	6.05	0.6026%
INDUS. BLDG. & MTG. INS.	\$	1,717,289.39	1,718,176.60		1,717,289.39	887.21	0.6286%
Operating Funds Totals	\$	737,657,591.77	\$ 684,446,614.13	\$	762,202,591.77	\$ 339,022.36	0.541%
CCDL 2004 SERIES A	\$	35,020.23	\$ -			\$ -	0.0000%
BOND CCDL 2006 SERIES C	\$	874,211.66	\$ 893,815.34	\$	893,411.58	\$ 461.46	0.6284%
GO BND-NTAX 2007 SERIES A	\$	389,764.83	\$ 389,788.83	\$	389,711.65	\$ 201.28	0.6284%
CCDL10B BOND CAPITAL COMPONENT	\$	950,432.29	\$ 950,000.00	\$	950,286.24	\$ 490.81	0.6284%
CCDL10C	\$	160,031.53	\$ 160,114.21	\$	160,031.53	\$ 82.68	0.6286%
CCDL2011A	\$	6,618,138.01	\$ 6,252,687.83	\$	6,254,687.26	\$ 3,230.37	0.6284%
CCDL2012B	\$	6,295,393.40	\$ 6,292,530.05	\$	6,294,426.03	\$ 3,250.95	0.6284%
GO CCDL 2013A	\$	5,219,377.32	\$ 5,216,502.98	\$	5,218,074.90	\$ 2,695.04	0.6284%
GO CCDL 2013B	\$	6,252,844.00	\$ 6,250,000.00	\$	6,251,883.17	\$ 3,228.98	0.6284%
GO CCDL 2014A	\$	3,361,039.29	\$ 2,276,931.69	\$	2,277,962.58	\$ 1,176.35	0.6283%
GO CCDL 2014B	\$	40,682.77	40,664.27	\$	40,676.52	21.01	0.6284%
GO CCDL 2016A	\$	34,464,344.90	29,777,051.41		29,787,511.48	15,383.93	0.6284%
GO CCDL 2016B	\$	6,728,372.69	6,501,931.85		6,503,962.08	3,359.14	0.6284%
CLEAN WATER 2004 SERIES A	\$	146,797.18	146,728.71		146,774.11	75.81	0.6284%
CCDL99A 1999A	\$	206,663.39	206,569.39		206,631.63	106.72	0.6284%
CLEAN WATER 2007 SERIES A	\$	283,380.95	283,252.06		283,337.40	146.34	0.6284%
CCDL2011A CLEAN WATER COMPONENT	\$	1,236,562.43	1,236,000.00		1,236,372.42	638.56	0.6284%
Bond Proceeds Fund Totals	\$	73,263,056.87	\$ 66,874,568.62	\$	66,895,740.58	\$ 34,549.43	0.628%

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

### Issuer Credit Rating September 30, 2016

			1	Issuer Ratings	S-T Deb	t Rating	,	L-T Deb	ot Rating	,	Credit Outlook
Issuer	Type of Instrument*	Month End % Portfolio		Moody's	Moody's	S&P		Moody's	S&P		S&P
Bank RI	3,4	4.4%		N/R	N/A	N/A		N/A	N/A		N/A
Santander Bank	3,4	12.7%		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	8.7%		Baa1	P-2	A-2		A1	A-		Stable
Webster Bank	3,4	0.7%		Baa1	P-1	A-2		A1	BBB+		Positive
Ocean State Investment Pool	6	50.5%		N/R	N/A	N/A		N/A	N/A		N/A
Washington Trust	3,7	8.9%		N/R	N/A	N/A		N/A	N/A		N/A
TD Bank	3	1.8%		Aa1	P-1	A-1+		Aa1	AA-		Negative
Customers Bank	4	12.3%		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*

### 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
- Lowest rated class, usually in default

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

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

### Modifiers:

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

### **Ratings Definitions**

### 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:

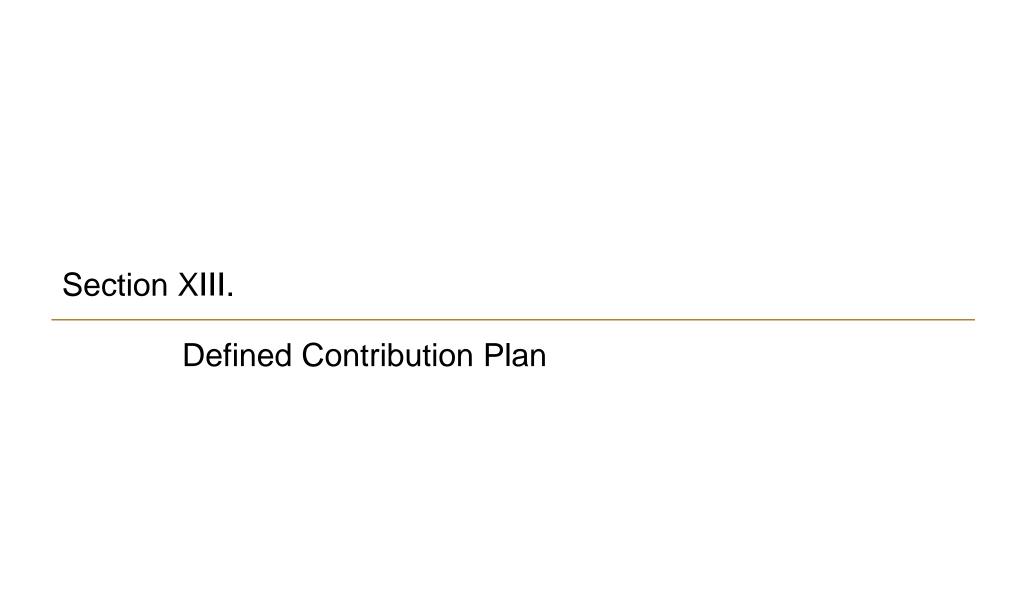
- AAA Highest rating, extremely strong
- AA Differs slightly from highest rating, very strong
- A More susceptible to adverse effects of change in economic condition, strong
- BBB Exhibits adequate protection parameters
- BB, B, Have significant speculative characteristics. BB least speculative
- CCC,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

## State of Rhode Island

## OSIP Performance FY17 Q1

July 1, 2016 through September 30, 2016

Fund Name	Ве	ginning Balance	En	ding Balance	Ave	erage Daily Balance	Ea	rnings	Yield
GENERAL FUND	\$	196,564,466.97	\$	203,068,354.05	\$	200,974,466.97	\$	103,887.08	0.6289%
GENERAL FUND (HIST PRES)	\$	540,680.77	\$	540,960.11		540,680.77	\$	279.34	0.6286%
HISTORIC TAX CREDITS	\$	2,416,228.44	\$	2,417,476.75	\$	2,416,228.44	\$	1,248.31	0.6286%
HIGHWAY FUND	\$	25,410,026.22	\$	25,423,153.98	\$	25,410,026.22	\$	13,127.76	0.6286%
T.D.I. RESERVE (DET)	\$	23,359,779.10	\$	23,371,847.63	\$	23,359,779.10	\$	12,068.53	0.6286%
RICAP GL FUND 21	\$	17,824,529.33	\$	47,939,637.89	\$	28,511,196.00	\$	15,108.56	0.6447%
R.I. CLEAN WATER ACT	\$	2,318,870.12	\$	2,320,068.13	\$	2,318,870.12	\$	1,198.01	0.6286%
STATE LOTTERY FUND	\$	18,797,356.50	\$	18,807,067.91	\$	18,797,356.50	\$	9,711.41	0.6286%
ASSESSED FRINGE BEN ADM	\$	302,850.90	\$	303,007.36	\$	302,850.90	\$	156.46	0.6286%
HEALTH INSURANCE FUND	\$	17,124,406.48	\$	17,133,253.58	\$	17,124,406.48	\$	8,847.10	0.6286%
RETIREE HEALTH FUND	\$	179,877.61	\$	179,970.54	\$	179,877.61	\$	92.93	0.6286%
BOG RETIREE FUND	\$	62,612.94	\$	62,645.29	\$	62,612.94	\$	32.35	0.6286%
RIPTA HEALTH FUND	\$	35,919.29	\$	35,937.85	\$	35,919.29	\$	18.56	0.6287%
PERMANENT SCHOOL FUND	\$	1,945,010.56	\$	1,946,015.42	\$	1,945,010.56	\$	1,004.86	0.6286%
TEACHER RETIREE HEALTH FUND	\$	138,567.20	\$	138,638.79	\$	138,567.20	\$	71.59	0.6286%
RI ST POL RETIREE HEALTH	\$	3,086.45	\$	3,088.04	\$	3,086.45	\$	1.59	0.6268%
UNIVERSITY COLLEGE	\$	9,761.31	\$	9,766.35	\$	9,761.31	\$	5.04	0.6282%
INDUS. BLDG. & MTG. INS.	\$	1,717,244.22	\$	1,718,131.41	\$	1,717,244.22	\$	887.19	0.6286%
Operating Funds Totals	\$	308,751,274.41	\$	345,419,021.08	\$	323,847,941.08	\$	167,746.67	0.60%
CCDL 2004 SERIES A	\$	35,020.23	¢	_			\$	_	0.0000%
BOND CCDL 2006 SERIES C	\$	874,211.66	\$	893,815.34	\$	893,411.58	\$	461.46	0.6284%
GO BND-NTAX 2007 SERIES A	\$	389,764.83	\$	389,788.83	\$	389,711.65	\$	201.28	0.6284%
CCDL10B BOND CAPITAL COMPONENT	\$	950,432.29	\$	950,000.00	\$	950,286.24	\$	490.81	0.6284%
CCDL10C	\$	160,031.53	\$	160,114.21		160,031.53	\$	82.68	0.6286%
CCDL2011A	\$	6,618,138.01	\$	6,252,687.83		6,254,687.26	\$	3,230.37	0.6284%
CCDL2012B	\$	6,295,393.40	\$	6,292,530.05	\$	6,294,426.03	\$	3,250.95	0.6284%
GO CCDL 2013A	\$	5,219,377.32	\$	5,216,502.98		5,218,074.90	\$	2,695.04	0.6284%
GO CCDL 2013B	\$	6,252,844.00	\$	6,250,000.00		6,251,883.17	\$	3,228.98	0.6284%
GO CCDL 2014A	\$	3,361,039.29	\$	2,276,931.69		2,277,962.58	\$	1,176.35	0.6283%
GO CCDL 2014B	\$	40,682.77	\$	40,664.27		40,676.52	\$	21.01	0.6284%
GO CCDL 2016A	\$	34,464,344.90	\$	29,777,051.41		29,787,511.48	\$	15,383.93	0.6284%
GO CCDL 2016B	\$	6,728,372.69	\$	6,501,931.85		6,503,962.08	\$	3,359.14	0.6284%
CLEAN WATER 2004 SERIES A	\$	146,797.18	\$	146,728.71			\$	75.81	0.6284%
CCDL99A 1999A	\$	206,663.39	\$	206,569.39	\$	206,631.63	\$	106.72	0.6284%
CLEAN WATER 2007 SERIES A	\$	283,380.95	\$	283,252.06	\$	283,337.40	\$	146.34	0.6284%
CCDL2011A CLEAN WATER COMPONENT	\$	1,236,562.43	\$	1,236,000.00			\$	638.56	0.6284%
Bond Proceeds Fund Totals	\$	73,263,056.87	\$	66,874,568.62	\$	66,895,740.58	\$	34,549.43	0.40%
Grand Totals	\$	382,014,331.28	\$	412,293,589.70	\$	390,743,681.66	\$	202,296.10	0.50%



2016 YTD Performance Summary  (B) (C) (D) (E) (F) (G) (H) (I) (K) (L) (M) (N) (O) (P) (Q) (R) (S)																			
LIAA (A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(1)		(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)
		Mgr.	AUM	Gross	Net	Net	Rev	Re	cent Retu	ırns		Α	<b>Innualiz</b> e	d Total R	eturns as	of 9/30/20	16		Since
As of 9/30/16	Ticker	Tenure	\$ Millions	ER	ER	%-ile	Share	1mo.	3mo.	YTD	1 Year	%-ile	3 Year	%-ile	5 Year	%-ile	10 Year	%-ile	Incep.
TIAA Stable Value****  FIXED INCOME	Current c	rediting ra	te = 1.80					0.15	0.47	1.42	1.88		1.89						1.87
Intermediate-Term Bond																			
Vanguard Total Bond Market Index Adm	VBTLX	3.67	174,847.91	0.06	0.06	2	0.00	(0.06)	0.41	5.95	5.31	47	3.98	38	3.00	70	4.77	44	4.54
Barclays U.S. Aggregate Float Adjusted Index								(0.06)	0.45	5.99	5.34		4.04		3.11		4.81		
Intermediate-Term Bond Median				0.87	0.75			0.03	0.92	5.88	5.26		3.79		3.48		4.74		
Intermediate-Term Bond Number of Funds				1,128	1,128							1101		1054		1009		877	
Inflation-Linked Bond																			
PIMCO Real Return Instl	PRRIX	8.83		0.58	0.45	22	0.00	0.80	1.41	7.57	6.69	22	1.94	24	1.99	5	4.69	3	
Barclays US Treasury US TIPS TR USD								0.55	0.96	7.27	6.58		2.40		1.93		4.48		
Inflation-Protected Bond Median				0.87	0.73			0.74	1.00	6.68	5.75		1.53		1.21		3.77		
Inflation-Protected Bond Number of Funds				262	262							258		242		207		155	
Equity																			
Large Cap Blend																			
Vanguard Institutional Index I	VINIX	15.83	208,758.42	0.04	0.04	1	0.00	0.02	3.85	7.81	15.41	11	11.13	5	16.35	11	7.24	20	9.44
S&P 500 TR USD								0.02	3.85	7.84	15.43		11.16		16.37		7.24		
TIAA-CREF Social Choice Eq Instl	TISCX	10.83	2,344.15	0.18	0.18	4	0.00	0.00	4.70	9.09	15.27	12	9.04	53	15.22	49	7.04	27	
Russell 3000 TR USD								0.16	4.40	8.18	14.96		10.44		16.36		7.37		
Large Blend Median				1.10	1.00			(0.02)	3.87	6.43	12.61		9.22		15.21		6.51		
Large Blend Number of Funds				1,624	1,624							1,578		1,504		1,377		1,213	
Mid Cap Blend	VINAAV	10.40	72 /2/ 12	0.00	0.00	_	0.00	0.27	F 10	0.00	10 (4	40	0.00	7	1/ 50	14	0.20	2/	0.40
Vanguard Mid Cap Index Adm	VIMAX	18.42	73,636.12	80.0	0.08	2	0.00	0.36	5.18	8.89	12.64	40	9.90	6	16.52	14	8.20	26	9.49
Spliced Mid Cap Index *								0.38	5.21	8.92	12.68		9.96		16.58		8.24		
CRSP US Mid Cap TR USD				4.00	4.45			0.38	5.21	8.92	12.68		9.96		16.54		8.22		
Mid-Cap Blend Median				1.23	1.15			(0.12)	4.46	8.90	11.89		7.50		15.06	222	7.07	222	
Mid-Cap Blend Number of Funds Small Cap Blend				480	480							440		414		382		328	
Vanquard Small Cap Index Adm	VSMAX	0.50	63,296.59	0.08	0.08	1	0.00	0.41	6.17	11.50	14.97	36	7.92	18	16.70	21	8.42	12	8.74
Spliced Small Cap Index **			,- <u>,</u> ,					0.41	6.15	11.47	14.93		7.91		16.68		8.35		
CRSP US Small Cap TR USD								0.41	6.15	11.47	14.93		7.91		16.75		8.84		
Small Blend Median				1.36	1.22			0.59	6.90	10.35	13.69		6.25		15.19		6.54		
Small Blend Number of Funds				879	879							856		755		696		589	

2016 YTD Performance Summary  (B) (C) (D) (E) (F) (G) (H) (I) (K) (L) (M) (N) (O) (P) (Q) (R) (S)																			
L IIAA (A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(1)		(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)
		Mgr.	AUM	Gross	Net	Net	Rev	Re	cent Retu	rns		Α	nnualize	d Total R	eturns as	of 9/30/20	16		Since
As of 9/30/16	Ticker	Tenure	\$ Millions	ER	ER	%-ile	Share	1mo.	3mo.	YTD	1 Year	%-ile	3 Year	%-ile	5 Year	%-ile	10 Year	%-ile	Incep.
Foreign Large Blend																			
TIAA-CREF International Eq Idx InstI	TCIEX	11.17	7,639.90	0.06	0.06	1	0.00	1.35	6.14	2.73	6.57	43	0.72	46	7.85	30	2.00	36	
MSCI EAFE NR USD								1.23	6.43	1.73	6.52		0.48		7.39		1.82		
Foreign Large Blend Median				1.31	1.15			1.32	6.19	2.52	6.07		0.61		7.25		1.61		
Foreign Large Blend Number of Funds				921	921							879		779		722		544	
Diversified Emerging Markets																			
Vanguard Emerging Mkts Stock Idx Adm	VEMAX	8.17	60,976.29	0.15	0.15	1	0.00	1.27	7.79	16.20	15.84	47	0.19	40	3.44	55	3.91	40	4.85
Spliced Emerging Markets Index ***								0.79	7.78	15.24	15.67		0.07		3.13		3.99		
FTSE Emerging NR USD								1.00	7.95	16.45	16.75		0.37		3.20		4.34		
MSCI EM NR USD								1.29	9.03	16.02	16.78		(0.56)		3.03		3.95		
Diversified Emerging Mkts Median				1.80	1.50			1.67	7.93	14.06	15.54		(0.43)		3.70		3.56		
Diversified Emerging Mkts Number of Funds				921	921							894		657		528		275	
Miscellaneous Sector																			
TIAA Real Estate Account	VA	1.17	24,003.73	0.89	0.89		0.24	0.28	0.68	3.90	5.59		8.62		9.31		3.46		
Lifecycle																			
Vanguard Target Retirment Income Trust II				0.07	0.07		0.00	0.32	1.93	6.36	7.63		4.75		5.99				4.99
Vanguard Target Retirement Income Compos. Lx								0.28	1.98	6.31	7.79		4.89		6.11				
Retirement Income Median				1.13	0.83			0.29	2.08	5.99	7.06		3.68		5.34		4.19		
Retirement Income Number of Funds				206	206							199		178		162		90	
Vanguard Target Retirment 2010 Trust II				0.07	0.07		0.00	0.34	2.06	6.38	7.91		5.13		7.32				5.16
Vanguard Target Retirement 2010 Compos. Lx								0.29	2.09	6.34	8.08		5.28		7.42				
Target Date 2000-2010 Median				0.91	0.78			0.36	2.53	6.35	8.24		4.55		7.17		4.03		
Target Date 2000-2010 Number of Funds				127	127							123		110		98		50	
Vanguard Target Retirment 2015 Trust II				0.07	0.07		0.00	0.38	2.78	6.83	9.19		5.79		8.67				5.54
Vanguard Target Retirement 2015 Compos. Lx								0.35	2.80	6.77	9.36		5.92		8.76				
Target Date 2011-2015 Median				1.03	0.76			0.37	2.73	6.59	8.76		4.72		7.95		4.86		
Target Date 2011-2015 Number of Funds				151	151							138		114		102		30	
Vanguard Target Retirment 2020 Trust II				0.07	0.07		0.00	0.38	3.29	7.24	10.14		6.32		9.71				5.75
Vanguard Target Retirement 2020 Compos. Lx								0.37	3.37	7.18	10.40		6.46		9.85				
Target Date 2016-2020 Median				1.08	0.87			0.38	2.92	6.61	8.71		4.78		7.93		4.32		
Target Date 2016-2020 Number of Funds				275	275							255		230		195		91	

ATTIA A	2016 YTD Performance Summary  (B) (C) (D) (E) (F) (G) (H) (I) (K) (L) (M) (N) (O) (P) (Q) (R) (S)																		
L IIAA (A)													(M)	(N)	(O)	(P)	(Q)	(R)	(S)
		Mgr.	AUM	Gross	Net	Net	Rev	Red	cent Retu	irns		А	nnualize	d Total R	eturns as	of 9/30/20	116		Since
As of 9/30/16	Ticker	Tenure	\$ Millions	ER	ER	%-ile	Share	1mo.	3mo.	YTD	1 Year	%-ile	3 Year	%-ile	5 Year	%-ile	10 Year	%-ile	Incep.
Vanguard Target Retirment 2025 Trust II				0.07	0.07		0.00	0.43	3.70	7.39	10.75		6.55		10.47				5.83
Vanguard Target Retirement 2025 Composite Lx								0.42	3.77	7.32	11.01		6.68		10.60				
Target Date 2021-2025 Median				1.08	0.86			0.41	3.39	6.80	9.75		5.23		9.23		4.76		
Target Date 2021-2025 Number of Funds				237	237							217		189		156		42	
Vanguard Target Retirment 2030 Trust II				0.07	0.07		0.00	0.47	4.03	7.42	11.22		6.70		11.19				5.86
Vanguard Target Retirement 2030 Composite Lx								0.47	4.14	7.39	11.52		6.86		11.32				
Target Date 2026-2030 Median				1.12	0.91			0.44	3.70	6.88	10.31		5.47		9.77		4.43		
Target Date 2026-2030 Number of Funds				275	275							255		230		195		91	
Vanguard Target Retirment 2035 Trust II				0.07	0.07		0.00	0.55	4.38	7.51	11.73	7	6.88		11.90				6.02
Vanguard Target Retirement 2035 Composite Lx								0.52	4.51	7.45	12.02		7.04		12.03				
Target Date 2031-2035 Median				1.12	0.88			0.51	4.17	6.94	10.97		5.72		10.59		4.79		
Target Date 2031-2035 Number of Funds				237	237							217		189		156		42	
Vanguard Target Retirment 2040 Trust II				0.07	0.07		0.00	0.57	4.75	7.56	12.16		6.94		12.22				6.18
Vanguard Target Retirement 2040 Composite Lx								0.57	4.87	7.50	12.51		7.13		12.37				
Target Date 2036-2040 Median				1.19	0.95			0.54	4.41	6.94	11.28		5.79		10.81		4.52		
Target Date 2036-2040 Number of Funds				275	275							255		230		195		91	
Vanguard Target Retirment 2045 Trust II				0.07	0.07		0.00	0.61	4.87	7.60	12.26		6.94		12.23				6.15
Vanguard Target Retirement 2045 Composite Lx								0.58	4.97	7.53	12.59		7.14		12.38				
Target Date 2041-2045 Median				1.20	0.90			0.57	4.60	6.96	11.48		5.93		11.34		4.68		
Target Date 2041-2045 Number of Funds				237	237							217		189		149		37	
Vanguard Target Retirment 2050 Trust II				0.07	0.07		0.00	0.61	4.84	7.61	12.25		6.92		12.19				6.17
Vanguard Target Retirement 2050 Composite Lx								0.58	4.97	7.53	12.59		7.14		12.38				
Target Date 2046-2050 Median				1.31	0.95			0.55	4.55	6.96	11.48		5.98		11.37		4.60		
Target Date 2046-2050 Number of Funds				265	265							245		220		183		24	
Vanguard Target Retirment 2055 Trust II				0.07	0.07		0.00	0.59	4.84	7.62	12.27		6.88						11.12
Vanguard Target Retirement 2055 Composite Lx								0.58	4.97	7.53	12.59		7.14						
Target Date 2051-2055 Median				1.38	0.90			0.57	4.67	6.97	11.56		6.02						
Target Date 2051-2055 Number of Funds				235	235							214		156					
Vanguard Target Retirment 2060 Trust II				0.07	0.07		0.00	0.61	4.83	7.64	12.28		6.90						8.39
Vanguard Target Retirement 2060 Composite Lx								0.58	4.97	7.53	12.59		7.14						
Target Date 2060+ Median				1.82	0.87			0.57	4.76	6.82	11.71		5.62						
Target Date 2060+ Number of Funds				164	164							91		9					

2016 YTD Performance Summary																				
	<b>TIAA</b> (A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	<b>(</b> 1)		(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)
			Mgr.	AUM	Gross					ecent Ret						eturns as				Since
	As of 9/30/16	Ticker	Tenure	\$ Millions	ER	ER	%-ile	Share	1mo.	3mo.	YTD	1 Year	%-ile	3 Year	%-ile	5 Year	%-ile	10 Year	%-ile	Incep.

Source: Morningstar & TIAA-CREF Morningstar Analyst Assigned Benchmark"

Data for 1-month and YTD return as of 9/30/2016. All other data as of 9/30/2016

### VA = Variable Annuity

Since Incep. = Since Inception Date

Incep. Date = Inception Date

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

- \* = S&P MidCap 400 Index through May 16, 2003; the MSCI US Mid Cap 450 Index through January 30, 2013; and the CRSP US Mid Cap Index thereafter
- \*\* = Russell 2000 Index through May 16, 2003; the MSCI US Small Cap 1750 Index through January 30, 2013; and the CRSP US Small Cap Index thereafter
- \*\*\* = Spliced Emerging Markets Index reflects performance of the Select Emerging Markets Index through August 23, 2006; the MSCI Emerging Markets Index through January 9, 2013; FTSE Emerging Transition Index through June 27, 2013;

FTSE Emerging Index; As of November 2, 2105 FTSE Emerging Markets ALL Cap China A Transition Index thereafter.

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. Ifinterest 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.

<sup>\*\*\*\* =</sup> 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.

<sup>&</sup>quot;Since Inception" performance is calculated from this date.

<sup>\*\*\*\*\* =</sup> For definitions please visit www.tiaa-cref.org/public/assetmanagement



· %-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, 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 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.

C12205



457 Plans

# **State of Rhode Island Total Assets 457 Plans**

Plan Provider	12/31/2015	3/31/2016	6/30/2016	9/30/2016
Valic Fidelity ING/Voya	\$ 55,423,509.00 \$112,661,541.00 \$ 140,090,432.17	\$ 55,832,092.69 \$113,143,204.23 \$ 139,832,969.88	\$ 56,814,911.96 \$ 114,427,432.87 \$ 148,887,765.53	\$ 57,795,223.13 \$ 119,908,274.00 \$ 153,884,535.00
Total	\$ 308,175,482.17	\$ 308,808,266.80	\$ 320,130,110.36	\$ 331,588,032.13

# **Monthly Plan Performance Update**

STATE OF RHODE ISLAND - STATE OF RI (35835)

Understanding investment performance: As you review this update, please remember that the performance data stated represents past performance, which does not guarantee future results. Investment return and principal value of an investment will fluctuate; therefore, you may have a gain or loss when you sell your shares. Current performance may be higher or lower than the performance stated. To learn more or to obtain the most recent month-end performance, call Fidelity or visit NetBenefits.com.

	Cum	ulative T	otal Retur	ns	Average Annual Total Returns						
Name	As of	1 mo	3 mo	YTD	As of	1 yr	3 yr	5 yr	10 yr		
DOW JONES 30 INDUSTRIAL AVERAGE	09/30/2016	-0.41	2.78	7.21	09/30/2016	15.46	9.23	13.77	7.39		
BARCLAYS CAPITAL U.S. AGGREGATE BOND INDEX	09/30/2016	-0.06	0.46	5.80	09/30/2016	5.19	4.03	3.08	4.79		
NASDAQ COMPOSITE INDEX	09/30/2016	1.96	10.02	7.09	09/30/2016	16.42	13.45	18.54	10.08		
RUSSELL 2000 INDEX	09/30/2016	1.11	9.05	11.46	09/30/2016	15.47	6.71	15.82	7.07		
STANDARD & POOR'S 500 ™ INDEX	09/30/2016	0.02	3.85	7.84	09/30/2016	15.43	11.16	16.37	7.24		

	Cum	ulative T	otal Retur	ns		Avera	ge Annual	<b>Total Ret</b>	Fees				
Investment Name	As of	1 mo	3 mo	YTD	As of	1 yr	3 yr	5 yr	10 yr	Life	Short-Term Trading Fee	Expense Ratio †	Inception Date
Stock Investme	ents												
Large Cap													
FID 500 INDEX INST	09/30/2016	0.03	3.85	7.82	09/30/2016	15.40	11.13	16.34	7.22	9.96	-	0.04% on 07/01/2016	02/17/1988
FID CONTRAFUND K	09/30/2016	0.44	5.24	4.04	09/30/2016	10.61	10.36	15.53	8.73	12.30	-	0.61% on 02/29/2016	05/17/1967
FID LARGE CAP STOCK	09/30/2016	0.65	8.01	9.18	09/30/2016	14.83	8.98	17.07	8.09	8.16	-	0.78% on 06/29/2016	06/22/1995
FID NEW MILLEN	09/30/2016	0.79	7.34	10.66	09/30/2016	14.57	7.87	14.74	8.87	13.14	-	0.74% on 01/29/2016	12/28/1992
INVESCO DIVRS DIV R6	09/30/2016	-0.62	0.21	9.24	09/30/2016	12.15	10.94	16.03	7.77	13.16	-	0.45% on 02/26/2016	09/24/2012
Mid-Cap													
FID LOW PRICED STK K	09/30/2016	1.08	4.94	5.36	09/30/2016	7.12	6.84	14.55	8.19	13.69	1.5 % / 90days	0.78% on 09/29/2016	12/27/1989
FID MID CAP IDX PR	09/30/2016	0.17	4.50	10.26	09/30/2016	14.26	9.63	16.59	-	14.71	.75 % / 30days	0.07% on 07/01/2016	09/08/2011
Small Cap													
FID SM CAP IDX PR	09/30/2016	1.12	9.13	11.68	09/30/2016	15.77	6.92	15.92	-	14.03	1.5 % / 90days	0.07% on 07/01/2016	09/08/2011
International													
FID INTL INDEX PR	09/30/2016	1.38	6.17	2.70	09/30/2016	6.59	0.63	7.69	1.97	4.46	1 % / 90days	0.08% on 07/01/2016	11/05/1997
HARBOR INTL INST	09/30/2016	1.52	5.96	4.75	09/30/2016	7.75	-0.55	7.31	3.81	10.68	-	0.78% on 03/01/2016	12/29/1987

			otal Retur			Avoid	ge Annual	Fees					
Investment Name	As of	1 mo	3 mo	YTD	As of	1 yr	3 yr	5 yr	10 yr	Life	Short-Term Trading Fee	Expense Ratio †	Inception Date
Blended Investi	ments*												
Others													
FID FREEDOM K 2005	09/30/2016	0.46	3.01	6.45	09/30/2016	8.24	4.57	6.35	-	7.45	-	0.49% on 05/28/2016	07/02/2009
FID FREEDOM K 2010	09/30/2016	0.54	3.51	6.84	09/30/2016	9.06	5.09	7.58	-	8.40	-	0.53% on 05/28/2016	07/02/2009
FID FREEDOM K 2015	09/30/2016	0.60	3.94	7.09	09/30/2016	9.86	5.44	7.91	-	8.71	-	0.56% on 05/28/2016	07/02/2009
FID FREEDOM K 2020	09/30/2016	0.64	4.25	7.19	09/30/2016	10.39	5.69	8.60	-	9.45	_	0.58% on 05/28/2016	07/02/2009
FID FREEDOM K 2025	09/30/2016	0.68	4.59	7.20	09/30/2016	10.81	6.10	9.73	-	10.20	-	0.61% on 05/28/2016	07/02/2009
FID FREEDOM K 2030	09/30/2016	0.87	5.47	7.41	09/30/2016	11.82	6.45	10.22	-	10.62	-	0.65% on 05/28/2016	07/02/2009
FID FREEDOM K 2035	09/30/2016	0.91	5.82	7.32	09/30/2016	12.27	6.56	11.02	-	11.02	_	0.67% on 05/28/2016	07/02/2009
FID FREEDOM K 2040	09/30/2016	0.85	5.81	7.31	09/30/2016	12.23	6.60	11.14	-	11.14	-	0.67% on 05/28/2016	07/02/2009
FID FREEDOM K 2045	09/30/2016	0.89	5.84	7.33	09/30/2016	12.21	6.63	11.36	-	11.27	-	0.67% on 05/28/2016	07/02/2009
FID FREEDOM K 2050	09/30/2016	0.88	5.86	7.32	09/30/2016	12.27	6.65	11.51	-	11.34	-	0.67% on 05/28/2016	07/02/2009
FID FREEDOM K 2055	09/30/2016	0.85	5.86	7.33	09/30/2016	12.27	6.70	11.72	-	7.18	-	0.67% on 05/28/2016	06/01/2011
FID FREEDOM K 2060	09/30/2016	0.87	5.78	7.33	09/30/2016	12.29	-	-	-	4.61	-	0.67% on 05/28/2016	08/05/2014
FID FREEDOM K INCOME	09/30/2016	0.37	2.27	6.02	09/30/2016	7.02	3.82	4.62	-	5.56	_	0.44% on 05/28/2016	07/02/2009
Bond Investme	nts												
Income													
FID US BOND IDX PR	09/30/2016	0.02	0.41	5.82	09/30/2016	5.22	3.97	3.01	4.46	6.30	-	0.05% on 07/01/2016	03/08/1990
PIM TOTAL RT INST	09/30/2016	0.37	1.24	5.18	09/30/2016	5.69	3.51	4.18	5.98	7.56	_	0.47% on 07/29/2016	05/11/1987
Short-Term Inve	estments												
Others													
FMMT RETIRE GOV II	09/30/2016	0	0.01	0.02	09/30/2016	0.03	0.02	0.01	0.99	3.27	-	0.42% on 10/30/2015	12/02/1988
Other Investme	ents												
Other													
BROKERAGELINK	-	-	-	-	-	-	-	-	-	-	-	-	-

<sup>†</sup> For Fidelity fund of funds the performance table displays both the Expense Ratio and the Combined Total Expense Ratio. Expense Ratio is the total annual fund operating expense ratio from the fund's most recent prospectus. Combined Total Expense Ratio reflects expense reimbursements and reductions and is based on the total operating expense ratio of the fund plus a weighted average of the total operating expense ratios of the underlying Fidelity funds in which it was invested. This ratio may be higher or lower depending on the allocation of the fund's assets among the underlying Fidelity funds and the actual expenses of the underlying Fidelity funds.

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

Total returns are historical and include change in share value and reinvestment of dividends and capital gains, if any. Cumulative total returns are reported as of the period indicated. Life of Fund figures are reported as of the inception date to the period indicated. These figures do not include the effect of sales charges, if any, as these charges are waived for contributions made through your company's employee benefit plans. If sales charges were included, returns would have been lower.

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

For any Retail (Non Government of U.S. Treasury) Money Market funds listed: YOU COULD LOSE MONEY BY INVESTING IN A MONEY MARKET FUND. ALTHOUGH THE FUNDS SEEKS TO PRESERVE THE VALUE OF YOUR INVESTMENT AT \$1.00 PER SHARE, IT CANNOT GUARANTEE IT WILL DO SO. THE FUND MAY IMPOSE A FEE UPON THE SALE OF YOUR SHARES OR MAY TEMPORARILY SUSPEND YOUR ABILITY TO SELL SHARES IF THE FUND'S LIQUIDITY FALLS BELOW THE REQUIRED MINIMUMS BECAUSE OF MARKET CONDITIONS OR OTHER FACTORS. AN INVESTMENT IN THE FUND IS NOT INSURED OR GUARANTEED BY THE FEDERAL DEPOSIT INSURANCE CORPORATION OR ANY OTHER GOVERNMENT AGENCY. THE FUND'S SPONSOR HAS NO LEGAL OBLIGATION TO PROVIDE FINANCIAL SUPPORT TO MONEY MARKET FUNDS AND YOU SHOULD NOT EXPECT THAT THE SPONSOR WILL PROVIDE FINANCIAL SUPPORT TO THE FUND AT ANY TIME.

For any Institutional Money Market funds listed: YOU COULD LOSE MONEY BY INVESTING IN A MONEY MARKET FUND. BECAUSE THE SHARE PRICE OF THE FUND WILL FLUCTUATE, WHEN YOU SELL YOUR SHARES THEY MAY BE WORHT MORE OR LESS THAT WHAT YOU ORIGINALLY PAID FOR THEM. THE FUND MAY IMPOSE A FEE UPON THE SALE OF YOUR SHARES OR MAY TEMPORARILY SUSPEND YOUR ABILITY TO SELL SHARES IF THE FUND'S LIQUIDITY FALLS BELOW THE REQUIRED MINIMUMS BECAUSE OF MARKET CONDITIONS OR OTHER FACTORS. AN INVESTMENT IN THE FUND IS NOT INSURED OR GUARANTEED BY THE FEDERAL DEPOSIT INSURANCE CORPORATION OR ANY OTHER GOVERNMENT AGENCY. THE FUND'S SPONSOR HAS NO LEGAL OBLIGATION TO PROVIDE FINANCIAL SUPPORT TO MONEY MARKET FUNDS AND YOU SHOULD NOT EXPECT THAT THE SPONSOR WILL PROVIDE FINANCIAL SUPPORT TO THE FUND AT ANY TIME.

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

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

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

BEFORE INVESTING IN ANY MUTUAL FUND, PLEASE CAREFULLY CONSIDER THE INVESTMENT OBJECTIVES, RISKS, CHARGES AND EXPENSES. Contact Fidelity for a prospectus or, if available, a summary prospectus containing this information. Read it carefully.

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# STATE OF RHODE ISLAND MUTUAL FUND SELECTION

The information is current as of 09/30/2016.

Category/Funds	YTD	1 Year Return	3 Year Return	5 Year Return	10 Year Return	Since Inception	Expense Ratio	Inception Date
Foreign Large Blend								
American Funds EuroPacific Growth R4	5.12%	8.14%	2.99%	8.73%	3.92%	7.29%	0.85%	6/7/2002
MSCI ACWI Ex USA NR USD Small Blend		9.26%	0.18%	6.04%	2.16%			
Siliali bieliu								
Dreyfus Small Cap Stock Index	13.33%	17.49%	8.62%	17.46%	8.45%	9.15%	0.51%	6/30/1997
S&P Small/Cap 600 TR USD Mid-Cap Blend		18.12%	9.04%	17.86%	8.71%			
іміа-Сар віена								
Dreyfus Midcap Index	12.05%	14.83%	8.90%	15.96%	8.65%	11.60%	0.51%	6/19/1991
Standard & Poor's Midcap 400 TR		15.33%	9.35%	16.50%	9.11%			
Large Growth								
MFS Mass Investors Growth Stock R3	8.24%	14.58%	9.78%	14.74%	8.24%	8.18%	0.74%	4/1/2005
Russell 1000 Growth TR USD		13.76%	11.83%	16.60%	8.85%			
Large Blend								
Vanguard 500 Index (Admiral)	7.81%	15.39%	11.12%	16.34%	7.23%	5.05%	0.05%	9/29/2006
Standard & Poor's 500 TR USD		15.43%	11.16%	16.37%	7.24%			
Vanguard Dividend Growth Inv	6.46%	13.73%	10.07%	14.70%	8.44%	8.17%	0.33%	5/15/1992
Russell 1000 Target Date 2050+		14.93%	10.78%	16.41%	7.40%			
Target Date 20001								
Vanguard Target Retirement 2060 Inv	7.50%	12.13%	6.81%	NA	NA	NA	0.16%	1/19/2012
Morningstar Lifetime Mod 2060 TR USD Target Date 2046-2050		12.22%	6.73%	12.33%	NA			
Target Date 2046-2050								
Vanguard Target Retirement 2050 Inv	7.51%	12.14%	6.85%	12.14%	5.87%	6.30%	0.16%	6/7/2006
S&P Target Date 2050 TR USD		12.08%	6.67%	12.13%	5.53%			
Target Date 2036-2040								
Vanguard Target Retirement 2040 Inv	7.52%	12.11%	6.84%	12.13%	5.87%	6.25%	0.16%	6/7/2006
S&P Target Date 2040 TR USD		11.56%	6.46%	11.55%	5.48%			57.7.2000
Target Date 2026-2030								
Vanguard Target Retirement 2030 Inv	7.40%	11.15%	6.64%	11.12%	5.64%	6.09%	0.15%	6/7/2006
S&P Target Date 2030 TR USD	7.4076	10.70%	6.10%	10.57%	5.37%	0.0376	0.1376	0/1/2000
Target Date 2016-2020								
V 17 18 5 1999	<b>-</b> 450/	40.050/	0.040/	0.000/	<b>5</b> 000/	0.040/	0.440/	0/7/0000
Vanguard Target Retirement 2020 Inv S&P Target Date 2020 TR USD	7.15%	10.05% <i>9.50%</i>	6.21% 5.63%	9.63% <i>9.05%</i>	5.62% 5.20%	6.01%	0.14%	6/7/2006
Target Date 2000-2010		0.0070	0.0070	0.0070	0.2070			
Vanguard Target Retirement 2010 Inv	6.31%	7.82%	5.08%	7.28%	5.21%	5.55%	0.14%	6/7/2006
S&P Target Date 2010 TR USD High Yield Bond		7.89%	4.73%	6.90%	4.68%			
Tright Hold Bond								
Federated Instl High Yield Bond Instl	13.80%	12.01%	5.81%	8.56%	7.82%	9.20%	0.57%	11/1/2002
Barclays US High Yield 2% Issuer Cap TR USD		12.74%	5.30%	8.34%	7.80%			
Inflation-Protected Bond								
American Century Inflation-Adjusted Bond Inv	7.44%	6.67%	1.86%	1.43%	4.09%	5.10%	0.47%	2/10/1997
Barclays Capital U.S. Treasury TIPS		6.58%	2.40%	1.93%	4.48%			
Intermediate-Term Bond								
PIMCO Total Return (A)	4.88%	5.28%	3.10%	3.78%	5.54%	6.02%	0.86%	1/13/1997
Barclays Capital U.S. Aggregate Bond	5078	5.19%	4.03%	3.08%	4.79%	J.JZ/0	J.5070	.,
Money Market								
American ContunuII & Course	0.040/	0.040/	0.040/	0.049/	0.000/	2 649/	0.469/	4/4/4000
American Century U.S. Government BofAML USD LIBOR 3 Mon CM	0.01%	0.01% <i>0.4</i> 9%	0.01% <i>0.33%</i>	0.01% <i>0.36%</i>	0.96% 1.40%	2.61%	0.46%	4/1/1993
Stable Value		0070	0.0070	0.0070				
VALIC Fixed-Interest Option ***		9/30/2016		2.00%				
		Calendar Ye	ear 2016	1.50% (min	. guarantee	d)		

Source: Morningstar Principia Pro (as of 09/30/2016)

The performance data quoted represents past performance. The Fixed-Interest Option performance is based on current interest rates. Current performance may be higher or lower than the performance stated due to recent market volatility. Past performance does not guarantee future result. Investment return and principal value will fluctuate so an investor's shares, when redeemed, may be worth more or less than their original cost. Please visit www.valic.com for month-end performance.

To view or print a prospectus, visit www.valic.com and click on ePrint under "Links to Login". Enter your Plan ID in the Login field and click go. Click on "Funds" in Quick Links, and funds available for your plan are displayed. The prospectus contains the investment objectives, risks, charges, expenses and other information about the respective investment company that you should consider carefully before investing. Please read the prospectus carefully before investing or sending money. You may also request a copy by calling 1-800-428-2542.

The current 7-day yield more closely reflects the current earnings of the money market fund than does the total average annual return. Yields are historical and do not guarantee future performance.

Securities and investment advisory services offered through VALIC Financial Advisors, Inc., member FINRA and an SEC-registered investment advisor.



The information is current as of 09/30/2016.

Effective December 31, 2001, all future contributions for all existing and new participants will be directed to VALIC for investment into the mutual fund and fixed-interest option investments. All VALIC annuity investment options will be closed to current or future Plan participants after this date.

Category/Funds	YTD Return	1 Year Return	3 Year Return	5 Year Return	10 Year Return	Since Inception	Expense Ratio	ITD Date
Domestic Equity								
Domestic Large Cap Equity								
Large Cap Value	0.77	14.52	0.45	40.07	<b>5.00</b>	<b>5.00</b>	4.00	40/0/0000
Dividend Value Fund (Black Rock/SunAmerica) Vanguard Windsor II Fund		14.52 10.94	8.15 7.01	13.37 13.52	5.08 4.67	5.08 4.67	1.62 1.39	12/8/2000 6/24/1985
Large Cap Blend	0.40	10.04	7.01	10.02	1.01	7.01	1.00	0/24/1000
Core Equity Fund (Black Rock)	4.99	10.82	7.99	13.94	4.58	4.58	1.60	4/29/1994
Stock Index Fund (SunAmerica)	6.93	14.16	9.90	15.05	6.04	6.04	1.14	4/20/1987
Large Cap Growth								
Growth Fund (American Century) Large Capital Growth Fund (SunAmerica/Invesco)		11.10	8.72	13.83	7.36	7.36	1.60	12/5/2005
Domestic Mid Cap Equity	7.57	13.61	8.89	12.97	5.73	5.73	1.55	12/20/2004
Mid Cap								-
Mid Cap Strategic Growth Fund (Allianz Global/MorganStanley)	9.19	13.25	5.28	11.34	6.69	6.69	1.61	12/20/2004
Global Equity								
Global Social Awareness Fund (PineBridge Investments)	5.82	10.80	6.73	12.32	3.89	3.89	1.42	10/2/1989
International Equity								
Emerging Economies Fund (JPMorgan)	15.71	14.38	-2.28	2.16	-2.00	-2.00	1.74	12/5/2005
Foreign Value Fund (Templeton Global)	8.20	8.97	-2.41	5.79	1.38	1.38	1.59	12/5/2005
Speciality								
Science & Technology Fund (T. Rowe/Allianz Global/Wellington)	10.62	22.31	14.05	17.29	10.12	10.12	1.78	4/29/1994
Hybrid								
Lifestyle								
Dynamic Allocation (AllianceBernstein/SunAmerica)	4.03	5.69	2.50	-	4.58	4.58	1.72	12/19/2012
Balanced Vanguard Wellington Fund	6.75	10.78	6.79	10.34	6.01	6.01	1.31	7/1/1929
Fixed Income	0.75	10.76	0.79	10.34	0.01	0.01	1.31	77171929
Investment Grade								
Vanguard Long-Term Treasury Fund	14.40	12.32	10.16	4.49	6.98	6.98	1.00	5/19/1986
Vanguard Long-Term Investment-Grade Fund	14.60	14.47	9.61	6.57	6.98	6.98	1.01	7/9/1973
International								
International Government Bond Fund (PineBridge)	11.07	10.24	2.13	1.82	3.66	3.66	1.45	10/1/1991
Stable Value	0.50	0.70	0.70	0.70	0.04	0.04	1 04	1/16/1000
Government Money Market I Fund (SunAmerica) 7-Day current yield at 30-Sep-2009: -0.79		-0.79	-0.79	-0.79	0.04	0.04	1.31	1/16/1986
Fixed Account Plus	2.22	2.22	2.27	2.41	3.74	-	-	1/1/1982
Short Term Fixed Account	1.00	1.00	1.00	1.00	1.75	-	-	1/1/1991

Annuities are long-term investments. Income taxes are payable upon withdrawal. Federal restrictions and tax penalties can apply to early withdrawals.

Contributions to your Portfolio Director annuity contract can qualify to be tax-deferred, subject to applicable contribution limits and related rules. That tax deferral is a result of issuing the contract, which satisfies specific important tax law requirements, under your work place retirement plan. It does not result from the mere fact that the contract is an annuity. Therefore, you do not receive any additional tax-deferred treatment of earnings beyond the treatment provided by the tax-qualified retirement plan itself.

<sup>1</sup>Through a commission recapture program in a portion of the funds' expenses have been reduced. "Other Expenses" does not take into account this expense reduction and is therefore higher than the actual expenses of the series. Had the expense reductions been taken into account, "Net Fund Expense" for VALIC Company I funds would be as follows: Asset Allocation Fund, 0.72%; Broad Cap Value Fund, 0.84%; Global Equity Fund, 0.98%; Global Real Estate, 0.94%; Global Social Awareness Fund, 0.71%; Growth & Income Fund, 0.83%; Health Sciences Fund, 1.18%, Large Cap Core Fund, 0.83%; and Mid Cap Strategic Growth, 0.81%.

The VALIC Company II Lifestyle funds and the VALIC Company I Dynamic Allocation Fund invest in the funds offered in VALIC Company I and VALIC Company II. The Vanguard LifeStrategy Funds invest in other Vanguard funds. Thus, each "Fund of Funds" indirectly bears the fees and expenses of those acquired funds, which fees and expenses are shown in the Acquired Fund Fees & Expenses column and are also reflected in each fund's Net Fund Expenses.

The fund company may limit the number of trades in and out of the fund. Please see the individual fund prospectus for more information.

An investment in a money market fun is not insured by the Federal Deposit Insurance Corporation or any other government agency. Although the fund seeks to preserve the value of your investment at \$1.00 per share, it is possible to lose mone by ivesting in the fund.

\*\*Pursuant to an Expense Limitation Agreement, the fund's advisor will waive fees and reimbursement expenses as shown in the column above. The expense waivers and fee reimbursements are voluntary and contractual and will continue through September 30, 2015 for VALIC Company I funds; December 31, 2015 for VALIC Company II funds; April 30, 2015 for American beacon Holland Large Cap Growth Fund; June 30, 2016 for the Invesco Balanced-Risk Commodity Strategy Fund, and indefinitely for SunAmerica High Watermark funds.

### NOT FDIC-INSURED \* MAY LOSE VALUE \* NO BANK GUARANTEE

To obtain a Portfolio Director contract and underlying fund prospectuses, visit www.valic.com or call 1-800-448-2542 and follow the prompts. The prospectuses contain the investment objective, risks, charges, expenses and other information about the investment company that you should consider before investing. Please read the prospectuses carefully before investing or snding money. Policy Form series UIT-194 and UITG-194P.

Portfolio Director Fixed and Valiable Annuity is issued by The Variable Annuity Life Insurance Company and distributed by its affiliate, American General Distributors, Inc., 2929 Allen Parkway, Houston, Texas, 77019, member FINRA.

VALIC represents The Variable Annuity Life Insurance Company and its subsidiaries, VALIC Financial Advisors, Inc. and VALIC Retirement Services Company.

### PERFORMANCE UPDATE

# **Voya Retirement Insurance and Annuity Company**

### State of RI 457 Plan

## Average Annual Total Returns as of: 09/30/2016 (shown in percentages)

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

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

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

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

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

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

Investment Ontions	Fund Benchmark	1-N		3-N		ΥT			Yr	3-		5-\		10-		lmaamt.	Fund Inception		Net Fund
Investment Options	ID (BM)	Fund	BM	Fund	BM	Fund	BM	Fund	BM	Fund	BM	Fund	BM	Fund	BM	Incept	Date	Exp %*	Exp %"
Stability of Principal																			
Stability of Principal																			
Voya Fixed Account - 457/401 - 043 (19)(20)	MFR	0.24	0.01	0.75	0.03	2.24	0.09	3.00	0.09	3.00	0.04	3.02	0.03	3.42	0.84				
Bonds																			
High Yield Bond																			
Prudential High Yield Fund - Class Z - 2482	BCUSH1IC	0.76	0.66	5.34	5.49	13.73	15.17	11.67	12.71	5.56	5.26	8.15	8.30	7.52	7.71		03/01/1996	0.58	0.58
Inflation-Protected Bond																			
PIMCO VIT Real Return Portfolio - Administrative Class - 833 (1)	LBUSTIPS	0.90	0.55	1.40	0.97	7.63	7.27	6.78	6.58	1.84	2.40	1.81	1.93	4.46	4.48		09/30/1999	0.78	0.65



Investment Options	Fund Benchmark ID (BM)	1-N Fund		3-l Fund	Mo BM	YT Fund	_	1- Fund	Yr BM	3- Fund	Yr BM	5- Fund	Yr BM	10- Fund	-Yr BM	Incept	Fund Inception Date		Net Fund Exp %*
Intermediate-Term Bond	(2)															шоорс			-AP 70
Voya Intermediate Bond Portfolio - Class I - 004 (2)	LEHM	0.13	-0.06	1.53	0.46	7.06	5.80	6.92	5.19	5.02	4.03	5.01	3.08	4.97	4.79		05/23/1973	0.54	0.49
Voya U.S. Bond Index Portfolio - Class I - 1554 (3)	LEHM	-0.01	-0.06	0.44	0.46	5.72	5.80	5.02	5.19	3.73	4.03	2.75	3.08	7.07	4.70	4.13	03/04/2008	0.41	0.40
Asset Allocation																			
Lifecycle																			
Voya Solution 2025 Portfolio - Initial Class - 790 (4)(5)	SPT2025	0.46	0.29	3.57	3.10	5.74	6.89	8.98	10.14	5.77	5.84	9.84	9.83	4.34	5.31		04/29/2005	0.90	0.80
Voya Solution 2035 Portfolio - Initial Class - 761 (5)(6)	SP2035	0.65	0.32	4.44	3.66	5.61	7.23	9.90	11.19	5.96	6.32	11.08	11.14	4.55	5.42		04/29/2005	0.94	0.87
Voya Solution 2045 Portfolio - Initial Class - 764 (5)(7)	SP2045	0.56	0.35	4.62	4.03	5.26	7.44	9.97	11.85	6.12	6.56	11.72	11.87	4.55	5.45		04/29/2005	0.95	0.89
Voya Solution 2055 Portfolio - Initial Class - 1166 (5)(8)	SPT2055	0.57	0.37	4.70	4.28	5.35	7.48	10.20	12.22	6.22	6.73	11.79	12.33			8.67	03/08/2010	0.95	0.89
Voya Solution Income Portfolio - Initial Class - 767 (5)(9)	SPTREIN	0.26	0.21	2.03	1.65	5.51	5.80	7.05	7.02	4.95	4.26	6.70	5.66	4.58	4.31		04/29/2005	0.78	0.68
Balanced																			
Allocation50% to70% Equity																			
VY® T. Rowe Price Capital Appreciation Portfolio - Inst - 1257 (10)	SPXLBGC	0.27	-0.06	2.69	2.47	8.12	7.48	12.95	11.71	10.90	8.50	14.65	11.12	8.64	6.60		01/24/1989	0.64	0.64
Large Cap Value																			
Large Blend																			
Voya Growth and Income Portfolio - Class I - 001 (11)	SPXRE	0.62	0.02	2.97	3.85	6.45	7.84	12.82	15.43	8.38	11.16	14.74	16.37	6.41	7.24		12/31/1979	0.63	0.58
Voya U.S. Stock Index Portfolio - Institutional Class - 829	SPXRE	0.00	0.02	3.77	3.85	7.58	7.84	15.14	15.43	10.84	11.16	16.06	16.37	6.97	7.24		05/03/2004	0.26	0.26
Large Value																			
BlackRock Equity Dividend Fund - Institutional Shares - 8518	RS1000V	-0.98	-0.21	1.99	3.48	6.85	10.00	14.69	16.20	8.66	9.70	12.81	16.15	7.11	5.85		11/29/1988	0.70	0.70
Large Cap Growth																			
Large Growth																			
Voya Large Cap Growth Portfolio - Institutional Class - 742 (12)	RS1000G	0.64	0.37	5.01	4.58	4.08	6.00	12.90	13.76	11.44	11.83	16.36	16.59	10.96	8.85		05/03/2004	0.67	0.67
Small/Mid/Specialty																			
Mid-Cap Blend																			
Voya Russell Mid Cap Index Portfolio - Class I - 1560 (13)	RSMID	0.21	0.20	4.44	4.52	10.00	10.26	13.86	14.25	9.26	9.70	16.25	16.67			9.58	03/04/2008	0.43	0.43
Mid-Cap Growth																			
Principal MidCap Fund - Class R-5 - 3412	RSMID	0.27	0.20	4.78	4.52	9.08	10.26	14.08	14.25	10.34	9.70	17.38	16.67	10.39	8.32		12/06/2000	0.85	0.85
Small Blend																			
Voya Russell Small Cap Index Portfolio - Class I - 1563 (14)	RS2000	1.03	1.11	8.90	9.05	11.28	11.46	15.25	15.47	6.59	6.71	15.67	15.82			9.40	03/04/2008	0.47	0.45
Voya Small Company Portfolio - Class I - 042 (15)	RS2000	0.10	1.11	6.97	9.05	13.12	11.46	17.59	15.47	9.16	6.71	17.20	15.82	8.70	7.07		12/27/1996	0.90	0.85
Global / International																			

Foreign Large Blend

	Fund Benchmark	1-N	<b>l</b> lo	3-1	Ио	ΥT	D	1-	Yr	3-	Yr	5-	Yr	10-	-Yr		Fund Inception	Gross Fund	Net Fund
Investment Options	ID (BM)	Fund	BM	Fund	ВМ	Fund	BM	Fund	BM	Fund	BM	Fund	BM	Fund	BM	Incept	Date	Exp %*	Exp %*
Voya International Index Portfolio - Class I - 1551 (16)	MSEAFANET	1.36	1.23	6.04	6.43	2.44	1.73	6.08	6.52	0.31	0.47	7.47	7.39			1.01	03/04/2008	0.56	0.48
Foreign Large Growth																			
American Funds EuroPacific Growth Fund - Class R-4 - 573 (17)	MSCIXUS	1.19	1.23	8.13	6.91	5.12	5.82	8.14	9.26	2.99	0.18	8.73	6.04	3.92	2.16		04/16/1984	0.85	0.85
World Stock																			
VY® Oppenheimer Global Portfolio - Initial Class - 432 (18)	MSCIACN	0.98	0.61	8.82	5.30	0.04	6.59	5.75	11.96	4.71	5.17	11.93	10.63	5.42	4.34		05/01/2002	0.75	0.75

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

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

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

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

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

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

## PERFORMANCE UPDATE

# **Voya Retirement Insurance and Annuity Company**

State of RI 457 Plan

**Separate Account D** 

## Average Annual Total Returns as of: 09/30/2016 (shown in percentages)

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

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

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

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

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

Investment Options	1-Mo	3-Mo	YTD	1-Yr	3-Yr	5-Yr	10-Yr	Fund Inception Incept Date
Stability of Principal								
Stability of Principal								
Voya Fixed Account - 457/401 - 043 (19)(20)  This fund is not part of the product's separate account.	0.24	0.75	2.24	3.00	3.00	3.02	3.42	
Bonds								
High Yield Bond								
Prudential High Yield Fund - Class Z - 2482	0.74	5.29	13.55	11.45	5.39	7.97	7.34	03/01/1996
Inflation-Protected Bond								
PIMCO VIT Real Return Portfolio - Administrative Class - 833 (1)	0.89	1.36	7.51	6.60	1.68	1.66	4.30	09/30/1999

Intermediate-Term Bond

Investment Options	1- <b>M</b> o	3-Mo	YTD	1-Yr	3-Yr	5-Yr	10-Yr	Incept	Fund Inception Date
Voya Intermediate Bond Portfolio - Class I - 004 (2)	0.12	1.49	6.94	6.77	4.86	4.85	4.82	•	05/23/1973
Voya U.S. Bond Index Portfolio - Class I - 1554 (3)	-0.02	0.40	5.60	4.87	3.57	2.60		3.98	03/04/2008
Asset Allocation									
Lifecycle									
Voya Solution 2025 Portfolio - Initial Class - 790 (4)(5)	0.45	3.53	5.63	8.82	5.61	9.67	4.19		04/29/2005
Voya Solution 2035 Portfolio - Initial Class - 761 (5)(6)	0.63	4.40	5.50	9.73	5.80	10.91	4.40		04/29/2005
Voya Solution 2045 Portfolio - Initial Class - 764 (5)(7)	0.55	4.58	5.14	9.81	5.96	11.55	4.40		04/29/2005
Voya Solution 2055 Portfolio - Initial Class - 1166 (5)(8)	0.56	4.66	5.23	10.03	6.06	11.63		8.51	03/08/2010
Voya Solution Income Portfolio - Initial Class - 767 (5)(9)	0.25	1.99	5.39	6.89	4.79	6.54	4.42		04/29/2005
Balanced									
Allocation50% to70% Equity									
VY® T. Rowe Price Capital Appreciation Portfolio - Inst - 1257 (10)	0.26	2.65	8.00	12.78	10.73	14.48	8.48		01/24/1989
Large Cap Value									
Large Blend									
Voya Growth and Income Portfolio - Class I - 001 (11)	0.61	2.93	6.33	12.65	8.22	14.56	6.25		12/31/1979
Voya U.S. Stock Index Portfolio - Institutional Class - 829	-0.01	3.73	7.46	14.97	10.68	15.89	6.81		05/03/2004
Large Value									
BlackRock Equity Dividend Fund - Institutional Shares - 8518	-0.99	1.95	6.73	14.52	8.50	12.64	6.95		11/29/1988
Large Cap Growth									
Large Growth									
Voya Large Cap Growth Portfolio - Institutional Class - 742 (12)	0.63	4.97	3.97	12.73	11.28	16.19	10.79		05/03/2004
Small/Mid/Specialty									
Mid-Cap Blend									
Voya Russell Mid Cap Index Portfolio - Class I - 1560 (13)	0.19	4.40	9.88	13.69	9.09	16.08		9.42	03/04/2008
Mid-Cap Growth									
Principal MidCap Fund - Class R-5 - 3412	0.25	4.74	8.96	13.91	10.18	17.20	10.22		12/06/2000
Small Blend									
Voya Russell Small Cap Index Portfolio - Class I - 1563 (14)	1.02	8.86	11.16	15.07	6.43	15.50		9.24	03/04/2008
Voya Small Company Portfolio - Class I - 042 (15)	0.09	6.93	12.99	17.41	9.00	17.03	8.54		12/27/1996
Global / International									
Foreign Large Blend									
Voya International Index Portfolio - Class I - 1551 (16)	1.35	6.00	2.32	5.92	0.16	7.31		0.86	03/04/2008
Foreign Large Growth									
American Funds EuroPacific Growth Fund - Class R-4 - 573 (17)	1.18	8.09	5.00	7.98	2.84	8.57	3.76		04/16/1984
World Stock									

Fund

Investment Options	1-Mo	3-Mo	YTD	1-Yr	3-Yr	5-Yr	10-Yr	Incept	Inception Date	
VY® Oppenheimer Global Portfolio - Initial Class - 432 (18)	0.96	8.78	-0.07	5.59	4.55	11.76	5.26		05/01/2002	

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

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

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

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

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

#### **Additional Notes**

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

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

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

(2)Voya Intermediate Bond Portfolio - Class I: The adviser is contractually obligated to limit expenses to 0.55% through May 1, 2017. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses, extraordinary expenses, and Acquired Fund Fees and Expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. The adviser is contractually obligated to waive 0.045% of the management fee through May 1, 2017. Termination or modification of these obligations requires approval by the Portfolio's board.

(3)Voya U.S. Bond Index Portfolio - Class I: The adviser is contractually obligated to limit expenses to 0.40% through May 1, 2017. The limitation does not extend to interest, taxes, interest-related costs, leverage expenses, extraordinary expenses, and Acquired Fund Fees and Expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.

(4)Voya Solution 2025 Portfolio - Initial Class: The adviser is contractually obligated to limit expenses to 0.80% through May 1, 2018. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses and extraordinary expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.

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

#### **Additional Notes**

of principal.

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

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

- (6)Voya Solution 2035 Portfolio Initial Class: The adviser is contractually obligated to limit expenses to 0.87% through May 1, 2018. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses and extraordinary expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.
- (7)Voya Solution 2045 Portfolio Initial Class: The adviser is contractually obligated to limit expenses to 0.89% through May 1, 2018. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses and extraordinary expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.
- (8)Voya Solution 2055 Portfolio Initial Class: The adviser is contractually obligated to limit expenses to 0.89% through May 1, 2018. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses and extraordinary expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.
- (9) Voya Solution Income Portfolio Initial Class: The adviser is contractually obligated to limit expenses to 0.68% through May 1, 2018. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses and extraordinary expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.
- (10)The VY T. Rowe Price Capital Appreciation Inst. Class commenced operations on May 1, 2003. The fund has identical investment objectives and policies, the same portfolio manager, and invests in the same holdings as the Service Class of this fund. The performance information for the VY T.Rowe Price Capital Appreciation Portfolio Inst. Class prior to May 1, 2003 is based upon the Service Class performance, NOT adjusted by fees associated with the Inst. Class.
- (11)Voya Growth and Income Portfolio Class I: The adviser is contractually obligated to limit expenses to 0.70% through May 1, 2017. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses, extraordinary expenses and Acquired Fund Fees and Expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. The adviser is contractually obligated to waive 0.045% of the management fee through May 1, 2017. Termination or modification of these obligations requires approval by the Portfolio's board.
- (12)Voya Large Cap Growth Portfolio Institutional Class: The adviser is contractually obligated to limit expenses to 0.67% through May 1, 2018. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses, extraordinary expenses, and Acquired Fund Fees and Expenses. Termination or modification of this obligation requires approval by the Portfolio's board.
- (13)Voya Russell (TM) Mid Cap Index Portfolio Class I: The adviser is contractually obligated to limit expenses to 0.43% through May 1, 2017. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses, extraordinary expenses, and Acquired Fund Fees and Expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.
- (14)Voya Russell (TM) Small Cap Index Portfolio Class I: The adviser is contractually obligated to limit expenses to 0.45% through May 1, 2017. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses, extraordinary expenses, and Acquired Fund Fees and Expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.
- (15)Voya Small Company Portfolio Class I: The adviser is contractually obligated to limit expenses to 0.95% through May 1, 2017. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses, extraordinary expenses, and Acquired Fund Fees and Expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. The adviser is contractually obligated to waive 0.045% of the management fee through May 1, 2017. Termination or modification of these obligations requires approval by the

#### **Additional Notes**

#### Portfolio's board.

(16)Voya International Index Portfolio - Class I: The adviser is contractually obligated to limit expenses to 0.50% through May 1, 2017. In addition, the adviser is contractually obligated to further limit expenses to 0.48% through May 1, 2017. These limitations do not extend to interest, taxes, investment-related costs, leverage expenses, extraordinary expenses, and Acquired Fund Fees and Expenses. These limitations are subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of these obligations requires approval by the Portfolio's board.

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

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

(19)The CURRENT rate for the Voya Fixed Account - 457/401 Base+110 is 3.00%, expressed as an annual effective yield, and is guaranteed not to drop below 3.00% through 12/31/2016. The annual rate of interest applied to your account may be higher or lower than the current rate. Restrictions may apply to transfers of funds from the Fixed Account to other contract investment options. Please refer to your product prospectus / disclosure booklet and call your 800 number for more information.

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

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

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

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

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



**OPEB Trust** 



Report ID: IPM0005

**Reporting Currency: USD** 

# TOTAL NET OF FEES 9/30/2016

Account Name Benchmark Name	Market Value	% of Total	Month	YTD	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	ITD	Inception Date
Mackay Shields OPEB Bloomberg Barclays U.S. Aggregate Bond Index	65,801,367.0	34.7	-0.10 -0.06	5.47 5.80	0.46 <i>0.46</i>	4.73 5.19	3.99 <i>4.0</i> 3			2.60 2.68	5/1/2013 5/1/2013
SSGA S&P 500 INDX S&P 500 - Total Return Index	123,991,572.1	65.3	0.02 <i>0.0</i> 2	7.85 7.84	3.85 3.85	15.49 <i>15.4</i> 3	11.17 11.16	16.33 <i>16.37</i>		12.15 <i>11.3</i> 2	5/1/2011 5/1/2011
Total OPEB OPEB Custom Blend 1	189,792,939.1	100.0	<b>-0.03</b> -0.01	<b>7.15</b> 7.23	<b>2.63</b> 2.66	<b>11.74</b> 11.94	<b>8.74</b> 8.77	<b>9.80</b> 9.59		<b>8.66</b> 7.73	<b>5/1/2011</b> 5/1/2011



Report ID: IPM0005

**Reporting Currency: USD** 

# **END NOTES**

9/30/2016

1 RI7GX0903OPE OF

**OPEB Custom Blend** 

35% Barclays Aggregate and 65% S&P 500



Report ID: IPM0005

Reporting Currency: USD

# TOTAL NET OF FEES 9/30/2016

		Cumulative									
Account Name Benchmark Name	Market Value	% of Total	YTD	Month	8/1/2016 - 8/31/2016	7/1/2016 - 7/31/2016	2015	2014	2013	Inception Date	
Mackay Shields OPEB Bloomberg Barclays U.S. Aggregate Bond Index	65,801,367.0	34.7	5.47 5.80	-0.10 -0.06	-0.05 -0.11	0.62 <i>0.63</i>	0.46 <i>0.55</i>	6.03 5.97		5/1/2013 5/1/2013	
SSGA S&P 500 INDX S&P 500 - Total Return Index	123,991,572.1	65.3	7.85 7.84	0.02 <i>0.0</i> 2	0.14 <i>0.14</i>	3.68 3.69	1.46 1.38	13.63 <i>13.69</i>	32.09 32.39	5/1/2011 5/1/2011	
Total OPEB OPEB Custom Blend	189,792,939.1	100.0	<b>7.15</b> 7.23	<b>-0.03</b> -0.01	<b>0.07</b> 0.05	<b>2.58</b> 2.62	<b>1.16</b> 1.31	<b>11.00</b> <i>11.00</i>	<b>15.77</b> 15.73	<b>5/1/2011</b> 5/1/2011	



Report ID: IPM0005

**Reporting Currency: USD** 

## **END NOTES**

9/30/2016

1 RI7G10000000 Total OPEB YTD - Calendar Year to Date

Month - Current Month

Cumulative Months - Prior Month and Second Prior Month

2013, 2012, 2011 - Calendar Year

Prior Month and Second Prior Month

2013, 2012, 2011 - Calendar Year

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