

**STATE OF RHODE ISLAND
INVESTMENT COMMISSION MEETING**

**DATA AT
November 30, 2016**

MEMBERS OF THE STATE INVESTMENT COMMISSION

Honorable Seth Magaziner, Chair

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

**Ms. Sylvia Maxfield
Ms. Paula M. McNamara
Mr. Thomas Mullaney
Ms. Marcia Reback**

Section I.

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 Friday, December 16th 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 November 16th*
- Review and consideration of Long Duration IPS*
- Long Duration Manager Recommendation*
 - Claude Athaide and Kirk Kashevaroff, Mackay Shields
 - Amit Chopra and Frances Coombes, Western Asset Management
- Cash Sweep Manager Recommendation*
 - Mary Beth Syal and Beth Westvold, Payden & Rygel
- Encap Manager Recommendation (Re-Up) for Private Equity program*
 - Tom Lynch, Cliffwater
- Southvest Manager Recommendation (Add-on) for Private Equity program*
 - Tom Lynch, Cliffwater
- QVM update and review
 - Greg Balewicz, State Street Global Advisors
 - John Burns, PCA
- Consideration of 2017 meeting schedule*
- Legal Counsel Report
- Chief Investment Officer Report
- Treasurer's General Comments



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- * Commission members may be asked to vote on this item.
- ** Commission members may elect to go into executive session pursuant to Rhode Island General Laws §42-46-5 (a) (7).

POSTED ON December 13th 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.

Section II.

Approval of Minutes



State Investment Commission
Monthly Meeting Minutes
Wednesday, November 16, 2016
9:00 a.m.
Room 205, State House

The Monthly Meeting of the State Investment Commission (SIC) was called to order at 9:03, Wednesday, November 16, 2016 in Room 205, State House.

I. Roll Call of Members

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

Also in attendance: Mr. John Burns, Mr. John Linder, Mr. David Glickman, and Mr. Dillon Lord, Pension Consulting Alliance (PCA), general consultants; Mr. Thomas Lynch, Cliffwater LLC, consultant; Ms. Ellen Savary and Ms. Yvette Friberg, Fidelity Investments; Mr. Greg Hyland and Mr. Gregg Libutti, Valic; Ms. Deltra Hayes, Voya Financial; Mr. David Iden and Mr. Matt DiCroce, TIAA, general consultants; Ms. Tiffany Spudich, Capital Cities LLC, general consultant; Ms. Kimberly Shockley, Associate Director of College and Retirement Savings Plans; Ms. Amy Crane, Treasury Legal Counsel; Mr. Tim Nguyen, Treasury Chief Investment Officer (interim); Ms. Sally Dowling, Adler, Pollock & Sheehan, legal counsel; and other members of the Treasurer's staff.

Treasurer Magaziner called the meeting to order at 9:05 a.m.

II. Approval of Minutes

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

VOTED: to approve the draft minutes of the October 26th, 2016 meeting of the State Investment Commission.

III. Update on Transition Plan and Illiquid Pacing Schedule

Mr. Nguyen explained that since last month's meeting, staff has been closely working on implementing the new asset allocation. He introduced Mr. Lynch from Cliffwater who presented revisions to the capital budget of the illiquid subclasses of private equity and opportunistic real estate. The private equity pacing plan was modified in order to reflect the new allocation of 11.25%. The private credit subclass pacing plan revision included a \$10 million decrease in commitment from \$40 to \$30 million in 2017.

Mr. Lynch then updated the board on the hedge fund transition, explaining there will be a one quarter delay in redemptions from hedge fund portfolios in order to align the redemption schedule with the funding of the new CRO program. Even with this delay, it is estimated that the hedge fund redemptions will be substantially completed by the end of 2017.

IV. Systematic Trend Following Strategy Presentation

Mr. Burns provided an overview of the systematic trend following strategy, reminding the board of the new 8% allocation to the CRO class, which is designed to produce appreciation during a growth crisis. He went on to explain to key considerations of the implementation to construct the new class utilizing 50% long-duration treasuries and 50% systematic trend following, which was the focus of this presentation.

Mr. Burns and Mr. Linder gave detailed information on the benchmarks and implementation process. Mr. Linder explained that systematic trend following will employ long and short positions, and that the managers will seek risk capture across markets. The benchmark recommended is the Credit Suisse managed Futures Liquid Index, which is diversified across various deep and liquid futures as well as different lookback horizons. Mr. Linder also outlined the due diligence process relating to the vetting of a platform manager, a process that is currently underway.

The board asked questions.

V. Review and Consideration of CRO overview Investment Policy Statement

The board reviewed the drafted CRO Investment Policy Statement (IPS). Having no further questions, On a motion by Mr. Fay and seconded by Mr. Mullaney, it was unanimously

VOTED: to adopt the Crisis Risk Offset Investment Policy Statement

VI. Fidelity 457 Plan Quarterly Performance Review

Ms. Savary highlighted that the plan's total assets are steadily increasing and exceeding both industry and similarly sized peers. The number of plan participants has also increased over the previous two quarters.

Ms. Friberg gave a brief synopsis of plan performance. She noted there has been a reduction in index fund fees after Fidelity had made reductions - ranging from half a basis point to four basis points - to its expense ratios. The decline in fees now makes Fidelity the lowest cost provider of index funds in the industry.

The board asked questions.

VII. Valic 457 Plan Quarterly Performance Review

Mr. Hyland spoke about Valic's new website that was recently deployed in order to encourage more plan participation. In addition to the participant focused website, he stated they would also be rolling out a plan sponsor site within the next six months.

Mr. Libutti talked about employee engagement. He noted Valic hired two additional financial advisors over the last year in order to meet the needs of growing employee outreach through increased consultations, on-site visits and overall education of employees on their retirement options.

The board asked questions.

VIII. Voya 457 Plan Quarterly Performance Review

Ms. Hayes began by talking about employee engagement and how Voya is utilizing a variety of digital tools and technology to reach out to customers, providing ease of access to facilitate participation, particularly

among younger generations. She noted the volume of on-site visits and one-on-one meetings held during the quarter. She then highlighted that both plan assets and plan participation is continuing to increase.

The board asked questions.

IX. TIAA Defined Contribution Plan Quarterly Performance Review

Mr. Iden talked about member engagement, stating that year to date attendance of seminars has already exceeded last year's attendance. The increased attendance in seminars and workshops has also led to an increase in one-on-one meetings.

Mr. DiCroce then spoke to investment performance. He noted the midcap index fund has hit the \$500 million mark, meaning the shares will be moved from the admiral shares to the institutional shares; the move comes at a savings of one basis point. Additionally, the Vanguard small cap also reached the \$500 million mark, making it eligible for a reduction of fees as well.

The board asked questions.

X. Recommendation of 401a/457 RFP Consultant

Ms. Shockley explained there had been a Request for Proposal (RFP) process to find a vendor to provide consulting services associated with overseeing the selection of a vendor for the state's defined contribution 401(a) and deferred compensation (457) plans. After soliciting for these services and convening a small committee to evaluate the six responses, the committee recommended Segal Rogerscasey to the SIC as 401(a) and 457 consultants.

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

VOTED: to engage Segal Rogerscasey as the state's defined contribution 401(a) and deferred compensation (457) RFP consultant

XI. CollegeBound Semi-Annual Performance Review

Ms. Spudich summarized the transition process that had taken place between the former provider, Alliance Bernstein, and the new provider, Ascensus, which concluded in July. The transition was the largest to ever take place in the industry and it occurred without significant incident. Ms. Spudich explained that since Ascensus had taken over after the start of the quarter, the data presented is not for the entire quarter; the first comprehensive quarterly report will occur in the fourth quarter. She went on to present the available data.

She explained that before transitioning from Alliance Bernstein to Ascensus the 529 plan had been either not rated or had been negatively rated by MorningStar for several years. However, just three months after the transition, MorningStar rated the Advisor Sold Plan bronze and the Direct Sold plan silver, both of which are now in the top quartile nationally.

The board asked questions.

XII. Real Estate Performance Update

Mr. Glickman told the board that real estate continues to perform at or above its benchmark on a net after fees basis. He summarized the purpose of real estate holdings is varied, noting the main purpose of core real estate is to protect against inflation while the purpose of non-core real estate is to be a total return, acting as a

private equity like boost. With the addition of CRO, he states PCA is reclassifying core and non-core real estate into different functional distinctions; however, no significant adjustments have to be made to the real estate portfolio to effectively make that transition. The allocation will not be increasing too much more than what it is currently; therefore, there are not many decisions to be made or new managers to be added in the coming year. It will be important to watch market conditions, particularly as it relates to non-core funds, to ensure allocations are on track and holding with model expectations.

The board asked questions.

XIII. Recommendation of ABLE investment lineup

Treasurer Magaziner reminded the board of the purpose of ABLE as it was just introduced at the last meeting. ABLE allows people with disabilities, and their families, to open savings accounts for disability related expenses. ABLE is IRS sanctioned to be included with other 529 plans. ABLE savings plans are necessary as those who receive Social Security Insurance (SSI) and Medicaid are not permitted to exceed a \$2200 traditional savings threshold without having their benefits decreased. Rhode Island is too small to have an independent ABLE program so it has joined a consortium with twelve other states, to go out to bid jointly for account management services. Currently, negotiations are underway with the consortium to finalize an implementation agreement and select a manager. Once this has been completed, a recommendation will be brought before the SIC for approval of the ABLE manager.

In the interim, there is an investment lineup to approve as it relates to the ABLE program. The investments would be managed by the list of managers provided. Ms. Churchville explained the funds selected are low cost, passive and simple. They have also had strong performance and good evaluations. Ms. Crane noted that while there are six options listed, it is possible there be fewer than six approved by the consortium.

The board asked questions.

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

VOTED: to approve the ABLE investment lineup

XIV. Recommendation on December meeting date

Given the previously scheduled December SIC meeting was close to holiday, it was recommended to move the December meeting from Wednesday December 21st to Friday December 16th.

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

VOTED: to move the date of the December SIC meeting

XV. Legal Counsel Report

There was no legal counsel report.

XVI. Treasurer's General Comments

Treasurer Magaziner noted that due to the early meeting this month, there were no final October performance numbers to report as of the meeting date.

There being no other business to come before the Board, on a motion by Ms. Maxfield and seconded by Mr. Mullaney the meeting adjourned at 11:32 a.m.

Respectfully submitted,

**Seth Magaziner,
General Treasurer**

DRAFT

Section III.

Staff Summary

Portfolio Highlights

PORTFOLIO PERFORMANCE

November 2016

For the month, the total portfolio value increased by approximately \$11.8 million to rest at \$7.6 billion. The month's increase comes from \$45.8 million of positive investment performance and \$34 million of transfers to meet pension payroll in excess of pension contributions. On a percentage basis, the portfolio increased 0.61% exceeding the plan benchmark of 0.22% and the -0.49 loss from the basic 60% global equity/40% fixed income allocation.

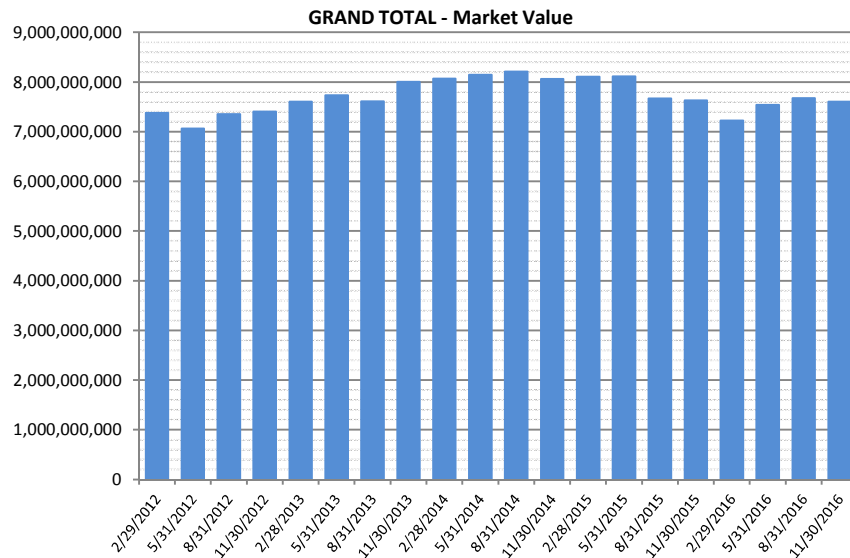
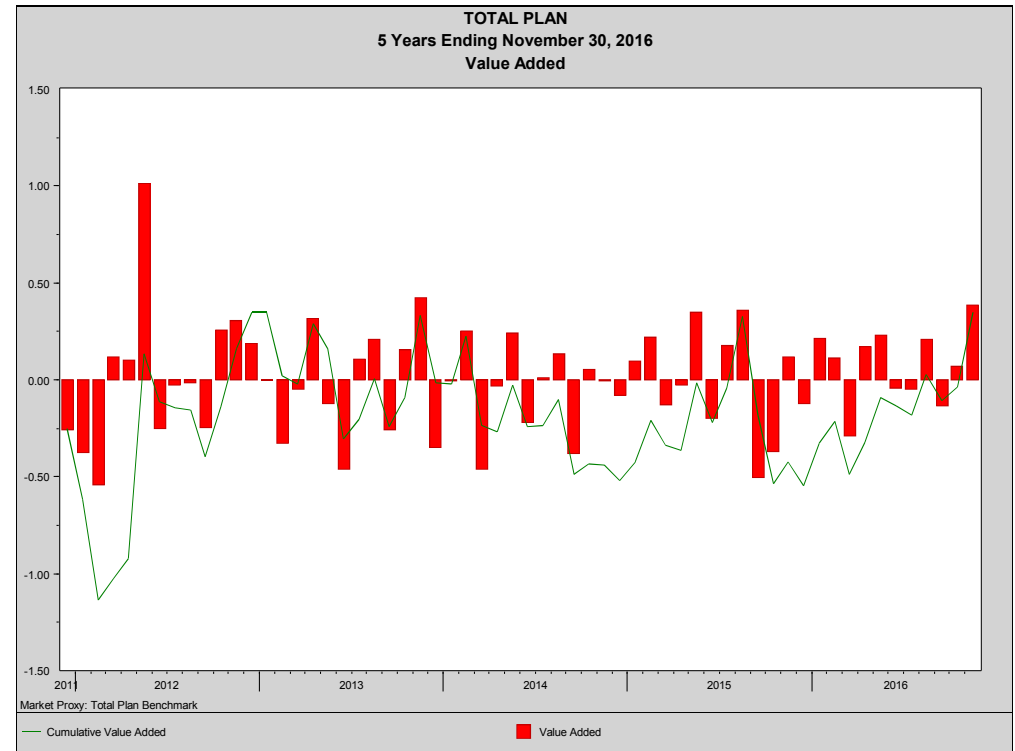
Calendar year-to-date, the total portfolio value has increased by \$83.6 million, with portfolio gains of \$435.6 million offset by \$352.0 million in pension payments. The portfolio's 5.92% investment gain exceeds the benchmark's 4.98% and the 60/40 allocation's 4.50% return.

Fiscal year-to-date, the total portfolio has increased by \$103.2 million, with portfolio gains of \$237.1 million offset by \$133.9 million in pension payments. The portfolio's 3.18% return exceeded the 2.68% benchmark and well surpassed the 1.49% 60/40 return.

Over a 3-year time frame and when comparing against a 60/40 portfolio, the ERSRI portfolio outperformed at 3.69% while the 60/40 portfolio earned 3.07%. Over a 5-year time frame, the ERSRI portfolio earned 7.24%, significantly outperforming the 60/40 portfolio which posted 6.41%.

For the month, stock markets responded positively to the 2016 U.S. elections, including Donald Trump's surprising win over Hillary Clinton and a Republican-controlled House and Senate. Financial and industrial companies rallied on expectations of easing government regulations and increased infrastructure spending. Critical monthly economic statistics—including employment and Real Gross Domestic Product (GDP)—were generally positive, indicating that the U.S. economy strengthened. There also are high expectations for a Federal Reserve rate increase in December.

**An error was discovered in the tabulation of YTD changes to market value as presented on this page. This page has been updated to reflect the correct tabulation going forward.*



Account Name Benchmark Name	Market Value (M)	Month	Fiscal YTD
US Public Equity	1,295.07	4.47	6.72
Non-US Public Equity	1,081.62	-2.42	3.27
Equity Hedge Funds	569.82	0.22	3.00
Private Equity	557.66	1.16	4.11
Traditional Fixed Income	981.30	-2.33	-2.31
Real Estate	548.04	0.84	4.06
Real Return Hedge Funds	510.44	1.98	4.31
Publicly Traded Infrastructure	174.70	3.45	2.04
Priv Listed Infrastructure	98.53	0.03	4.71
Credit Aggregate	431.24	0.16	3.46
Inflation-Linked Bonds	251.10	-1.51	-1.02
Total Cash	29.48	0.02	0.27
TOTAL PLAN	7,603.88	0.61	3.18

BNY MELLON ASSET SERVICING



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

Seth Magaziner

General Treasurer

December 27, 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 November 30, 2016.

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

Asset Class		Base Market Value
Grand Total		7,603,881,436
CASH EQUIVALENT*		97,527,048
EQUITY HEDGE FUNDS**		568,367,825
GLOBAL PUBLIC EQUITY		3,423,612,738
CREDIT		413,354,163
INFLATION-LINKED BDS		240,387,465
PRIVATE EQUITY**		557,657,056
REAL ESTATE**		548,038,680
REAL RET HEDGE FUNDS**		510,038,466
INFRASTRUCTURE**		268,635,893
US TRADITIONAL FIXED		976,262,103
Plan Allocations	%	Base Market Value
Grand Total	100.00%	7,603,881,436
STATE EMP RET PLAN	75.67%	5,731,117,210
MUNI EMP RET PLAN	17.94%	1,374,789,671
TEACHER'S SURVIVOR BENEFIT	3.80%	291,427,399
STATE POLICE RET PL	1.55%	119,392,371
JUDICIAL RET PLAN	0.81%	62,146,399
NON-CONTRIB JUD RET	0.01%	599,832
NON-CONT ST POL RET	0.22%	24,408,553

* Cash & Short-Term Investments, as shown, also includes amounts available within specific active-manager mandates, and thus as aggregated will not tie directly to separate cash allocations as reported elsewhere.

** Alternative Investments – comprising the five components as indicated – have varying degrees of liquidity and may not have readily determinable market values. As such, they may be based on appraisals only.

Respectfully submitted,

Kerri Baker
Cash Manager

Section IV.

Asset Allocation

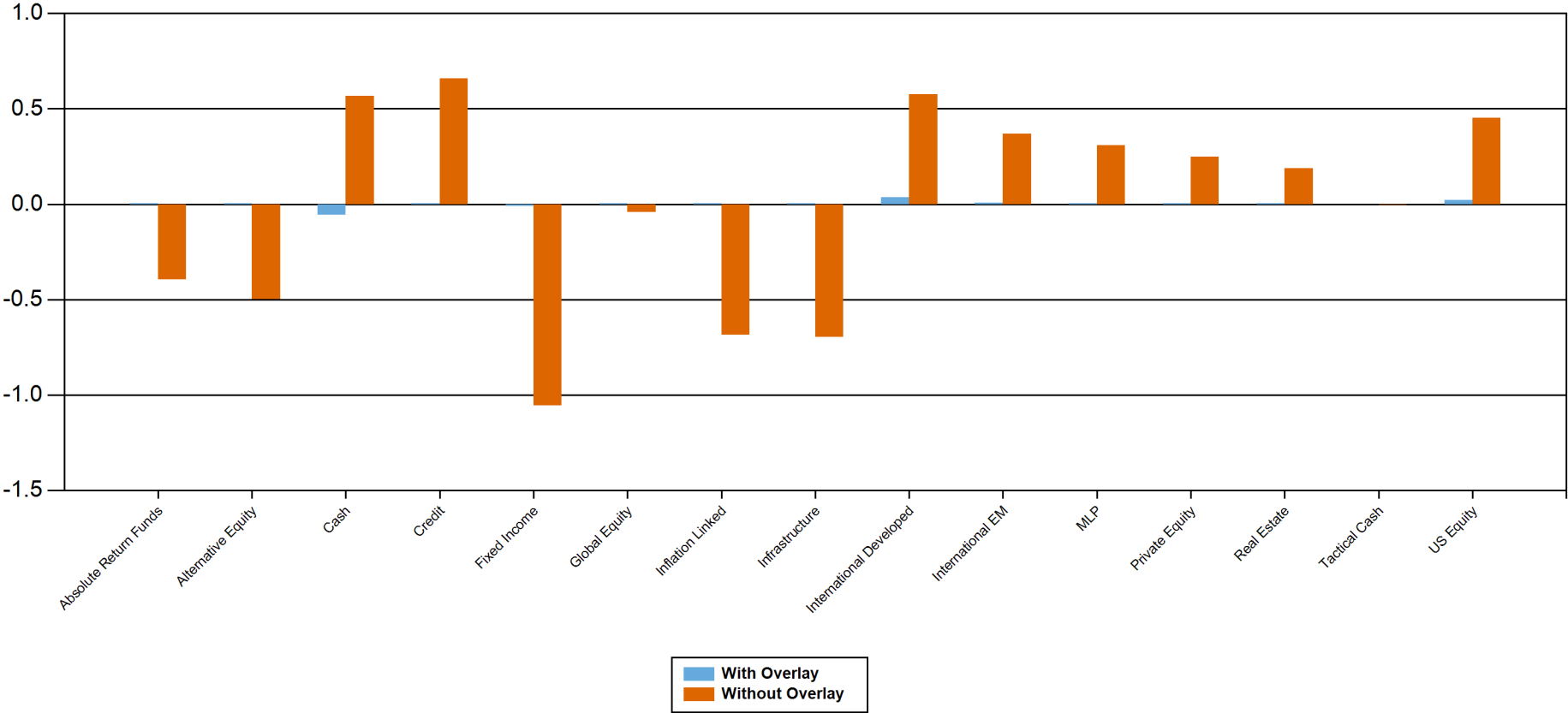
Asset Summary

Balance Date: 11/30/2016



<u>Asset Class</u>	<u>Physical Exposure</u>		<u>Synthetic Exposure</u>		<u>Net Position</u>		<u>Overlay Target</u>		<u>Policy Target</u>	
Total Market Value	7,577.5	100.0 %	0.0	0.0 %	7,577.5	100.0 %	7,577.6	100.0 %	7,577.6	100.00 %
Cash	43.1	0.6 %	-43.0	-0.6 %	0.0	0.0 %	4.3	0.1 %	0.0	0.00 %
Cash	43.1	0.6 %	-43.0	-0.6 %	0.0	0.0 %	4.3	0.1 %	0.0	0.00 %
Equity	4,554.5	60.1 %	-44.4	-0.6 %	4,510.1	59.5 %	4,505.1	59.5 %	4,470.8	59.00 %
Alternative Equity	568.6	7.5 %	0.0	0.0 %	568.6	7.5 %	568.6	7.5 %	606.2	8.00 %
Global Equity	1,057.7	14.0 %	0.0	0.0 %	1,057.7	14.0 %	1,057.7	14.0 %	1,060.9	14.00 %
International Developed	801.3	10.6 %	-22.0	-0.3 %	779.3	10.3 %	776.5	10.2 %	757.8	10.00 %
International EM	331.0	4.4 %	-19.8	-0.3 %	311.1	4.1 %	310.6	4.1 %	303.1	4.00 %
Private Equity	549.3	7.2 %	0.0	0.0 %	549.3	7.2 %	549.3	7.2 %	530.4	7.00 %
US Equity	1,246.6	16.5 %	-2.5	0.0 %	1,244.1	16.4 %	1,242.4	16.4 %	1,212.4	16.00 %
Fixed	980.9	12.9 %	87.4	1.2 %	1,068.3	14.1 %	1,069.0	14.1 %	1,060.9	14.00 %
Fixed Income	980.9	12.9 %	87.4	1.2 %	1,068.3	14.1 %	1,069.0	14.1 %	1,060.9	14.00 %
Other	1,999.1	26.4 %	0.0	0.0 %	1,999.1	26.4 %	1,999.1	26.4 %	2,046.0	27.00 %
Absolute Return Funds	500.5	6.6 %	0.0	0.0 %	500.5	6.6 %	500.5	6.6 %	530.4	7.00 %
Credit	428.9	5.7 %	0.0	0.0 %	428.9	5.7 %	428.9	5.7 %	378.9	5.00 %
Inflation Linked	251.2	3.3 %	0.0	0.0 %	251.2	3.3 %	251.2	3.3 %	303.1	4.00 %
Infrastructure	98.7	1.3 %	0.0	0.0 %	98.7	1.3 %	98.7	1.3 %	151.6	2.00 %
MLP	175.0	2.3 %	0.0	0.0 %	175.0	2.3 %	175.0	2.3 %	151.6	2.00 %
Real Estate	544.7	7.2 %	0.0	0.0 %	544.7	7.2 %	544.7	7.2 %	530.4	7.00 %
Tactical Cash	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.00 %

Percent Deviation from Overlay Target



Total Absolute Notional Value: 131.8 (USD)

Asset Summary

Balance Date: 11/30/2016



<u>Manager</u>	<u>Total Market Value</u>		<u>Equity Market Value</u>		<u>Fixed Market Value</u>		<u>Other Market Value</u>		<u>Cash Balance</u>	
Total Assets	7,577.6	100.0 %	4,554.5	60.1 %	980.9	12.9 %	1,999.1	26.4 %	43.1	0.6 %
Cash	43.1	0.6 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	43.0	0.6 %
Cash Acct (Pooled Trust)	27.8	0.4 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	27.7	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	15.3	0.2 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	15.3	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	4,554.5	60.1 %	4,554.5	60.1 %	0.0	0.0 %	0.0	0.0 %	0.1	0.0 %
Alternative Equity	568.6	7.5 %	568.6	7.5 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
Ascend Partners Fund II, LP	69.0	0.9 %	69.0	0.9 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
Davidson Kempner	80.2	1.1 %	80.2	1.1 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
Elliot Associates, LP	89.6	1.2 %	89.6	1.2 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
ESG	40.4	0.5 %	40.4	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	77.5	1.0 %	77.5	1.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
Samlyn Onshore Fund LP	106.3	1.4 %	106.3	1.4 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
Viking Global Equities	99.6	1.3 %	99.6	1.3 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
Global Equity	1,057.8	14.0 %	1,057.7	14.0 %	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	1,057.7	14.0 %	1,057.7	14.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
International Developed	801.3	10.6 %	801.3	10.6 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
SSgA MSCI Canada	100.9	1.3 %	100.9	1.3 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
SSgA MSCI EAFE	700.4	9.2 %	700.4	9.2 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
International EM	331.0	4.4 %	331.0	4.4 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
SSgA Emerging Mkts	331.0	4.4 %	331.0	4.4 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
Private Equity	549.3	7.2 %	549.3	7.2 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
Combined Private Equity	549.3	7.2 %	549.3	7.2 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
US Equity	1,244.5	16.4 %	1,244.5	16.4 %	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	1,244.5	16.4 %	1,244.5	16.4 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
US Large Cap	2.1	0.0 %	2.1	0.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
Shott Capital	2.1	0.0 %	2.1	0.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %
Fixed	980.9	12.9 %	0.0	0.0 %	980.9	12.9 %	0.0	0.0 %	0.0	0.0 %
Fixed Income	980.9	12.9 %	0.0	0.0 %	980.9	12.9 %	0.0	0.0 %	0.0	0.0 %
MacKay Shields Core	486.3	6.4 %	0.0	0.0 %	486.3	6.4 %	0.0	0.0 %	0.0	0.0 %
Pyramis Core	494.6	6.5 %	0.0	0.0 %	494.6	6.5 %	0.0	0.0 %	0.0	0.0 %
Other	1,999.1	26.4 %	0.0	0.0 %	0.0	0.0 %	1,999.1	26.4 %	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 %

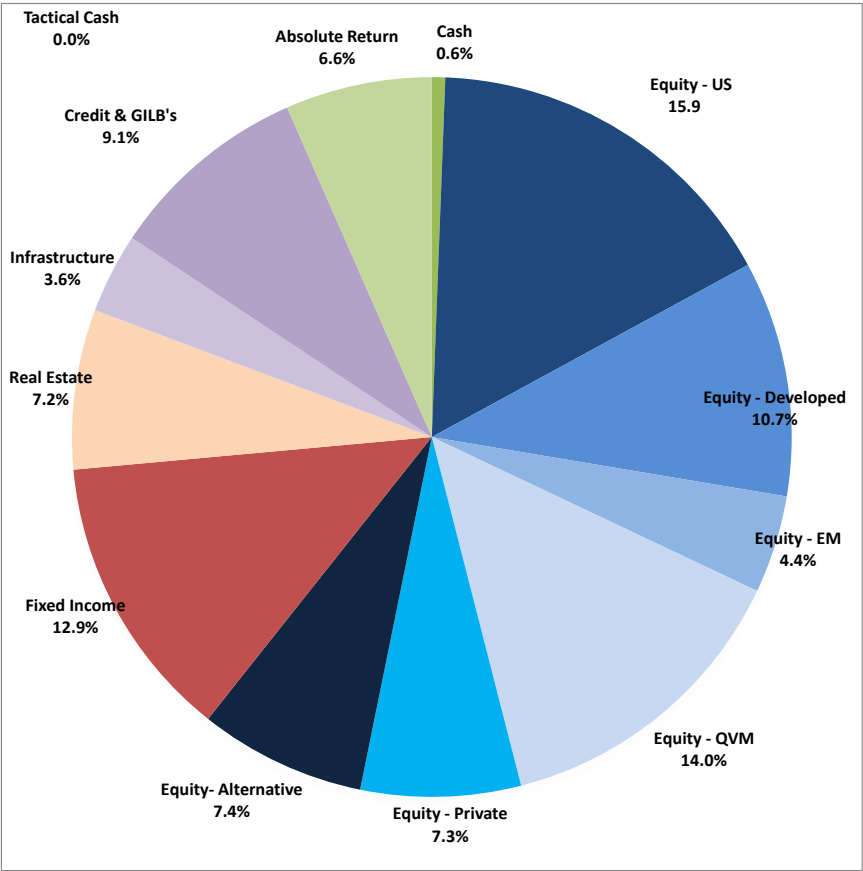
Asset Summary

Balance Date: 11/30/2016

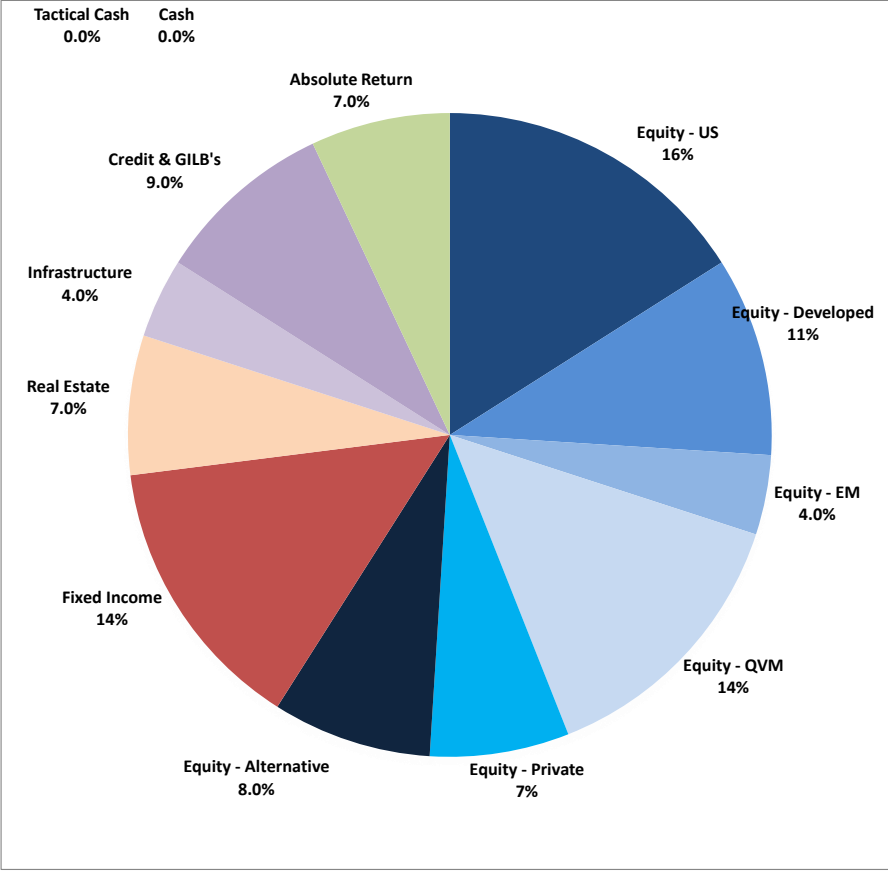


<u>Manager</u>	<u>Total Market Value</u>		<u>Equity Market Value</u>		<u>Fixed Market Value</u>		<u>Other Market Value</u>		<u>Cash Balance</u>	
Absolute Return Funds	500.5	6.6 %	0.0	0.0 %	0.0	0.0 %	500.5	6.6 %	0.0	0.0 %
Brevan Howard LP	76.2	1.0 %	0.0	0.0 %	0.0	0.0 %	76.2	1.0 %	0.0	0.0 %
Brigade Levered Capital	59.7	0.8 %	0.0	0.0 %	0.0	0.0 %	59.7	0.8 %	0.0	0.0 %
Capula Global Relative Value	65.9	0.9 %	0.0	0.0 %	0.0	0.0 %	65.9	0.9 %	0.0	0.0 %
Claren Road Cr Fund	5.7	0.1 %	0.0	0.0 %	0.0	0.0 %	5.7	0.1 %	0.0	0.0 %
D.E. Shaw Composite Fund	95.8	1.3 %	0.0	0.0 %	0.0	0.0 %	95.8	1.3 %	0.0	0.0 %
Graham Global	57.7	0.8 %	0.0	0.0 %	0.0	0.0 %	57.7	0.8 %	0.0	0.0 %
Oz Domestic Partners II	103.8	1.4 %	0.0	0.0 %	0.0	0.0 %	103.8	1.4 %	0.0	0.0 %
Winton Futures Ltd Fund	35.6	0.5 %	0.0	0.0 %	0.0	0.0 %	35.6	0.5 %	0.0	0.0 %
Credit	428.9	5.7 %	0.0	0.0 %	0.0	0.0 %	428.9	5.7 %	0.0	0.0 %
PIMCO	217.0	2.9 %	0.0	0.0 %	0.0	0.0 %	217.0	2.9 %	0.0	0.0 %
WAMCO	211.9	2.8 %	0.0	0.0 %	0.0	0.0 %	211.9	2.8 %	0.0	0.0 %
Inflation Linked	251.2	3.3 %	0.0	0.0 %	0.0	0.0 %	251.2	3.3 %	0.0	0.0 %
Brown Brothers Harriman-GILBS	251.2	3.3 %	0.0	0.0 %	0.0	0.0 %	251.2	3.3 %	0.0	0.0 %
Infrastructure	98.7	1.3 %	0.0	0.0 %	0.0	0.0 %	98.7	1.3 %	0.0	0.0 %
Combined Priv. Infrastructure	98.7	1.3 %	0.0	0.0 %	0.0	0.0 %	98.7	1.3 %	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	175.0	2.3 %	0.0	0.0 %	0.0	0.0 %	175.0	2.3 %	0.0	0.0 %
Harvest Fund Advisor	175.0	2.3 %	0.0	0.0 %	0.0	0.0 %	175.0	2.3 %	0.0	0.0 %
Real Estate	544.7	7.2 %	0.0	0.0 %	0.0	0.0 %	544.7	7.2 %	0.0	0.0 %
Combined Real Estate	544.7	7.2 %	0.0	0.0 %	0.0	0.0 %	544.7	7.2 %	0.0	0.0 %

Actual Allocation



Policy Allocation

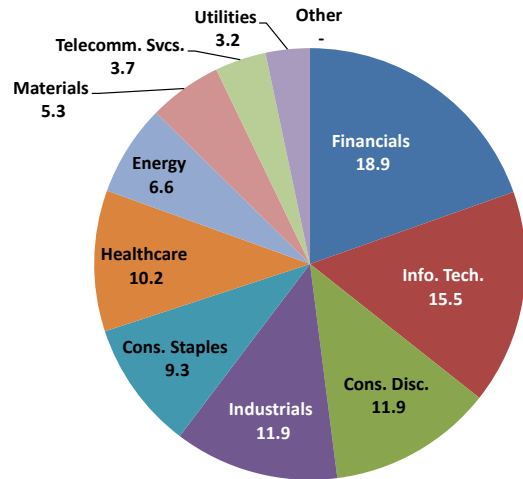


ERSRI Asset Allocation

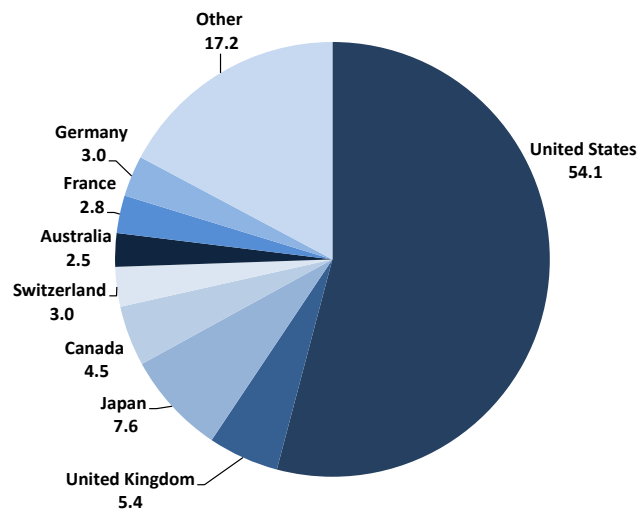
Public-Asset Portfolios

%% - as of November 30, 2016

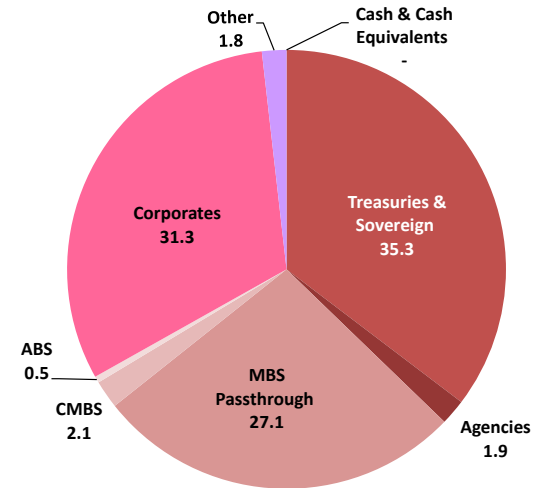
Global Public Equity - by Industry Sector



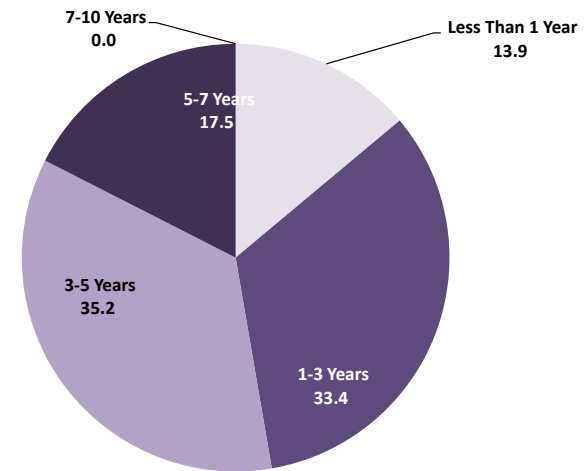
Global Public Equity - by Geography



Core Fixed Income - by Type



Inflation-Linked Bonds - by Duration



Section V.

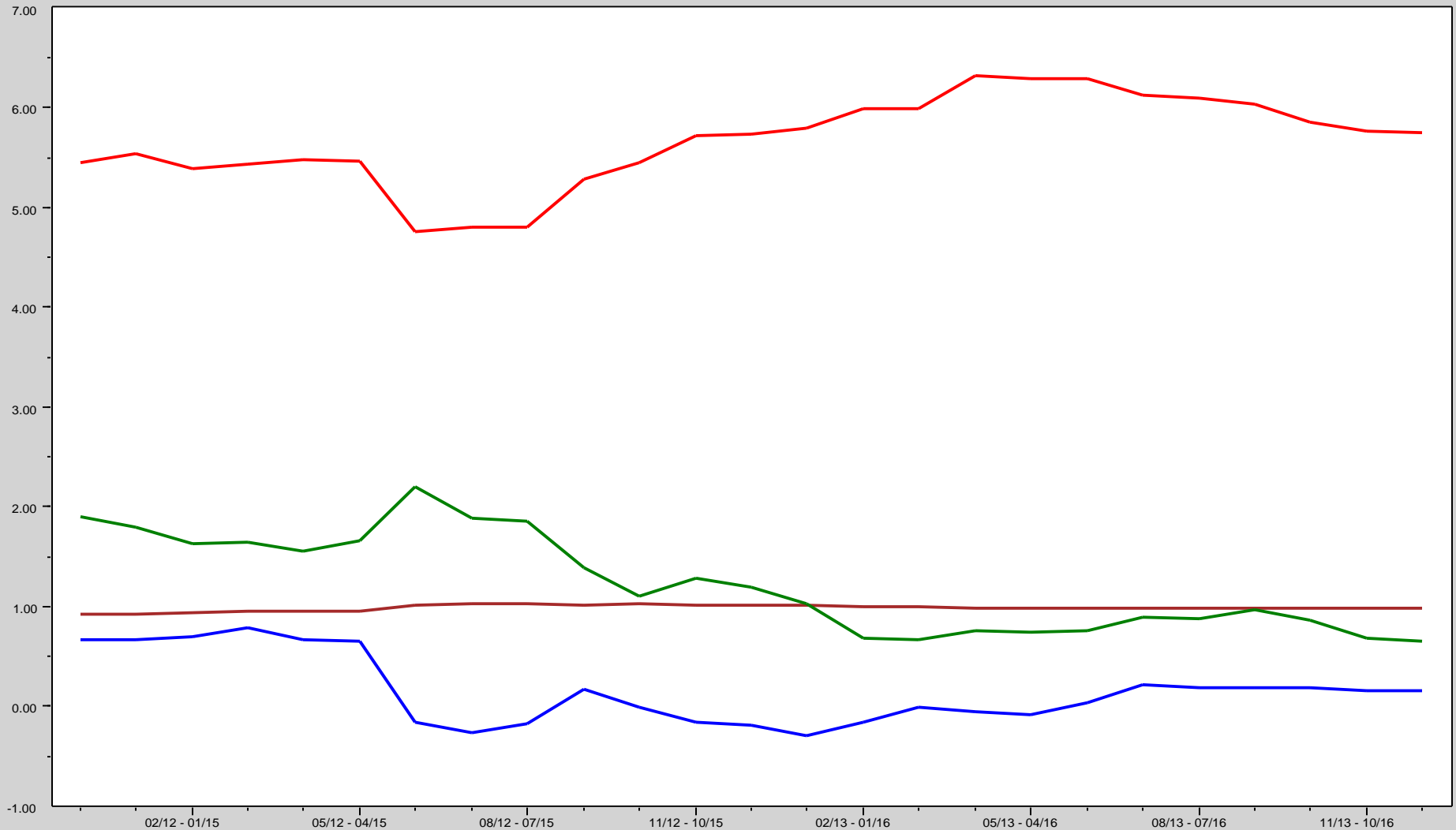
Risk Overview

Historical Risk - Three Year Rolling Periods

TOTAL PLAN

5 Years Ending November 30, 2016

Trend



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

Ann Std Dev Ann Sharpe Ratio Ann Alpha Beta

5 Years Ending November 30, 2016 Comparison

	TOTAL PLAN	Total Plan Benchmark	60/40 Blend
Ann Return	7.24	7.16	6.41
Ann Ex Ret vs Mkt	0.07		
Ann Tracking Error	0.96		
Ann Std Dev	5.88	6.15	6.87
Beta	0.94		
R-Squared	0.98		
Ann Alpha	0.45		
Ann Sharpe Ratio	1.20	1.14	0.93

Risk Exposures

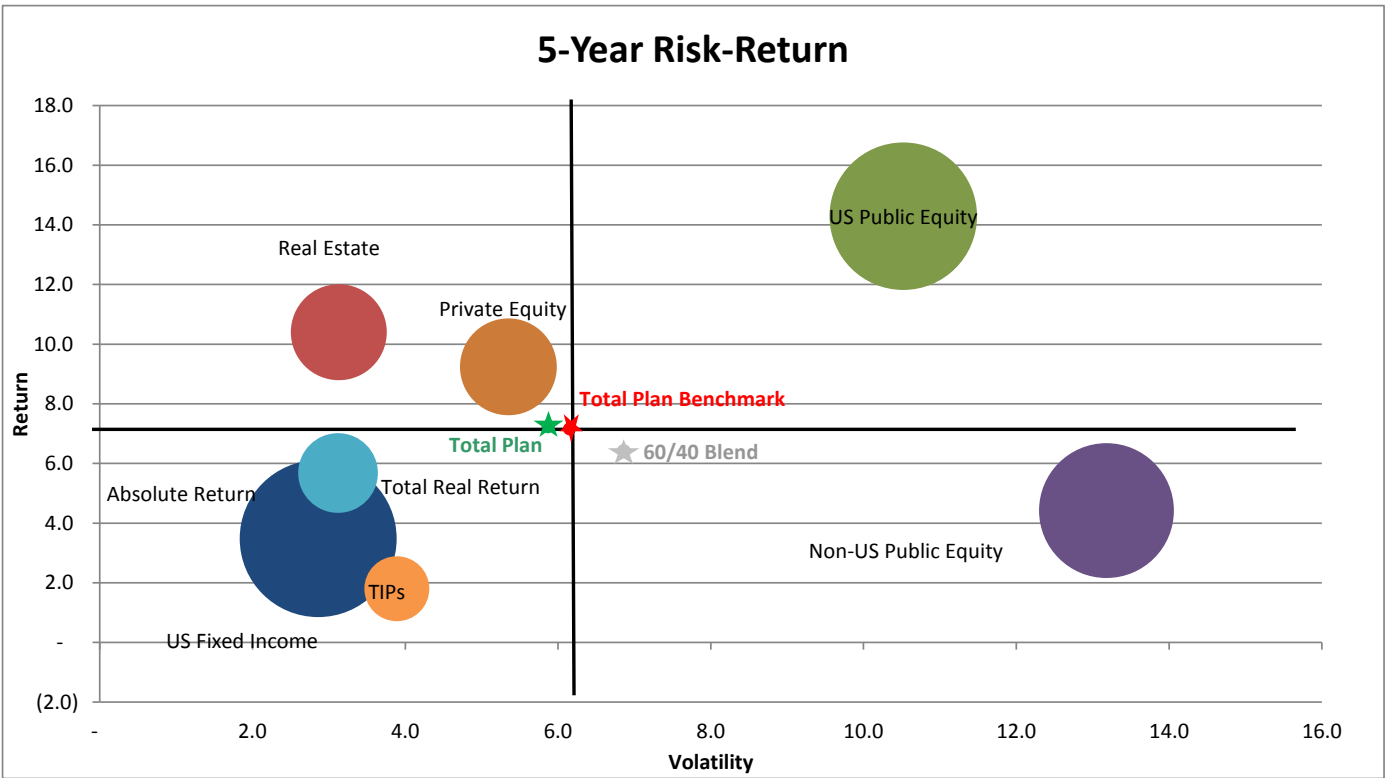
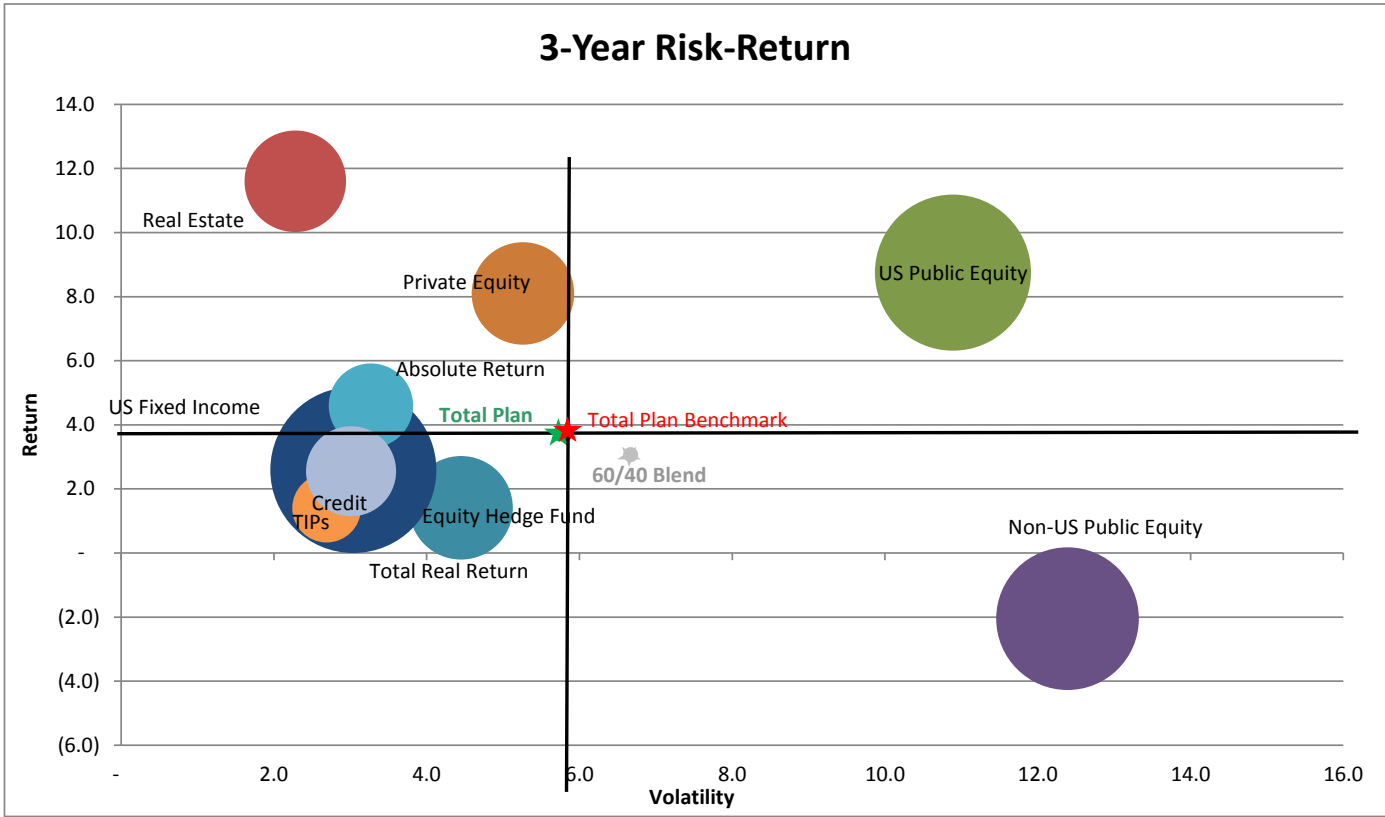
3 Years Ending November 30, 2016

	Annualized Return	Ann Std Dev	Beta (ACWI)	Beta (BC AGG)	Beta (GSCI)	Beta (CPI)
US Public Equity	8.75	10.89	0.93	-0.48	0.14	1.04
Non-US Public Equity	-2.05	12.40	1.08	0.12	0.27	2.31
Equity Hedge Funds	1.41	4.46	0.22	-0.29	0.04	0.54
Private Equity	8.11	5.27	-0.01	-0.30	0.08	1.70
Traditional Fixed Income	2.83	2.98	0.01	0.98	-0.03	-0.17
Real Estate	11.60	2.29	0.03	0.26	-0.02	-0.40
Real Return Hedge Funds	4.04	2.72	0.07	-0.09	-0.00	0.02
Inflation-Linked Bonds	1.41	2.69	0.03	0.73	0.01	0.34
Cash	0.67	0.37	0.00	-0.01	-0.00	-0.04
Russell Overlay Fd	0.02	0.09	-0.00	-0.00	-0.00	-0.02
TOTAL PLAN	3.69	5.75	0.52	0.02	0.11	1.02

ERSRI Portfolio

% - as of November 30, 2016

Bubble-Size Scaled based on Current Allocations



3 Years Ending November 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	0.81	1.00									
Eq HF	0.56	0.47	1.00								
PE	0.01	-0.01	-0.03	1.00							
FI	-0.05	0.13	-0.14	-0.18	1.00						
RE	0.06	0.15	0.00	-0.27	0.34	1.00					
RR HF	0.35	0.23	0.58	-0.10	-0.06	-0.12	1.00				
TIPS	-0.05	0.25	-0.23	-0.09	0.84	0.31	-0.05	1.00			
Cash	0.14	0.10	0.08	-0.10	-0.07	-0.25	0.14	-0.22	1.00		
Overlay	-0.22	-0.16	-0.34	-0.08	-0.10	0.08	-0.13	-0.09	-0.01	1.00	
Total	0.93	0.95	0.58	0.04	0.11	0.13	0.35	0.16	0.12	-0.22	1.00
Tot BM	0.93	0.96	0.54	-0.01	0.11	0.11	0.30	0.16	0.12	-0.20	0.99

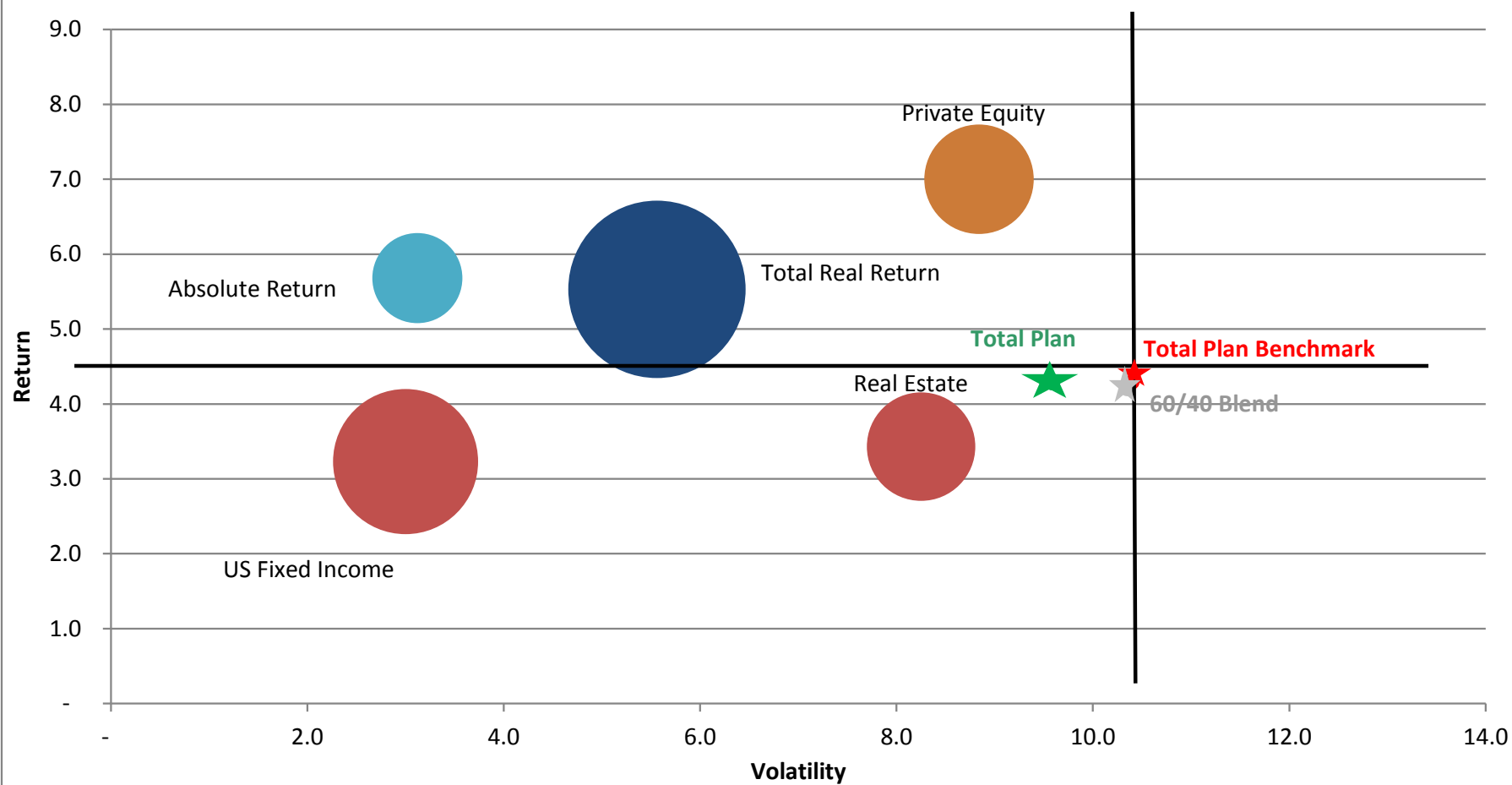
5 Years Ending November 30, 2016

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	0.80	1.00									
Eq HF	0.66	0.55	1.00								
PE	0.10	0.09	0.06	1.00							
FI	0.01	0.24	-0.09	-0.23	1.00						
RE	0.16	0.24	0.00	-0.10	0.31	1.00					
RR HF	0.39	0.31	0.62	-0.05	0.04	0.00	1.00				
TIPS	-0.01	0.23	-0.06	-0.14	0.79	0.23	0.16	1.00			
Cash	0.06	0.02	-0.03	-0.10	-0.06	-0.04	0.08	-0.14	1.00		
Overlay	0.22	0.30	0.12	0.06	-0.06	0.16	0.12	-0.02	-0.07	1.00	
Total	0.93	0.95	0.66	0.13	0.21	0.24	0.41	0.21	0.03	0.25	1.00
Tot BM	0.92	0.96	0.62	0.08	0.21	0.22	0.36	0.16	0.03	0.29	0.99

10-Year Risk-Return



10 Years Ending November 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	---	---	---	-0.02	1.00						
RE	---	---	---	0.30	-0.17	1.00					
RR HF	---	---	---	---	---	---	---				
GILBS	---	---	---	---	---	---	---	---			
Cash	---	---	---	0.13	0.03	0.16	---	---	1.00		
Overlay	---	---	---	---	---	---	---	---	---	---	
Total	---	---	---	0.22	0.45	0.01	---	---	-0.01	---	1.00
Tot BM	---	---	---	0.14	0.44	-0.02	---	---	0.00	---	0.99

Section VI.

Performance Overview

TOTAL NET OF FEES

11/30/2016

Account Name Benchmark Name	Market Value	% of Total	Month	YTD	Fiscal YTD	1 Year	Annualized				Inception Date
							3 Years	5 Years	10 Years	ITD	
SSGA R3000 INDEX <i>Russell 3000 Index</i>	1,295,072,208	17	4.47 4.48	10.67 10.58	6.72 6.71	8.39 8.31	8.76 8.68			13.22 13.17	10/1/2012 10/1/2012
US Public Equity <i>Russell 3000 Index</i>	1,295,072,282	17	4.47 4.48	10.67 10.58	6.72 6.71	8.39 8.31	8.75 8.68	14.30 14.41		6.99 6.99	8/1/2007 8/1/2007
SSGA MSCI EAFE <i>MSCI EAFE Net Dividend Index</i>	680,370,238	9	-1.98 -1.99	-2.07 -2.34	2.24 2.18	-3.38 -3.66	-1.96 -2.22			5.47 5.21	9/1/2012 9/1/2012
SSGA MSCI CANADA <i>MSCI Canada Net Dividend Index</i>	100,867,164	1	2.41 2.38	22.99 22.40	6.57 6.39	14.40 13.77	-0.85 -1.44			1.53 0.90	9/1/2012 9/1/2012
SSGA MSCI EM <i>MSCI Emerging Markets Net Dividend Index</i>	300,333,048	4	-4.64 -4.60	10.59 10.94	4.14 4.26	8.18 8.47	-3.28 -3.10			-0.05 0.16	9/1/2012 9/1/2012
Non-US Public Equity <i>Total International Equity BM</i>	1,081,622,176	14	-2.42 -2.31	2.57 1.89	3.27 2.94	0.48 -0.03	-2.05 -2.31	4.43 4.22		7.20 6.35	5/1/2009 5/1/2009
QVM Tilt <i>MSCI World Net Dividend Index</i>	1,057,492,047	14	1.53 1.44	5.06 5.00	4.18 4.31	3.53 3.15				9.49 9.17	10/1/2015 10/1/2015
Global Public Equity <i>MSCI All Country World Net Index</i>	3,434,186,505	45	1.21 0.76	6.41 5.58	4.76 4.30	4.37 3.68	3.27 2.99	9.63 8.85	4.30 3.57	3.80	7/1/2000 7/1/2000
Private Equity <i>ILPA All Fds Custom BM 1Q Lag</i>	557,656,961	7	1.16 1.41	8.89 6.22	4.11 4.45	9.08 4.58	8.11 11.57	9.25 14.93	7.00 8.71	9.09	2/1/1989 2/1/1989
Equity Hedge Funds <i>HFRI Equity Hedge (Total) Index</i>	569,821,518	7	0.22 1.45	-1.30 4.84	3.00 5.26	-1.90 3.63	1.41 2.34	5.33 5.15		5.09 4.64	11/1/2011 11/1/2011
Total Equity	4,561,664,984	60	1.08	5.63	4.46	4.04	3.56	9.01	4.38	8.74	6/1/1996
MACKAY SHIELDS <i>Bloomberg Barclays U.S. Aggregate Bond Index</i>	486,133,769	6	-2.39 -2.37	2.42 2.50	-2.61 -2.67	1.96 2.17	2.77 2.79			1.73 1.68	11/1/2012 11/1/2012
PYRAMIS GLOBAL ADV <i>Bloomberg Barclays U.S. Aggregate Bond Index</i>	495,159,164	7	-2.28 -2.37	3.35 2.50	-2.02 -2.67	2.72 2.17	2.89 2.79			1.78 1.68	11/1/2012 11/1/2012
Traditional Fixed Income <i>Bloomberg Barclays U.S. Aggregate Bond Index</i>	981,295,019	13	-2.33 -2.37	2.89 2.50	-2.31 -2.67	2.34 2.17	2.83 2.79	3.24 2.43	4.32 4.27	5.26 5.14	7/1/2000 7/1/2000

TOTAL NET OF FEES

11/30/2016

Account Name Benchmark Name	Market Value	% of Total	Month	YTD	Fiscal YTD	1 Year	Annualized				Inception Date
							3 Years	5 Years	10 Years	ITD	
Real Return Hedge Funds	510,439,328	7	1.98	5.96	4.31	5.02	4.04	4.71		4.72	11/1/2011
<i>HFRI Fund of Funds Composite Index</i>			<i>-0.17</i>	<i>-0.69</i>	<i>1.94</i>	<i>-1.11</i>	<i>1.23</i>	<i>3.06</i>		<i>2.81</i>	<i>11/1/2011</i>
PIMCO	217,922,261	3	0.27	6.59	2.94	5.88	3.14			3.07	5/1/2013
<i>30%BoA1-3BB-BHY/70% JPMB/BLLI</i>			<i>0.24</i>	<i>8.10</i>	<i>3.47</i>	<i>7.39</i>	<i>3.85</i>			<i>3.97</i>	<i>5/1/2013</i>
WAMCO	213,313,453	3	0.05	9.43	3.99	7.58	1.97			2.47	4/1/2013
<i>30% BoA 1-3 BB-B HY/70% CS LLI</i>			<i>0.25</i>	<i>8.88</i>	<i>3.98</i>	<i>7.89</i>	<i>3.67</i>			<i>3.93</i>	<i>4/1/2013</i>
Credit Aggregate	431,235,714	6	0.16	7.98	3.46	6.71	2.55			2.70	5/1/2013
<i>Credit Aggregate</i>			<i>0.24</i>	<i>8.49</i>	<i>3.72</i>	<i>7.64</i>	<i>3.81</i>			<i>3.93</i>	<i>5/1/2013</i>
BROWN BROTHERS HARR	251,104,111	3	-1.51	3.87	-1.02	3.30	1.41			0.45	11/1/2012
<i>BBH Inflation-Linked Custom BM</i>			<i>-1.47</i>	<i>3.90</i>	<i>-1.02</i>	<i>3.28</i>	<i>1.56</i>			<i>0.42</i>	<i>11/1/2012</i>
Inflation-Linked Bonds	251,104,111	3	-1.51	3.87	-1.02	3.30	1.41	1.81		4.06	11/1/2009
<i>Total Inflation Linked Custom</i>			<i>-1.47</i>	<i>3.90</i>	<i>-1.02</i>	<i>3.28</i>	<i>1.56</i>	<i>1.75</i>		<i>4.03</i>	<i>11/1/2009</i>
Harvest Fund Advisor	174,698,282	2	3.45	16.33	2.04	10.13				-10.84	1/1/2015
<i>Alerian MLP Index</i>			<i>2.30</i>	<i>13.33</i>	<i>-1.20</i>	<i>9.28</i>				<i>-13.11</i>	<i>1/1/2015</i>
Priv Listed Infrastructure	98,531,971	1	0.03	11.99	4.71	11.99				4.57	3/1/2015
Total Real Return	1,466,009,405	19	0.87	7.87	2.82	6.85	2.59	3.49	5.53	5.45	6/1/2004
Real Estate	548,038,680	7	0.84	9.28	4.06	9.77	11.60	10.41	3.43	3.00	1/1/2005
<i>NFI-ODCE Index</i>			<i>0.86</i>	<i>8.68</i>	<i>3.39</i>	<i>12.41</i>	<i>12.56</i>	<i>12.49</i>	<i>8.40</i>	<i>9.91</i>	<i>1/1/2005</i>
ERSRI CASH	27,758,951	0	0.03	0.94	0.30	0.97	0.70	0.47	1.70	12.95	7/1/2000
<i>BofA Merrill Lynch 3 Month US Treasury Bill G001</i>			<i>0.02</i>	<i>0.28</i>	<i>0.14</i>	<i>0.32</i>	<i>0.13</i>	<i>0.11</i>	<i>0.84</i>	<i>1.68</i>	<i>7/1/2000</i>
Total Cash	29,480,525	0	0.02	0.88	0.27	0.91	0.67	0.47	1.27	2.35	4/1/2004
Russell Overlay Fd	15,290,281	0	0.05	0.07	0.07	0.07	0.02	0.08		-0.06	9/1/2008
TOTAL PLAN	7,603,881,436	100	0.61	5.92	3.18	4.71	3.69	7.24	4.28	4.57	7/1/2000
<i>Total Plan Benchmark</i>			<i>0.22</i>	<i>4.98</i>	<i>2.68</i>	<i>3.90</i>	<i>3.69</i>	<i>7.16</i>	<i>4.30</i>		<i>7/1/2000</i>
<i>60/40 Blend</i>			<i>-0.49</i>	<i>4.50</i>	<i>1.49</i>	<i>3.24</i>	<i>3.07</i>	<i>6.41</i>	<i>4.22</i>		<i>7/1/2000</i>
Total Plan ex PE,RE & Priv Inf	6,399,653,825	84	0.55	5.37	3.00	3.93	2.87	6.59	3.96	6.07	4/1/1996
<i>Total Plan BM ex PE RE</i>			<i>0.09</i>	<i>4.65</i>	<i>2.50</i>	<i>3.36</i>	<i>2.63</i>	<i>6.64</i>	<i>3.88</i>		<i>4/1/1996</i>

TOTAL NET OF FEES

11/30/2016

Account Name Benchmark Name	Market Value	% of Total	Month	Cumulative		YTD	2015	2014	2013	Inception Date
				10/1/2016 - 10/31/2016	9/1/2016 - 9/30/2016					
SSGA R3000 INDEX <i>Russell 3000 Index</i>	1,295,072,208	17	4.47 4.48	-2.14 -2.16	0.14 0.16	10.67 10.58	0.60 0.48	12.59 12.56	33.49 33.55	10/1/2012 10/1/2012
US Public Equity <i>Russell 3000 Index</i>	1,295,072,282	17	4.47 4.48	-2.14 -2.16	0.14 0.16	10.67 10.58	0.60 0.48	12.57 12.56	33.48 33.55	8/1/2007 8/1/2007
SSGA MSCI EAFE <i>MSCI EAFE Net Dividend Index</i>	680,370,238	9	-1.98 -1.99	-2.03 -2.05	1.26 1.23	-2.07 -2.34	-0.59 -0.81	-4.64 -4.90	23.08 22.78	9/1/2012 9/1/2012
SSGA MSCI CANADA <i>MSCI Canada Net Dividend Index</i>	100,867,164	1	2.41 2.38	-0.84 -0.89	1.17 1.10	22.99 22.40	-23.70 -24.16	2.17 1.51	6.35 5.63	9/1/2012 9/1/2012
SSGA MSCI EM <i>MSCI Emerging Markets Net Dividend Index</i>	300,333,048	4	-4.64 -4.60	0.21 0.24	1.31 1.29	10.59 10.94	-15.16 -14.92	-2.34 -2.19	-2.81 -2.60	9/1/2012 9/1/2012
Non-US Public Equity <i>Total International Equity BM</i>	1,081,622,176	14	-2.42 -2.31	-1.27 -1.44	1.27 1.23	2.57 1.89	-5.77 -5.66	-3.63 -3.87	15.18 15.29	5/1/2009 5/1/2009
QVM Tilt <i>MSCI World Net Dividend Index</i>	1,057,492,047	14	1.53 1.44	-1.59 -1.94	0.43 0.53	5.06 5.00				10/1/2015 10/1/2015
Global Public Equity <i>MSCI All Country World Net Index</i>	3,434,186,505	45	1.21 0.76	-1.68 -1.70	0.61 0.61	6.41 5.58	-2.48 -2.36	4.35 4.16	23.90 22.80	7/1/2000 7/1/2000
Private Equity <i>ILPA All Fds Custom BM 1Q Lag</i>	557,656,961	7	1.16 1.41	0.55 0.54	1.00 2.44	8.89 6.22	7.08 7.16	8.02 16.39	14.86 25.14	2/1/1989 2/1/1989
Equity Hedge Funds <i>HFR1 Equity Hedge (Total) Index</i>	569,821,518	7	0.22 1.45	-0.75 -0.80	0.86 0.99	-1.30 4.84	1.27 -0.97	2.64 1.81	17.11 14.28	11/1/2011 11/1/2011
Total Equity	4,561,664,984	60	1.08	-1.30	0.69	5.63	-0.95	4.51	21.95	6/1/1996
MACKAY SHIELDS <i>Bloomberg Barclays U.S. Aggregate Bond Index</i>	486,133,769	6	-2.39 -2.37	-0.79 -0.76	-0.05 -0.06	2.42 2.50	0.48 0.55	6.00 5.97	-1.79 -2.02	11/1/2012 11/1/2012
PYRAMIS GLOBAL ADV <i>Bloomberg Barclays U.S. Aggregate Bond Index</i>	495,159,164	7	-2.28 -2.37	-0.63 -0.76	-0.02 -0.06	3.35 2.50	0.01 0.55	5.83 5.97	-1.93 -2.02	11/1/2012 11/1/2012
Traditional Fixed Income <i>Bloomberg Barclays U.S. Aggregate Bond Index</i>	981,295,019	13	-2.33 -2.37	-0.71 -0.76	-0.04 -0.06	2.89 2.50	0.25 0.55	5.91 5.97	-1.86 -2.02	7/1/2000 7/1/2000

TOTAL NET OF FEES

11/30/2016

Account Name Benchmark Name	Market Value	% of Total	Month	Cumulative		YTD	2015	2014	2013	Inception Date
				10/1/2016 - 10/31/2016	9/1/2016 - 9/30/2016					
Real Return Hedge Funds	510,439,328	7	1.98	0.72	0.17	5.96	0.86	4.70	6.96	11/1/2011
HFRI Fund of Funds Composite Index			-0.17	-0.29	0.44	-0.69	-0.27	3.37	8.96	11/1/2011
PIMCO	217,922,261	3	0.27	0.40	0.50	6.59	1.13	1.22		5/1/2013
30%BoA1-3BB-BHY/70% JPMB/BBLLI			0.24	0.41	0.65	8.10	1.00	2.11		5/1/2013
WAMCO	213,313,453	3	0.05	1.05	0.90	9.43	-3.69	0.10		4/1/2013
30% BoA 1-3 BB-B HY/70% CS LLI			0.25	0.65	0.74	8.88	-0.18	2.03		4/1/2013
Credit Aggregate	431,235,714	6	0.16	0.72	0.70	7.98	-1.29	0.66		5/1/2013
Credit Aggregate			0.24	0.53	0.69	8.49	0.49	2.11		5/1/2013
BROWN BROTHERS HARR	251,104,111	3	-1.51	-0.12	0.79	3.87	-0.26	1.72	-5.03	11/1/2012
BBH Inflation-Linked Custom BM			-1.47	-0.12	0.76	3.90	-0.15	2.04	-5.13	11/1/2012
Inflation-Linked Bonds	251,104,111	3	-1.51	-0.12	0.79	3.87	-0.26	1.72	-5.03	11/1/2009
Total Inflation Linked Custom			-1.47	-0.12	0.76	3.90	-0.15	2.04	-5.13	11/1/2009
Harvest Fund Advisor	174,698,282	2	3.45	-5.33	1.99	16.33	-31.01			1/1/2015
Alerian MLP Index			2.30	-4.45	1.85	13.33	-32.59			1/1/2015
Priv Listed Infrastructure	98,531,971	1	0.03	2.41	2.38	11.99				3/1/2015
CPI + 4%				0.44	0.56					3/1/2015
Total Real Return	1,466,009,405	19	0.87	-0.07	0.79	7.87	-2.76	2.74	3.39	6/1/2004
Real Estate	548,038,680	7	0.84	0.56	0.94	9.28	14.22	10.90	5.65	1/1/2005
NFI-ODCE Index			0.86	0.59	1.91	8.68	13.86	12.26	12.00	1/1/2005
ERSRI CASH	27,758,951	0	0.03	0.02	0.05	0.94	0.40	0.75	0.14	7/1/2000
BofA Merrill Lynch 3 Month US Treasury Bill G001			0.02	0.03	0.05	0.28	0.05	0.03	0.07	7/1/2000
Total Cash	29,480,525	0	0.02	0.01	0.04	0.88	0.38	0.74	0.13	4/1/2004
Russell Overlay Fd	15,290,281	0	0.05	-0.02	-0.01	0.07	0.00	-0.02	0.17	9/1/2008
TOTAL PLAN	7,603,881,436	100	0.61	-0.86	0.60	5.92	-0.28	4.52	14.06	7/1/2000
Total Plan Benchmark			0.22	-0.93	0.73	4.98	-0.25	5.04	14.47	7/1/2000
60/40 Blend			-0.49	-1.32	0.34	4.50	-0.98	4.96	12.32	7/1/2000
Total Plan ex Overlay	7,588,591,155	100	0.55	-0.85	0.62	5.85	-0.28	4.54	13.87	8/1/2008
Total Plan Benchmark			0.22	-0.93	0.73	4.98	-0.25	5.04	14.47	8/1/2008

TOTAL NET OF FEES

11/30/2016

Account Name Benchmark Name	Market Value	% of Total	Month	Cumulative		YTD	2015	2014	2013	Inception Date
				10/1/2016 - 10/31/2016	9/1/2016 - 9/30/2016					
Total Plan ex PE,RE & Priv Inf	6,399,653,825	84	0.55	-1.14	0.52	5.37	-1.68	3.98	14.33	4/1/1996
<i>Total Plan BM ex PE RE</i>			<i>0.09</i>	<i>-1.13</i>	<i>0.53</i>	<i>4.65</i>	<i>-1.64</i>	<i>3.90</i>	<i>14.57</i>	<i>4/1/1996</i>

END NOTES
11/30/2016

1	RI6G23000000	TOTAL PLAN	<p>Month - Current Month</p> <p>Cumulative Months - Prior Month and Second Prior Month</p> <p>Monthly Reporting for Private Equity and Real Estate skew performance on an actual and benchmark basis due to nature of valuations</p> <p>2014, 2013, 2012 - Calendar Years</p>
	RI6G23000000	TOTAL PLAN	<p>The current composition of the Total Plan Benchmark is as follows:</p> <p>15.0% Barclays U.S. Aggregate Bond Index</p> <p>44.5% MSCI All Country World Net Index</p> <p>7.0% HFRI Fund of Funds Composite Index</p> <p>3.0% BofA Merrill Lynch 3 Month US Treasury Bill</p> <p>8.0% HFRI Equity Hedge (Total) Index</p> <p>5.0% NFI-ODCE Index</p> <p>4.0% Barclays U.S. Treasury Inflation Notes: 1-10 Year Index</p> <p>5.0% Credit Aggregate Custom: 30% BoA1-3BB-B HY/35%CSInstLLI/35% JPM BB/B Leveraged Loan Index</p> <p>7.0% ILPA All Funds Index</p> <p>1.5% Alerian MLP Total Return Index</p>

Section VII.

Hedge Fund Returns

Employees' Retirement System of the State of Rhode Island

Hedge Fund Portfolio

Portfolio Performance Summary

Estimated as of November 30, 2016

Fund	Market Value	Actual %	Returns								Std Dev	Sharpe Ratio	Incep Date
			Nov	QTD	YTD	FYTD	1 Year	3 Year	5 Year	Incep			
Global Equities													
Ascend ERSRI Fund LP	68,308,163	6.3%	-1.04%	-1.31%	-6.79%	0.30%	-7.61%	0.60%	2.74%	2.58%	3.39%	0.65	Nov-11
Davidson Kempner Institutional Partners, L.P.	80,267,163	7.4%	0.10%	0.70%	6.37%	3.51%	6.38%	4.23%	5.99%	5.89%	2.07%	2.59	Nov-11
Elliott Associates, L.P.	94,553,532	8.8%	2.20%	2.51%	11.48%	5.83%	11.20%	8.10%	9.87%	9.36%	3.79%	2.29	Nov-11
ESG Cross Border Equity Fund LP	38,154,668	3.5%	-5.50%	-7.21%	-13.16%	-7.19%	-11.56%	-	-	-10.23%	8.32%	-1.30	Jun-14
Indus Asia Pacific Distribution Holding Company II, 06.30.14 Series (liquidating trust)	344,716	0.0%	0.00%	13.23%	-24.01%	14.85%	-21.08%	-24.76%	-	-14.00%	18.71%	-0.72	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	3,885,474	0.4%	-2.33%	-4.49%	-	-8.08%	-	-	-	-8.08%	4.24%	-	Jul-16
PFM Diversified Fund, L.P.	77,881,506	7.2%	0.50%	-1.44%	-6.42%	3.84%	-7.23%	2.16%	-	5.68%	8.97%	0.62	Mar-12
Samlyn Onshore Fund, L.P.	107,035,192	9.9%	0.60%	0.98%	0.12%	4.89%	-1.06%	3.67%	-	7.42%	6.38%	1.09	Jan-12
Viking Global Equities, LP	98,281,093	9.1%	-1.40%	-3.53%	-3.96%	2.01%	-2.96%	6.66%	10.37%	10.37%	7.59%	1.29	Dec-11
Total Global Equities	570,165,201	52.8%	-0.22%	-0.84%	-1.35%	2.61%	-1.94%	1.40%	5.30%	5.04%	4.39%	1.05	Nov-11
MSCI AC World Index Free - Net			0.76%	-0.95%	5.58%	4.30%	3.68%	2.99%	8.85%	8.05%	11.40%	0.70	Nov-11
Russell 3000 Index (DRI)			4.48%	2.21%	10.58%	6.71%	8.31%	8.68%	14.41%	14.10%	10.57%	1.27	Nov-11
HFRI Equity Hedge (Total) Index			1.45%	0.64%	4.84%	5.26%	3.63%	2.34%	5.15%	4.64%	6.23%	0.70	Nov-11
Real Return													
Brevan Howard LP	80,527,346	7.5%	5.54%	6.36%	2.74%	3.95%	-1.25%	0.11%	1.12%	1.41%	5.67%	0.20	Nov-11
Brigade Leveraged Capital Structures Fund LP	59,891,307	5.5%	0.30%	0.34%	20.11%	6.09%	15.62%	2.79%	-	3.87%	5.69%	0.63	Mar-12
Capula Global Relative Value Fund Ltd.	66,814,896	6.2%	1.38%	1.46%	6.54%	3.39%	6.87%	7.52%	5.97%	5.97%	1.86%	2.92	Dec-11
Claren Road Credit Fund, Ltd.	5,354,118	0.5%	0.00%	0.50%	-6.90%	-6.74%	-7.44%	-7.79%	-	-6.13%	7.33%	-0.88	Apr-13
DE Shaw Composite Fund LLC	96,282,871	8.9%	0.40%	1.98%	7.74%	4.41%	10.46%	12.97%	14.05%	13.76%	4.20%	3.00	Nov-11
Graham Absolute Return Trading Ltd.	60,395,145	5.6%	4.66%	8.37%	9.05%	8.39%	7.04%	4.33%	-	3.91%	4.95%	0.72	Jan-12
OZ Domestic Partners II, L.P.	105,252,597	9.7%	1.54%	1.94%	3.12%	5.51%	2.68%	3.38%	7.16%	6.89%	4.66%	1.37	Nov-11
Winton Futures Fund Limited	35,266,333	3.3%	-0.81%	-3.32%	-4.33%	-4.23%	-6.18%	3.34%	3.29%	3.29%	8.78%	0.37	Dec-11
Total Real Return	509,784,614	47.2%	1.94%	2.68%	6.04%	4.27%	4.99%	3.89%	4.72%	4.70%	2.65%	1.60	Nov-11
ML 3-month T-Bills			0.02%	0.04%	0.28%	0.14%	0.32%	0.13%	0.11%	0.11%	0.04%	-	Nov-11
HFRI Fund of Funds Composite Index			-0.17%	-0.46%	-0.69%	1.94%	-1.11%	1.23%	3.06%	2.81%	3.51%	0.69	Nov-11
Total Hedge Fund Portfolio	1,079,949,815	100.0%	0.79%	0.79%	2.02%	3.39%	1.22%	2.55%	5.03%	4.90%	3.26%	1.36	Nov-11
HFRI Fund of Funds Composite Index			-0.17%	-0.46%	-0.69%	1.94%	-1.11%	1.23%	3.06%	2.81%	3.51%	0.69	Nov-11

Employees' Retirement System of the State of Rhode Island

Hedge Fund Portfolio

Portfolio Performance Summary

Estimated as of November 30, 2016

Fund	Market Value	Actual %	Returns								Std Dev	Sharpe Ratio	Incep Date
			Nov	QTD	YTD	FYTD	1 Year	3 Year	5 Year	Incep			
Market Indices													
Libor3Month			0.08%	0.15%	0.68%	0.36%	0.73%	0.42%	0.39%	0.40%	0.06%	-	Nov-11
Barclays Aggregate Bond Index			-2.37%	-3.11%	2.51%	-2.67%	2.19%	2.79%	2.43%	2.38%	2.92%	0.68	Nov-11
Barclays High Yield Credit Bond Index			-0.47%	-0.08%	15.01%	5.46%	12.11%	4.22%	7.54%	6.95%	5.66%	1.15	Nov-11
S&P 500 TR			3.70%	1.81%	9.79%	5.73%	8.06%	9.07%	14.44%	14.14%	10.29%	1.30	Nov-11
MSCI EAFE - Net			-1.99%	-4.00%	-2.34%	2.18%	-3.66%	-2.22%	5.62%	4.49%	13.57%	0.36	Nov-11
MSCI EMF (Emerging Markets Free) - Net			-4.60%	-4.38%	10.94%	4.26%	8.47%	-3.10%	0.99%	-0.39%	16.33%	0.03	Nov-11

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

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

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

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Employees' Retirement System of the State of Rhode Island

Hedge Fund Portfolio

Fund Level Performance Report

Estimated as of November 30, 2016

Fund	QTD	YTD	Nov	Oct	Sep	Trailing Returns			Calendar Year Returns					5 Yr	Sharpe Ratio			Start Date
						1 Year	3 Year	5 Year	2015	2014	2013	2012	2011	Std Dev	3 yr	5 yr	Incep.	
Global Equities																		
Ascend Partners Fund II LP	-0.85%	-4.39%	-0.64%	-0.21%	0.63%	-4.35%	1.63%	3.47%	2.66%	5.09%	12.22%	2.50%	-3.02%	2.93%	0.40	1.04	0.93	Jan-04
Davidson Kempner Institutional Partners, L.P.	0.74%	6.16%	0.10%	0.64%	1.24%	6.17%	4.15%	5.74%	1.51%	4.45%	9.52%	6.87%	1.27%	2.06%	1.69	2.53	1.56	Mar-96
Elliott Associates, L.P.	2.51%	11.09%	2.20%	0.30%	0.90%	10.76%	7.61%	9.31%	2.51%	8.24%	12.44%	13.18%	3.94%	3.59%	1.78	2.40	1.92	Jan-90
ESG Cross Border Equity Fund LP	-7.20%	-13.22%	-5.50%	-1.80%	0.70%	-11.65%	-8.43%	-1.69%	-5.06%	-7.16%	13.59%	6.74%	9.45%	7.42%	-1.10	-0.25	0.59	Jan-04
Indus Asia Pacific Fund, LP	13.23%	-24.01%	0.00%	13.23%	-0.12%	-21.08%	-24.67%	-13.67%	-33.23%	-15.60%	4.97%	8.21%	-7.18%	18.71%	-1.11	-0.70	0.04	Dec-00
Luxor Capital Partners, LP	11.02%	6.47%	7.17%	3.59%	1.06%	-0.72%	-7.56%	-0.70%	-19.05%	-9.83%	19.53%	5.21%	-2.89%	9.23%	-0.73	-0.07	0.78	Apr-02
PFM Diversified Fund, L.P.	-1.44%	-6.34%	0.50%	-1.93%	2.44%	-7.12%	2.12%	5.95%	8.10%	2.84%	22.17%	5.59%	-3.35%	8.66%	0.23	0.67	0.81	Nov-04
Samlyn Onshore Fund, L.P.	1.00%	-0.03%	0.64%	0.36%	0.66%	-1.40%	3.35%	7.17%	-1.29%	9.24%	18.93%	10.49%	-5.05%	6.42%	0.46	1.05	1.00	Mar-07
Viking Global Equities, LP	-3.67%	-4.01%	-1.50%	-2.20%	0.80%	-3.05%	6.56%	10.25%	8.27%	13.47%	22.65%	12.75%	7.71%	7.53%	0.70	1.28	1.41	Oct-99
Real Return																		
Brevan Howard LP	6.35%	2.74%	5.54%	0.77%	-0.90%	-1.24%	0.11%	1.19%	-1.98%	-0.78%	2.68%	3.91%	12.21%	5.78%	-0.02	0.17	0.95	Sep-05
Brigade Leveraged Capital Structures Fund LP	0.34%	20.05%	0.30%	0.04%	0.98%	15.56%	2.78%	3.99%	-10.73%	0.61%	6.13%	6.91%	2.55%	5.60%	0.37	0.66	0.68	Jan-07
Capula Global Relative Value Fund Ltd.	1.46%	6.54%	1.38%	0.08%	0.88%	6.88%	7.52%	5.97%	7.54%	8.14%	7.60%	0.41%	6.19%	1.85%	4.69	2.93	1.88	Oct-05
Claren Road Credit Fund, Ltd.	0.60%	-12.57%	1.93%	-1.30%	-1.75%	-13.10%	-10.23%	-5.32%	-7.96%	-10.10%	5.43%	1.49%	6.88%	7.06%	-1.34	-0.79	0.36	Jan-06
DE Shaw Composite Fund LLC	1.91%	7.09%	0.40%	1.50%	-0.30%	9.66%	12.13%	12.32%	13.68%	15.57%	11.51%	13.94%	3.69%	4.01%	2.65	2.83	1.57	Mar-01
Graham Absolute Return Trading Ltd.	8.65%	9.18%	4.94%	3.54%	0.33%	7.17%	7.98%	9.05%	1.50%	10.42%	10.50%	9.29%	4.64%	7.56%	0.90	1.14	1.06	Jan-05
OZ Domestic Partners II, L.P.	2.09%	3.08%	1.54%	0.54%	0.63%	2.79%	3.19%	6.74%	-0.44%	5.45%	14.20%	12.01%	0.17%	4.53%	0.54	1.38	1.04	Jan-04
Winton Futures Fund Limited	-3.33%	-4.33%	-0.81%	-2.54%	-0.51%	-6.19%	3.35%	3.36%	0.95%	13.88%	9.43%	-3.56%	6.29%	8.79%	0.35	0.37	0.67	Oct-97
Benchmark																		
HFRI Fund of Funds Composite Index	-0.46%	-0.69%	-0.17%	-0.29%	0.44%	-1.11%	1.23%	3.06%	-0.27%	3.37%	8.96%	4.79%	-5.72%	3.49%				Jan-90
HFRI Fund Weighted Composite Index	0.35%	4.57%	0.90%	-0.54%	0.63%	3.36%	2.47%	4.23%	-1.12%	2.98%	9.13%	6.36%	-5.25%	4.11%				Jan-90
Market Indices																		
3 Month Libor - BOM	0.15%	0.68%	0.08%	0.07%	0.07%	0.73%	0.42%	0.39%	0.33%	0.23%	0.27%	0.42%	0.35%	0.06%				Jan-87
Barclays Aggregate Bond Index	-3.11%	2.51%	-2.37%	-0.76%	-0.06%	2.19%	2.79%	2.43%	0.57%	5.94%	-2.02%	4.23%	7.86%	2.94%				Jan-76
Barclays High Yield Credit Bond Index	-0.08%	15.01%	-0.47%	0.39%	0.67%	12.11%	4.22%	7.54%	-4.46%	2.46%	7.46%	15.81%	4.98%	5.57%				Jul-83
S&P 500 (TR)	1.81%	9.79%	3.70%	-1.82%	0.02%	8.06%	9.07%	14.45%	1.38%	13.69%	32.39%	16.00%	2.11%	10.36%				Jun-88
MSCI EAFE - Net - USD	-4.00%	-2.34%	-1.99%	-2.05%	1.23%	-3.66%	-2.22%	5.62%	-0.81%	-4.90%	22.78%	17.31%	-12.13%	13.47%				Dec-69
MSCI EMF (EMERGING MARKETS FREE) - Net - USD	-4.38%	10.94%	-4.60%	0.24%	1.29%	8.47%	-3.10%	0.99%	-14.92%	-2.19%	-2.60%	18.23%	-18.42%	16.18%				Dec-87

Note: The above is manager composite history.

Section VIII.

Private Equity Returns

Portfolio Summary

9/30/2016

All Portfolio Investments

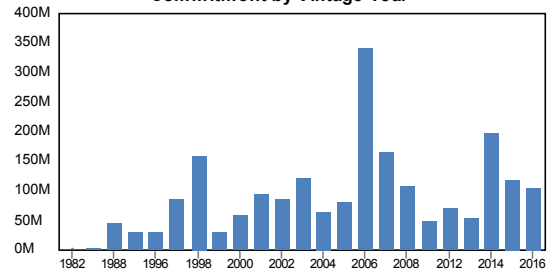
Performance Summary

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

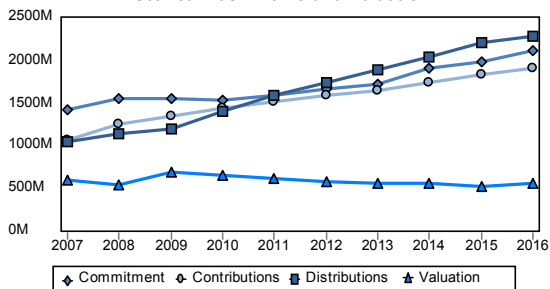
Cash Flow and Valuation Summary



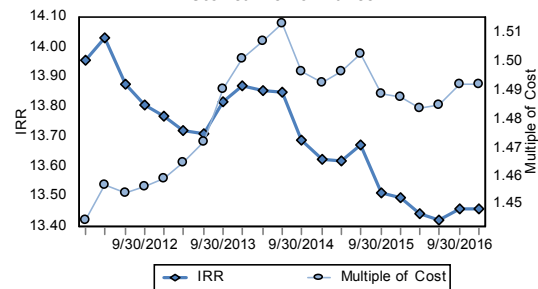
Commitment by Vintage Year



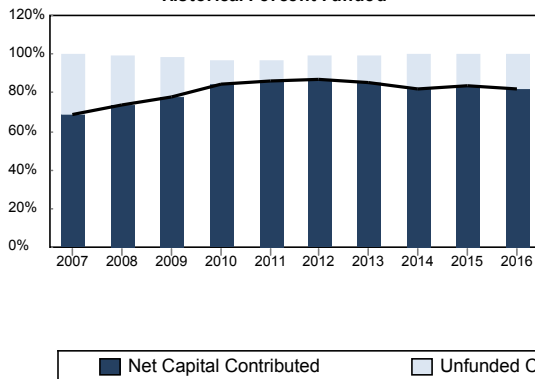
Historical Cash Flows and Valuation



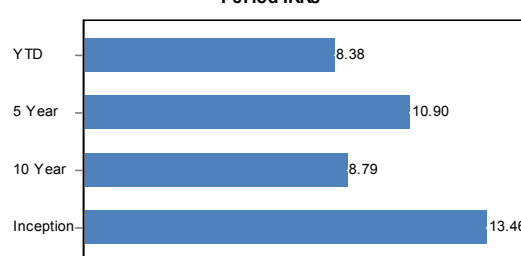
Historical Performance



Historical Percent Funded



Period IRRs



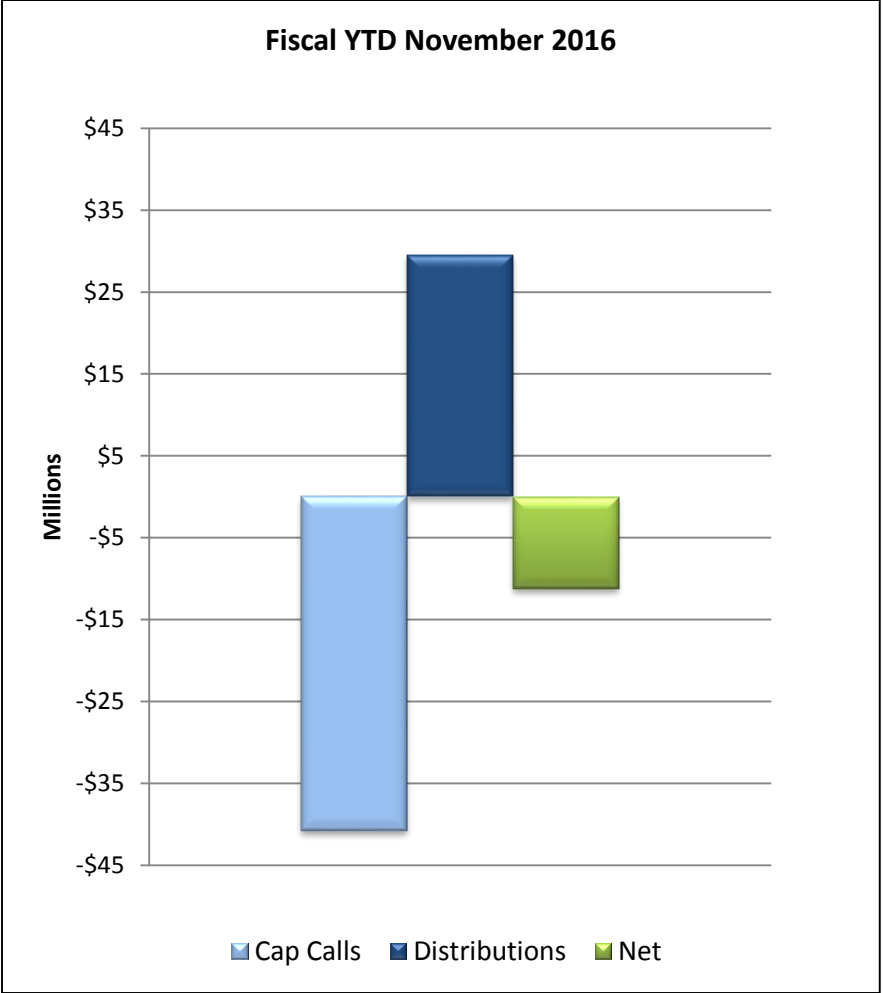
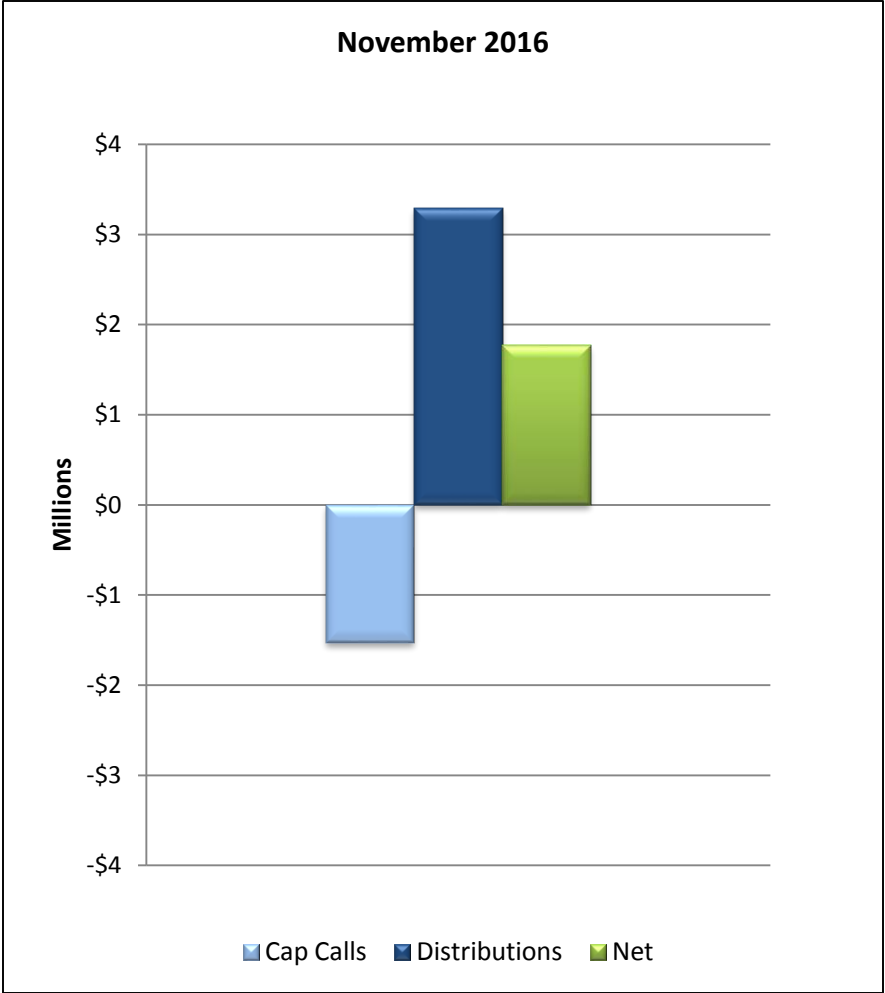
Employees' Retirement System of Rhode Island Private Equity Performance
9/30/2016

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

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

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

Private Equity Cash Flows



Section IX.

Real Estate Returns

PORTFOLIO SUMMARY

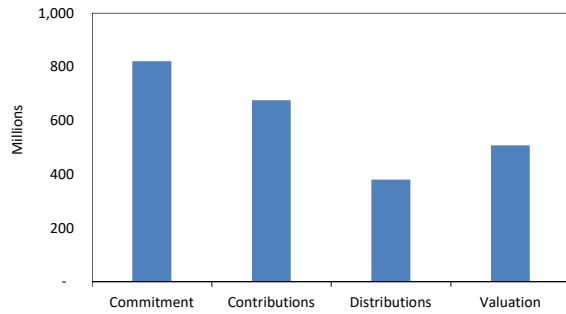
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All Portfolio Investments - Real Estate

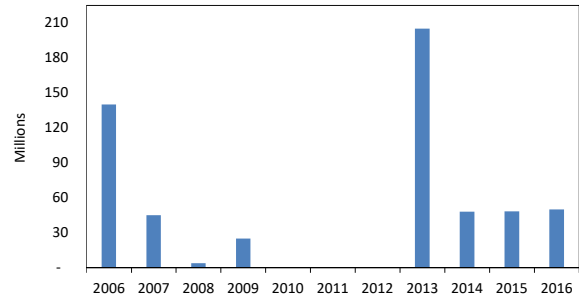
Performance Summary

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%
	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%

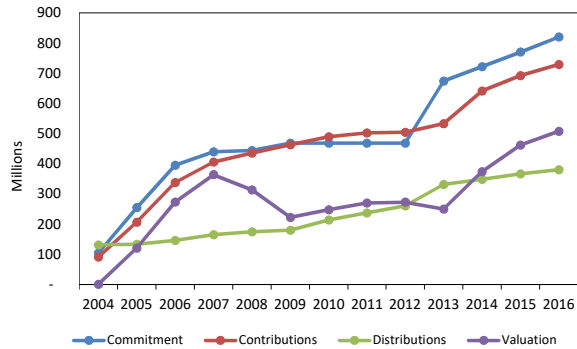
Cash Flow and Valuation Summary



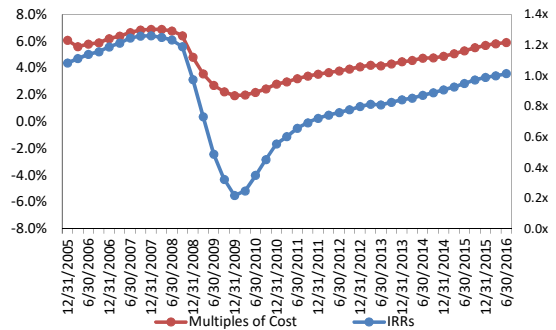
Commitment by Vintage Year



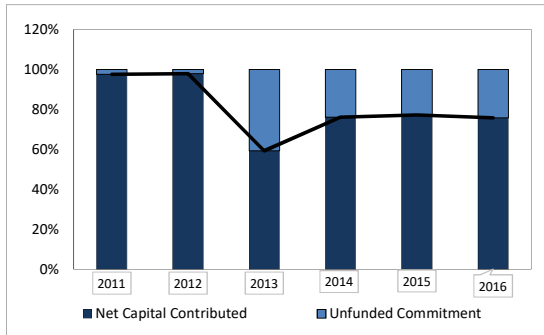
Historical Cash Flows and Valuation



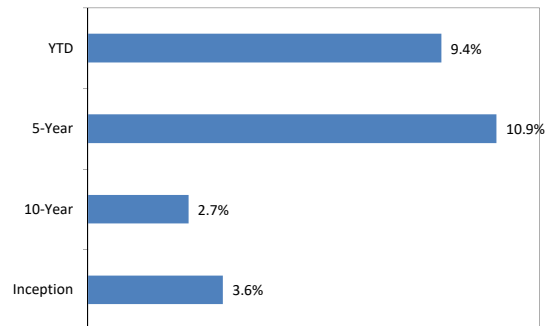
Historical Performance



Historical Percent Funded



Period IRRs



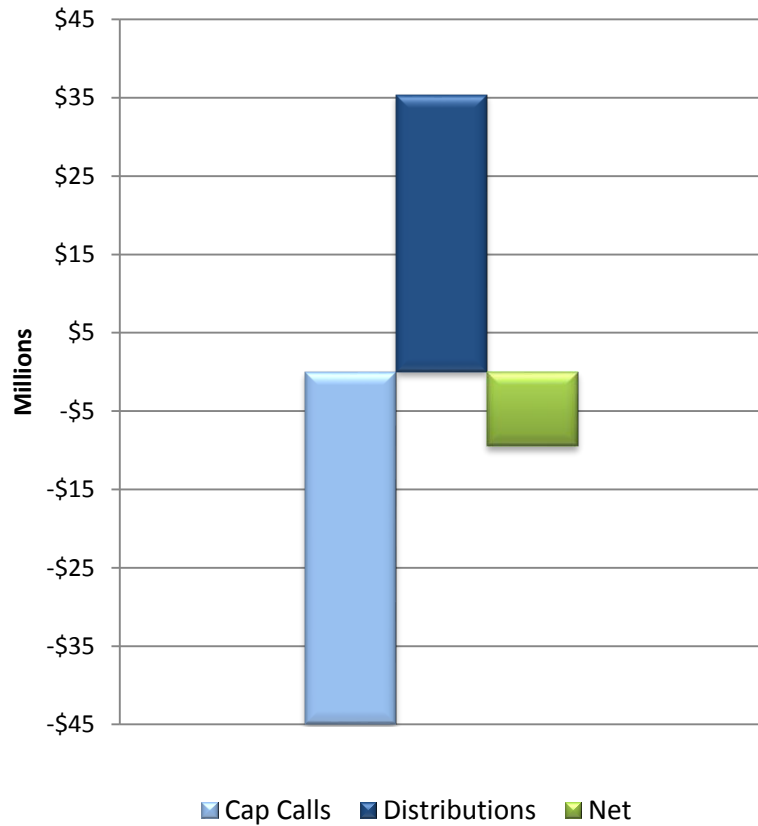
Employees' Retirement System of Rhode Island Real Estate Performance
6/30/2016

Current Partnerships	Vintage Year	Amount Committed (In \$ unless otherwise noted)	Cumulative Cash Flows (\$)				Cumulative Performance*	
			Amount Drawn	Amount Distributed	Amount Unfunded	Valuation (\$)	Net IRR (%)	Net Multiple of Investment
AEW Core Property Trust	open-end	60,000,000	60,000,000	10,480,447	-	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		

*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

November 2016



Fiscal YTD November 2016



Section X.

Infrastructure Returns

Portfolio Summary

9/30/2016

All Portfolio Investments – Infrastructure

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

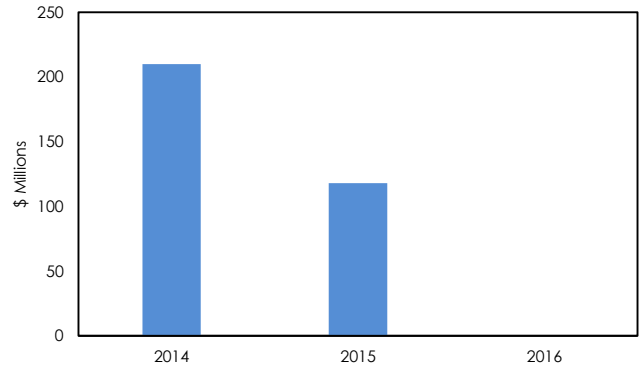
*Net of Fees and Expenses

1. Recallable Distributions

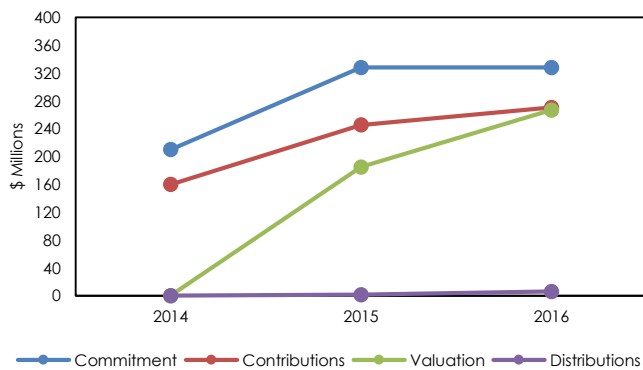
Cash Flow and Valuation Summary



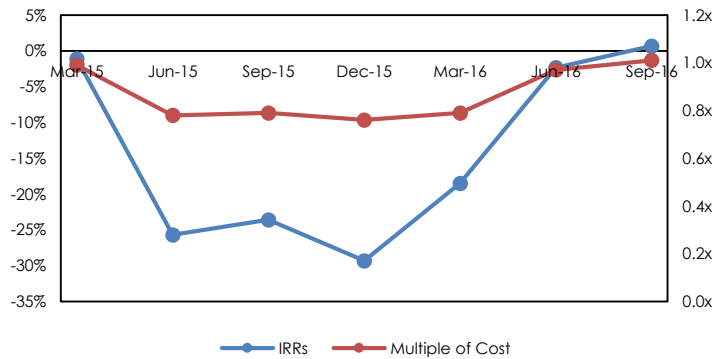
Commitment by Vintage Year



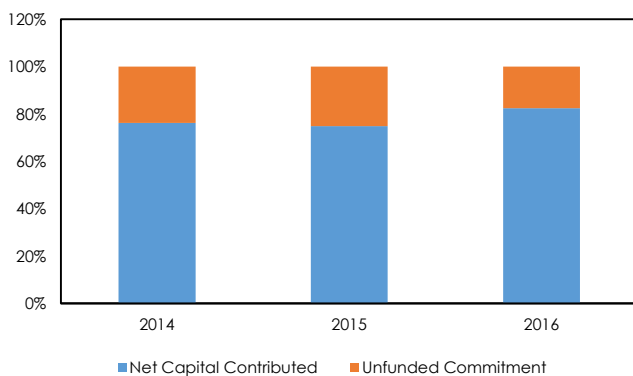
Historical Cash Flows and Valuation



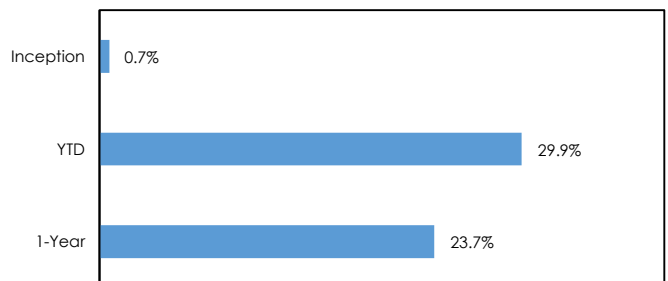
Historical Performance



Historical Percent Funded



Period IRRs

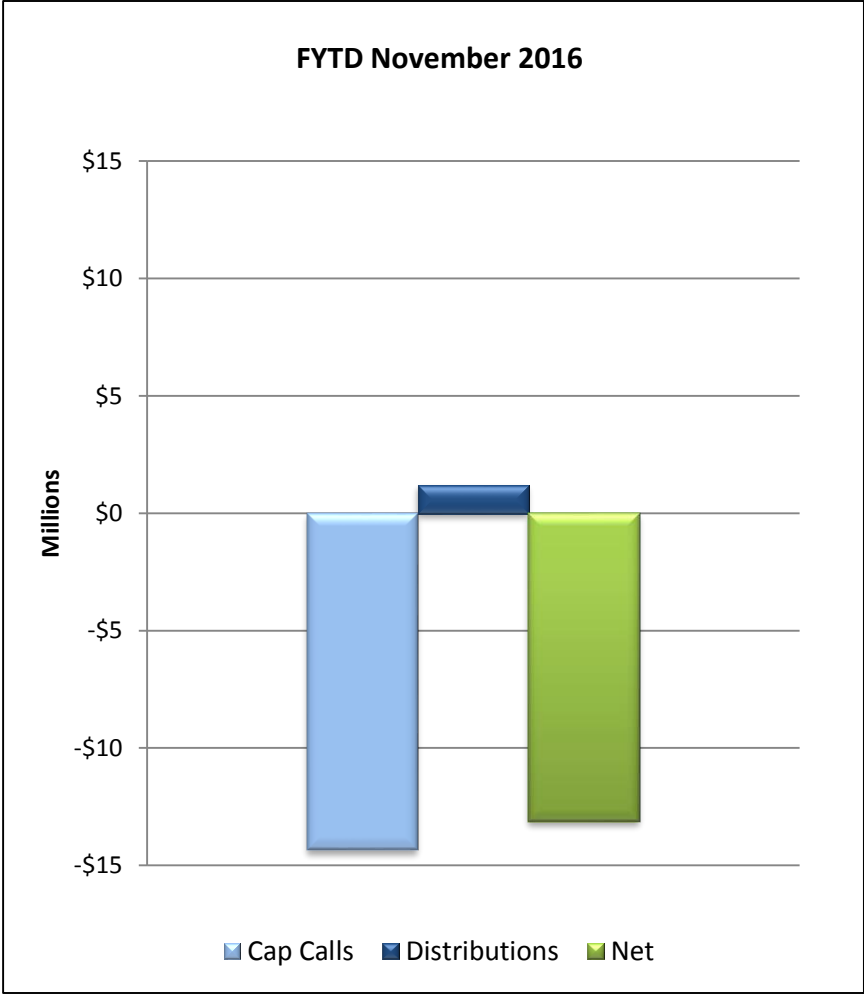
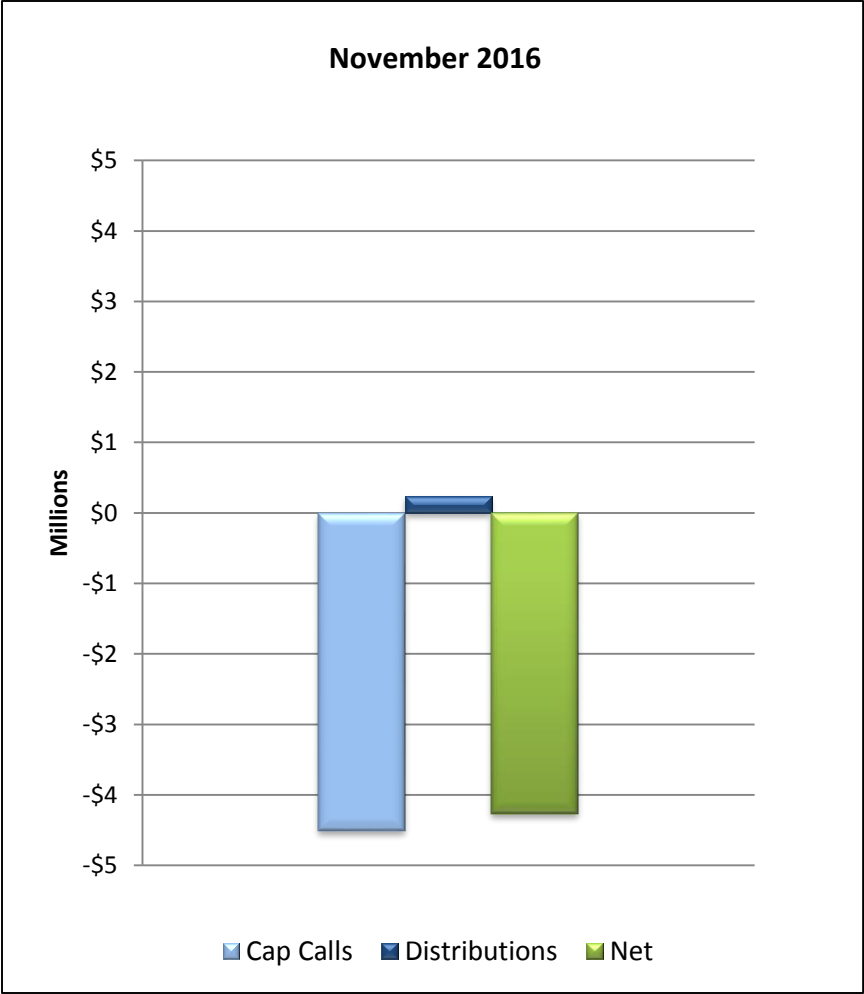


Employees' Retirement System of Rhode Island Private Infrastructure Performance
9/30/2016

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

*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.

Infrastructure Cash Flows



Section XI.

Cash Flow

Monthly Valuation Change

Period : 2016-11-01 - 2016-11-30

Category	Source Account Name	Closing Balance	Market Value Increase/(Decrease)	Transfer In/(Out)	Opening Balance
Grand Total		7,603,881,436.10	45,772,504.35	(33,986,017.00)	7,592,094,948.75
Total Global Equity		4,003,956,223.50	42,280,936.79	0.00	3,961,675,286.71
Global Equity		3,434,134,705.12	41,046,303.16	0.00	3,393,088,401.96
	SSGA R3000 INDEX	1,295,072,207.61	53,851,033.37	50,000,000.00	1,191,221,174.24
	SSGA MSCI EAFE	680,370,238.16	(14,212,988.65)	(20,000,000.00)	714,583,226.81
	SSGA MSCI CANADA	100,867,164.21	2,376,882.91	0.00	98,490,281.30
	SSGA MSCI EM	300,333,047.93	(16,698,864.70)	(30,000,000.00)	347,031,912.63
	QVM TILT	1,057,492,047.21	15,730,240.23	0.00	1,041,761,806.98
Global Equity Hedge Funds		569,821,518.38	1,234,633.63	0.00	568,586,884.75
	DAVIDSON KEMPNER	80,267,162.98	51,083.83	0.00	80,216,079.15
	ELLIOTT ASSOCIATES	94,270,719.64	4,658,997.19	0.00	89,611,722.45
	INDUS ASIA PACIFIC	336,741.08	(7,975.33)	0.00	344,716.41
	PFM DIVERSIFIED	77,881,506.10	385,796.62	0.00	77,495,709.48
	SAMLYN ON/OFFSHORE	107,081,973.66	744,241.47	0.00	106,337,732.19
	VIKING GLOBAL EQUITI	98,181,416.61	(1,455,146.53)	0.00	99,636,563.14
	LUXOR CAP PTNS LP	5,339,167.40	(193,122.09)	0.00	5,532,289.49
	ESG CBE FUND LP	38,154,668.01	(2,222,817.32)	0.00	40,377,485.33
	ASCENT ERSRI FUND LP	68,308,162.90	(726,424.21)	0.00	69,034,587.11
Private Equity		557,656,960.73	6,424,078.81	(3,149,183.05)	554,382,064.97
Private Equity		557,656,960.73	6,424,078.81	(3,149,183.05)	554,382,064.97
	PRIVATE EQUITY	557,656,960.73	6,424,078.81	(3,149,183.05)	554,382,064.97
Total Fixed Income		981,292,933.01	(24,016,818.62)	(25,000,000.00)	1,030,309,751.63
Fixed Income		981,292,933.01	(24,016,818.62)	(25,000,000.00)	1,030,309,751.63
	MACKAY SHIELDS	486,133,768.84	(12,127,909.04)	(10,000,000.00)	508,261,677.88
	PYRAMIS GLOBAL ADV	495,159,164.17	(11,888,909.58)	(15,000,000.00)	522,048,073.75
Total Real Return		1,466,009,405.17	12,534,343.08	4,272,361.00	1,449,202,701.09
Alternative Absolute Return		377,885,869.31	8,714,752.09	0.00	369,171,117.22
	BREVAN HOWARD	80,527,345.93	4,283,133.42	0.00	76,244,212.51
	DE SHAW	96,282,871.10	448,772.63	0.00	95,834,098.47
	OZ DOMESTIC PTRS	105,252,597.46	1,416,730.14	0.00	103,835,867.32
	WINTON FUTURE FD	35,266,332.57	(286,742.46)	0.00	35,553,075.03
	GRAHAM ABS RETURN	60,556,722.25	2,852,858.36	0.00	57,703,863.89
Alternative Fixed Income		132,553,458.63	1,184,089.43	0.00	131,369,369.20
	BRIGADE LEV CAP	59,873,823.71	161,652.75	0.00	59,712,170.96
	CAPULA GLOBAL	66,814,895.58	887,725.79	0.00	65,927,169.79
	CLAREN ROAD CR. FUND	5,864,739.34	134,710.89	0.00	5,730,028.45
Credit		431,235,713.64	623,897.15	0.00	430,611,816.49
	PIMCO	217,922,260.77	513,853.87	0.00	217,408,406.90
	WAMCO	213,313,452.87	110,043.28	0.00	213,203,409.59
GILBs		251,104,110.72	(3,849,091.07)	0.00	254,953,201.79
	BROWN BROTHERS HARR	251,104,110.72	(3,849,091.07)	0.00	254,953,201.79
Publicly Traded Infrastructure		273,230,252.87	5,860,695.48	4,272,361.00	263,097,196.39
	PRIV INFRASTR AGGR	98,531,970.60	28,499.49	4,272,361.00	94,231,110.11
	HARVEST FUND ADVISOR	174,698,282.27	5,832,195.99	0.00	168,866,086.28
Real Estate		548,038,680.06	4,340,676.32	9,513,268.69	534,184,735.05

Monthly Valuation Change

Period : 2016-11-01 - 2016-11-30

Category	Source Account Name	Closing Balance	Market Value Increase/(Decrease)	Transfer In/(Out)	Opening Balance
Real Estate		548,038,680.06	4,340,676.32	9,513,268.69	534,184,735.05
	REAL ESTATE	548,038,680.06	4,340,676.32	9,513,268.69	534,184,735.05
Total Cash		29,480,524.66	(12,787.24)	(14,622,463.64)	44,115,775.54
Cash Accounts		29,480,524.66	(12,787.24)	(14,622,463.64)	44,115,775.54
	ERSRI CASH	27,758,950.66	(12,787.24)	6,663,553.36	21,108,184.54
	CITIZENS CASH	1,721,574.00	0.00	(21,286,017.00)	23,007,591.00
Total Other		15,290,281.25	4,101,261.13	(5,000,000.00)	16,189,020.12
Other		15,290,281.25	4,101,261.13	(5,000,000.00)	16,189,020.12
	RUSSELL OVERLAY FD	15,290,281.25	4,101,261.13	(5,000,000.00)	16,189,020.12
Total Miscellaneous		2,156,427.72	120,814.08	0.00	2,035,613.64
Miscellaneous Accounts		2,156,427.72	120,814.08	0.00	2,035,613.64
	RI TRANS ACCT	5,026.33	(16.31)	0.00	5,042.64
	SHOTT CAPITAL	2,097,514.90	123,397.95	0.00	1,974,116.95
	DOM EQUITY TRANS	74.25	0.00	0.00	74.25
	NON-US EQUITY TRANS	51,725.79	(2,736.42)	0.00	54,462.21
	FIXED INC TRANS	2,086.45	168.86	0.00	1,917.59

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	Actual November	Actual October	Actual September	Actual August	Actual July 2016
MEMBER BENEFITS	846,271,017	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	70,000,000	68,470,352	68,479,638	69,638,749	80,260,148	69,422,131
ADMINISTRATIVE EXPENSES	9,992,557	1,402,923.56	718,107	1,403,401	1,327,462	490,334	467,821	1,455,574	415,373	625,257	642,177	670,460	373,667
INVESTMENT EXPENSES	10,252,026	109,133	1,202,775	290,754	1,489,542	391,688	1,569,175	(6,984)	1,354,605	637,021	1,260,447	1,476,800	477,072
TOTAL OUTFLOW	866,515,600	71,512,056	71,920,881	71,694,154	72,817,004	70,882,023	72,036,996	71,448,589	70,240,330	69,741,916	71,541,373	82,407,407	70,272,870
CONTRIBUTIONS	497,167,477	25,172,944	40,513,703	36,341,134	44,799,731	37,789,948	40,891,910	51,049,618	43,254,275	36,194,139	40,690,939	53,520,677	46,948,459
OTHER INCOME*	73,296,312	6,214,325	15,712,147	3,394,010	6,136,870	6,008,319	2,112,280	10,795,323	5,469,260	8,150,581	4,338,494	1,605,841	3,358,861
TOTAL INCOME	570,463,789	31,387,269	56,225,850	39,735,144	50,936,601	43,798,267	43,004,190	61,844,941	48,723,535	44,344,720	45,029,433	55,126,518	50,307,320
DIFFERENCE	(296,051,811)	(40,124,787)	(15,695,031)	(31,959,011)	(21,880,402)	(27,083,755)	(29,032,806)	(9,603,648)	(21,516,795)	(25,397,196)	(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	Actual November	Actual October	Actual September	Actual August	Actual July 2016
MEMBER BENEFITS	94,710,680	7,700,000	7,700,000	7,700,000	7,700,000	7,700,000	7,700,000	7,700,000	7,715,117	7,702,047	7,634,888	10,139,174	7,619,454
ADMINISTRATIVE EXPENSES	2,175,893	303,792	155,113	302,293	285,305	105,032	105,608	321,127	105,608	141,149	144,969	122,026	83,870
INVESTMENT EXPENSES	2,103,895	23,632	259,802	62,628	320,139	83,902	354,234	(1,541)	354,234	143,805	284,540	111,440	107,080
TOTAL OUTFLOW	98,990,468	8,027,424	8,114,915	8,064,921	8,305,444	7,888,934	8,159,843	8,019,586	8,174,960	7,987,001	8,064,397	10,372,640	7,810,403
CONTRIBUTIONS	63,535,147	302,987	4,051,743	4,513,754	5,412,174	4,816,573	5,806,255	5,706,992	5,806,255	6,763,262	5,550,861	7,700,000	7,104,291
OTHER INCOME*	15,346,619	1,345,664	3,393,857	731,070	1,318,966	1,287,012	476,838	2,381,654	476,838	1,839,957	979,396	361,465	753,901
TOTAL INCOME	78,881,766	1,648,651	7,445,600	5,244,824	6,731,140	6,103,585	6,283,093	8,088,646	6,283,093	8,603,219	6,530,257	8,061,465	7,858,192
DIFFERENCE	(20,108,702)	(6,378,773)	(669,314)	(2,820,097)	(1,574,304)	(1,785,349)	(1,876,750)	69,060	(1,891,867)	616,219	(1,534,140)	(2,311,175)	47,789

CASH FLOW ANALYSIS - INCOME & EXPENSES

State Police
Retirement System

	TOTAL	Projected June	Projected May	Projected April	Projected March	Actual February	Projected January 2017	Projected December	Actual November	Actual October	Actual September	Actual August	Actual July 2016
MEMBER BENEFITS	4,688,058	385,000	385,000	385,000	385,000	385,000	385,000	385,000	402,415	402,415	393,280	410,224	384,724
ADMINISTRATIVE EXPENSES	182,263	25,127	12,771	24,801	23,304	8,553	9,124	26,978	9,124	12,195	12,525	10,543	7,216
INVESTMENT EXPENSES	178,397	1,955	21,391	5,138	26,150	6,833	30,606	(129)	30,606	12,425	24,584	9,628	9,212
TOTAL OUTFLOW	5,048,718	412,082	419,163	414,940	434,454	400,386	424,730	411,848	442,145	427,034	430,389	430,396	401,152
CONTRIBUTIONS	6,292,419	441,275	393,221	415,000	395,000	485,000	462,084	1,220,000	479,499	490,382	533,942	592,292	384,724
OTHER INCOME*	1,285,422	111,301	279,439	59,980	107,736	104,808	41,198	200,081	41,198	158,971	84,619	31,230	64,861
TOTAL INCOME	7,577,842	552,576	672,660	474,980	502,736	589,808	503,282	1,420,081	520,697	649,352	618,561	623,523	449,585
DIFFERENCE	2,529,123	140,495	253,497	60,040	68,282	189,422	78,552	1,008,233	78,552	222,318	188,172	193,127	48,433

Judicial
Retirement System

	TOTAL	Projected June	Projected May	Projected April	Projected March	Actual February	Projected January 2017	Projected December	Actual November	Actual October	Actual September	Actual August	Actual July 2016
MEMBER BENEFITS	2,757,703	230,000	230,000	230,000	230,000	230,000	230,000	230,000	227,841	227,841	227,841	236,341	227,841
ADMINISTRATIVE EXPENSES	94,425	12,912	6,598	12,804	12,022	4,410	4,768	14,034	4,768	6,373	6,545	5,442	3,748
INVESTMENT EXPENSES	92,737	1,004	11,051	2,653	13,490	3,523	15,994	(67)	15,994	6,493	12,847	4,969	4,786
TOTAL OUTFLOW	2,944,865	243,917	247,649	245,457	255,512	237,934	250,762	243,966	248,603	240,706	247,233	246,752	236,375
CONTRIBUTIONS	4,254,866	291,448	263,142	280,000	270,000	270,000	456,408	430,000	454,249	443,861	436,053	431,866	227,841
OTHER INCOME*	666,395	57,197	144,363	30,965	55,579	54,043	21,529	104,081	21,529	83,075	44,220	16,119	33,694
TOTAL INCOME	4,921,261	348,645	407,505	310,965	325,579	324,043	477,937	534,081	475,778	526,936	480,273	447,984	261,534
DIFFERENCE	1,976,395	104,728	159,856	65,509	70,067	86,110	227,175	290,115	227,175	286,229	233,040	201,233	25,160

*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

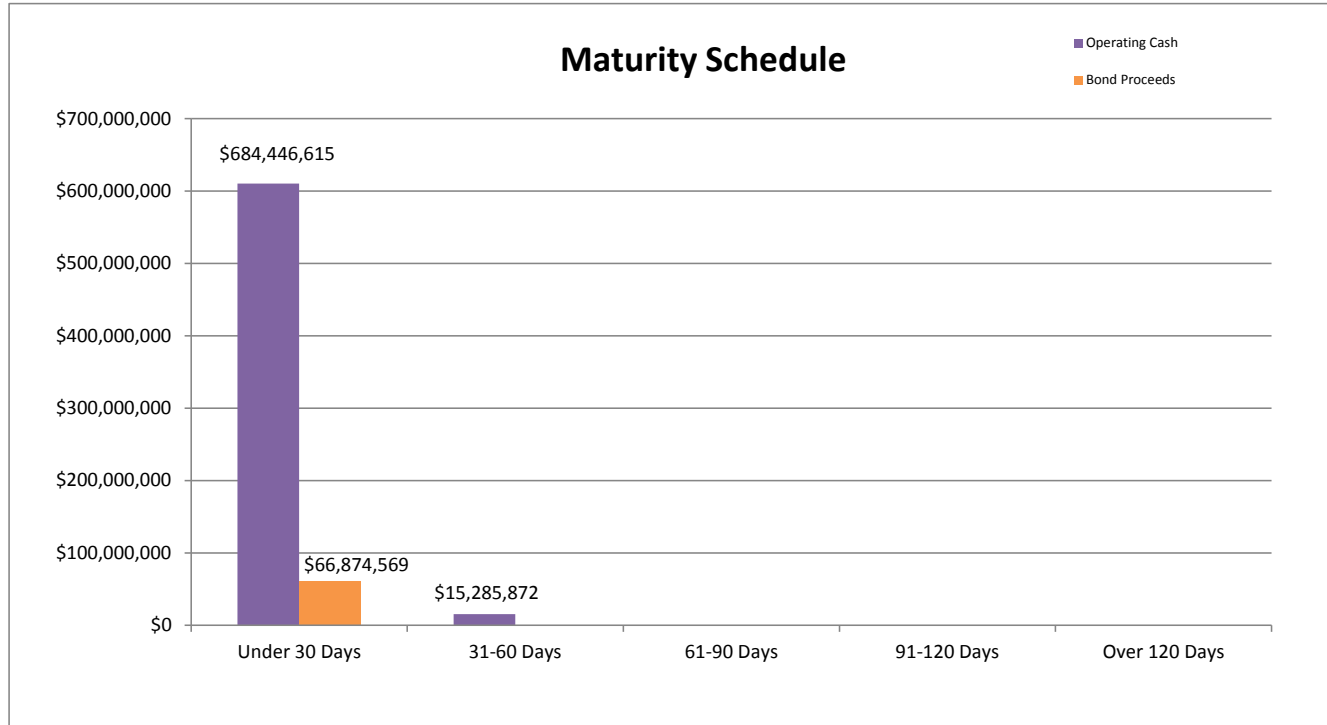
	Projected Jul 16	Projected Aug	Projected Sept	Projected Oct	Projected Nov	Projected Dec	Projected Jan 17	Projected Feb	Projected Mar	Projected Apr	Projected May	Projected June	Projected TOTAL
EQUITIES US													
SSGA Russell 3000			37,971			42,000			42,000			42,000	163,971
Shott Capital/Hamilton Lane			8,259			1,000			1,000			1,000	11,259
SSGA QVM Tilt			<u>105,563</u>			<u>70,000</u>			<u>70,000</u>			<u>70,000</u>	<u>315,563</u>
			151,794			113,000			113,000			119,800	182,031
FIXED INCOME													
Pyramis			180,000			180,000			180,000			180,000	720,000
Mackay Shields			181,878			180,000			180,000			180,000	721,878
Brown Bros.TIPS/GILB			<u>82,477</u>			<u>84,000</u>			84,000			<u>84,000</u>	<u>334,477</u>
			444,355			444,000			444,000			444,000	1,776,355
INT'L EQUITIES													
SSGA MSCI EAFE			54,233			65,000			65,000			65,000	249,233
SSGA MSCI CAD			7,383			8,000			8,000			8,000	31,383
SSGA MSCI Emerg Mkts			<u>85,001</u>			<u>80,000</u>			80,000			<u>80,000</u>	<u>325,001</u>
			146,617			153,000			153,000			153,000	605,617
CREDIT													
WAMCO			100,000			100,000			100,000			100,000	400,000
PIMCO			<u>133,852</u>			<u>130,000</u>			130,000			<u>130,000</u>	<u>523,852</u>
			233,852			230,000			230,000			230,000	923,852
Infrastructure													
Harvest Partners			319,128			220,000			220,000			220,000	979,128
REAL ESTATE													
Direct Billed Real Estate	331,011	192,928	0	513,718	94,274	0	493,165	91,634	0	79,200	104,358	0	1,900,288
ALTERNATIVE INVESTMENTS													
Direct Billed Private Equity	267,199	428,254	1,586,067	287,868	1,880,276	(8,723)	69,034	507,595	1,245,019	673,084	1,231,877	135,737	8,303,287
SUB TOTAL-INV MGMT FEES	598,210	621,182	2,881,813	801,586	1,974,550	1,151,277	562,199	599,228	2,405,019	752,284	1,336,235	1,302,537	14,670,558
PROFESSIONAL FEES													
Legal	3,488	5,000	2,875	5,125	8,418	3,357	0	7,964	18,469	12,347	5,960	9,763	82,766
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	210,233	14,583	33,333	63,695	14,583	14,583	82,263	14,583	14,583	33,333	524,940
PCA Real Estate	<u>10,417</u>	<u>10,417</u>	<u>10,417</u>	<u>10,417</u>	<u>10,417</u>	<u>10,417</u>	<u>10,417</u>	<u>10,417</u>	<u>10,417</u>	<u>10,417</u>	<u>10,417</u>	<u>10,417</u>	<u>125,004</u>
	98,988	100,500	294,025	100,625	122,668	147,969	95,500	103,464	181,650	107,848	101,460	124,013	1,578,710
OPERATING EXPENSE													
Retirement Transfers	359,498	596,617	1,310,274	921,394	456,008	1,625,828	512,091	865,046	920,987	823,990	442,116	1,303,711	<u>10,137,560</u>
Other Expense	0	0	<u>4,375</u>	<u>13,270</u>	<u>10,000</u>	<u>38,335</u>	<u>1,625</u>	0	<u>49,974</u>	0	0	<u>1,000</u>	<u>118,579</u>
	359,498	596,617	1,314,649	934,664	466,008	1,664,163	513,716	865,046	970,961	823,990	442,116	1,304,711	10,256,138
TOTAL:	1,056,696	1,318,298	4,490,487	1,836,875	2,563,226	2,963,409	1,171,416	1,567,738	3,557,630	1,684,122	1,879,811	2,731,261	26,505,406

Note: Numbers in bold are actual.

Section XII.

Short-Term Investments

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



Vendor	CP	CD	Agency	Money Mkt	PIP	Repo	CDP	OSIP	Total (\$)
Guidelines-Total/Vendor	25%/10%	50%/20%	75%/35%	75%/35%	75%/35%	100%/20%	75%/35%	50%/50%	
OSIP	0	0	0	0	0	0	0	310,628,006	310,628,006
	0%	0%	0%	0%	0%	0%	0%	50%	50%
Bank RI	0	15,285,872	0	15,103,892	0	0	0	0	30,389,765
	0%	2%	0%	2%	0%	0%	0%	0%	5%
Santander Bank	0	0	0	0	99,377,811	0	0	0	99,377,811
	0%	0%	0%	0%	16%	0%	0%	0%	16%
Citizens Bank	0	0	0	0	24,792,221	0	0	0	24,792,221
	0%	0%	0%	0%	4%	0%	0%	0%	4%
Webster Bank	0	0	0	0	2,879,639	0	0	0	2,879,639
	0%	0%	0%	0%	0%	0%	0%	0%	0%
Customers Bank	0	0	0	0	84,066,360	0	0	0	84,066,360
	0%	0%	0%	0%	13%	0%	0%	0%	13%
Washington Trust	0	0	0	60,770,980	0	0	0	0	60,770,980
	0%	0%	0%	10%	0%	0%	0%	0%	10%
TD Bank	0	0	0	0	12,584,751	0	0	0	12,584,751
	0%	0%	0%	0%	2%	0%	0%	0%	2%
TOTALS	-	15,285,872	-	75,874,872	223,700,781	-	-	310,628,006	625,489,532
(%) PORTFOLIO	0.00%	2.44%	0.00%	12.13%	35.76%	0.00%	0.00%	49.66%	100.00%

Note: PIP + CD must be under 75%.

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

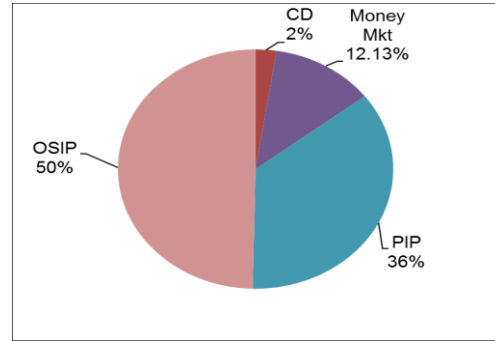
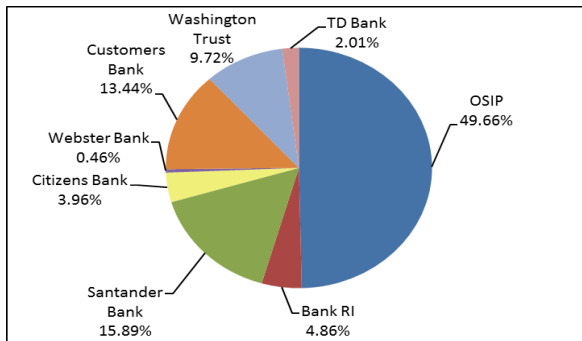
State of Rhode Island
Short Term Cash Monthly Performance
Performance for
November 01, 2016 to November 30, 2016

Fund Name	Beginning Balance	Ending Balance	Average Daily Balance	Earnings	Yield(Annual)
GENERAL FUND	\$ 322,390,896.84	\$ 309,645,693.66	\$ 322,550,896.84	\$ 154,796.82	0.5839%
H.A.V.A	\$ 297.34	\$ 297.46	\$ 297.34	\$ 0.12	0.4910%
GENERAL FUND (HIST PRES)	\$ 541,293.05	\$ 541,589.87	\$ 541,293.05	\$ 296.82	0.6672%
HISTORIC TAX CREDITS	\$ 2,923,046.25	\$ 2,924,579.31	\$ 2,923,046.25	\$ 1,533.06	0.6381%
HIGHWAY FUND	\$ 54,348,689.71	\$ 59,577,863.45	\$ 56,648,689.71	\$ 29,173.74	0.6266%
T.D.I. RESERVE (DET)	\$ 93,091,346.18	\$ 118,445,676.95	\$ 117,604,679.51	\$ 54,330.77	0.5621%
RICAP GL FUND 21	\$ 62,562,916.87	\$ 55,090,966.80	\$ 59,562,916.87	\$ 28,049.93	0.5730%
BOND CAPITAL FUND	\$ 763,519.40	\$ 564,403.93	\$ 2,163,519.40	\$ 884.53	0.4974%
R.I. CLEAN WATER ACT	\$ 3,203,327.44	\$ 3,204,961.87	\$ 3,203,327.44	\$ 1,634.43	0.6208%
STATE LOTTERY FUND	\$ 44,398,046.20	\$ 48,617,747.72	\$ 41,284,712.87	\$ 19,701.52	0.5806%
ASSESSED FRINGE BEN ADM	\$ 415,644.15	\$ 415,856.50	\$ 415,644.15	\$ 212.35	0.6216%
AUTO EQUIPMENT SERVICE	\$ 1,254.00	\$ 1,254.51	\$ 1,254.00	\$ 0.51	0.4948%
HEALTH INSURANCE FUND	\$ 20,362,398.31	\$ 20,074,082.01	\$ 22,759,064.98	\$ 11,683.70	0.6246%
FLEET REVOLVING LOAN FUND	\$ 3,766,646.68	\$ 1,767,573.95	\$ 2,899,980.01	\$ 927.27	0.3890%
EMPLOYEES RETIREMENT	\$ 8,535,694.34	\$ 48,980.43	\$ 32,419,027.67	\$ 13,286.09	0.4986%
MUNICIPAL EMPLOYEES RET.	\$ 1,838,951.28	\$ 41,001.17	\$ 5,005,617.95	\$ 2,049.89	0.4982%
RETIREE HEALTH FUND	\$ 241,094.44	\$ 1,172.77	\$ 151,761.11	\$ 78.33	0.6280%
BOG RETIREE FUND	\$ 62,910.84	\$ 62,945.30	\$ 62,910.84	\$ 34.46	0.6664%
RIPTA HEALTH FUND	\$ 35,961.81	\$ 35,981.53	\$ 35,961.81	\$ 19.72	0.6672%
PERMANENT SCHOOL FUND	\$ 1,947,889.29	\$ 1,948,957.35	\$ 1,947,889.29	\$ 1,068.06	0.6671%
TEACHER RETIREE HEALTH FUND	\$ 579,962.77	\$ 580,219.68	\$ 579,962.77	\$ 256.91	0.5390%
RI ST POL RETIREE HEALTH	\$ 123,950.62	\$ 124,001.84	\$ 123,950.62	\$ 51.22	0.5028%
RI LEG RETIREE HEALTH	\$ 828.86	\$ 829.20	\$ 828.86	\$ 0.34	0.4991%
RI JUDICIAL RETIREE HEALTH	\$ 40,486.72	\$ 40,503.31	\$ 40,486.72	\$ 16.59	0.4985%
UNIVERSITY COLLEGE	\$ 12,228.34	\$ 12,234.71	\$ 12,228.34	\$ 6.37	0.6338%
INDUS. BLDG. & MTG. INS.	\$ 1,719,213.13	\$ 1,720,155.88	\$ 1,719,213.13	\$ 942.75	0.6672%
Operating Funds Totals	\$ 623,908,494.86	\$ 625,489,531.16	\$ 674,659,161.53	\$ 321,036.30	0.579%
CCDL 2004 SERIES A	\$ -	\$ -	\$ -	\$ -	
BOND CCDL 2006 SERIES C	\$ 893,815.34	\$ 893,815.34	\$ 893,799.00	\$ 490.14	0.6672%
GO BND-NTAX 2007 SERIES A	\$ 374,918.91	\$ 374,918.91	\$ 374,912.06	\$ 205.59	0.6672%
CCDL10B BOND CAPITAL COMPONENT	\$ 950,000.00	\$ 950,000.00	\$ 949,982.63	\$ 520.95	0.6672%
CCDL10C	\$ 160,210.80	\$ 160,298.65	\$ 160,210.80	\$ 87.85	0.6671%
CCDL2011A	\$ 6,136,795.38	\$ 6,100,604.96	\$ 6,104,112.43	\$ 3,347.28	0.6672%
CCDL2012B	\$ 6,212,767.87	\$ 6,212,767.87	\$ 6,212,654.31	\$ 3,406.86	0.6672%
GO CCDL 2013A	\$ 4,500,299.34	\$ 3,789,111.26	\$ 3,860,159.55	\$ 2,115.52	0.6668%
GO CCDL 2013B	\$ 6,250,000.00	\$ 6,250,000.00	\$ 6,249,885.76	\$ 3,427.28	0.6672%
GO CCDL 2014A	\$ 2,094,193.10	\$ 2,094,193.10	\$ 2,094,154.82	\$ 1,148.38	0.6672%
GO CCDL 2014B	\$ 40,664.27	\$ 40,664.27	\$ 40,663.53	\$ 22.30	0.6672%
GO CCDL 2016A	\$ 27,479,453.44	\$ 26,023,986.22	\$ 26,169,054.68	\$ 14,347.80	0.6671%
GO CCDL 2016B	\$ 6,318,378.32	\$ 6,101,735.08	\$ 6,123,287.49	\$ 3,357.46	0.6671%
CLEAN WATER 2004 SERIES A	\$ 146,728.71	\$ 146,728.71	\$ 146,726.03	\$ 80.46	0.6672%
CCDL99A 1999A	\$ 206,569.39	\$ 206,569.39	\$ 206,565.61	\$ 113.28	0.6672%
CLEAN WATER 2007 SERIES A	\$ 283,252.06	\$ 283,252.06	\$ 283,246.88	\$ 155.33	0.6672%
CCDL2011A CLEAN WATER COMPONENT	\$ 1,236,000.00	\$ 1,236,000.00	\$ 1,235,977.41	\$ 677.78	0.6672%
Bond Proceeds Fund Totals	\$ 63,284,046.93	\$ 60,864,645.82	\$ 61,105,392.99	\$ 33,504.26	0.667%
Grand Totals	\$ 687,192,541.79	\$ 686,354,176.98	\$ 735,764,554.52	\$ 354,540.56	0.586%

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

**Issuer Credit Rating
November 30, 2016**

Issuer	Type of Instrument*	Month End % Portfolio	Issuer Ratings		S-T Debt Rating		L-T Debt Rating		Credit Outlook	
			Moody's		Moody's	S&P	Moody's	S&P		S&P
Bank RI	3,4	4.9%	N/R		N/A	N/A	N/A	N/A		N/A
Santander Bank	3,4	15.9%	Baa2		P-1	A-2	A2	BBB+		Stable
Bank of America		0.0%	Baa1		P-2	A-2	Baa1	BBB+		Stable
JP Morgan Chase		0.0%	A3		P-2	A-2	A3	A-		Stable
Fidelity		0.0%	N/R		N/A	N/A	N/A	N/A		N/A
State Street Bank & Trust Company		0.0%	Aa3		P-1	A-1+	Aa1	AA-		Stable
RBS Citizens	3,4	4.0%	Baa1		P-2	A-2	A1	A-		Stable
Webster Bank	3,4	0.5%	Baa1		P-1	A-2	A1	BBB+		Positive
Ocean State Investment Pool	6	49.7%	N/R		N/A	N/A	N/A	N/A		N/A
Washington Trust	3,7	9.7%	N/R		N/A	N/A	N/A	N/A		N/A
TD Bank	3	2.0%	Aa1		P-1	A-1+	Aa1	AA-		Negative
Customers Bank	4	13.4%	N/R		N/A	N/A	N/A	N/A		N/A



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

Ratings Definitions

Moody's Short-Term Debt Ratings:

P-1 - Prime-1 have a superior ability for repayment of sr. S-T debt obligations

P-2 - Prime-1 have a strong ability for repayment of sr. S-T debt obligations

P-3 - Prime-1 have an acceptable ability for repayment of sr. S-T debt obligations

NP - Not Prime

Moody's Issuer Rating Symbols:

Aaa - Offer exceptional financial security (high-grade)

Aa - Offer excellent financial security (high-grade)

A - Offer good financial security

Baa - Offer adequate financial security

Ba - Offer questionable financial security

B - Offer poor financial security

Caa - Offer very poor financial security

Ca - Offer extremely poor financial security

C - Lowest rated class, usually in default

Moody's Long-Term Debt Ratings:

Aaa - Best Quality

Aa - High Quality

A - Possess many favorable investment attributes

Baa - Medium-grade obligations

Ba - Possess speculative elements

B - Generally lack characteristics of desirable investments

Caa - Poor standing

Ca - Speculative in a high degree

C - Lowest rated class of bonds

Modifiers:

1 - Higher end of letter rating category

2 - Mid-range of letter rating category

3 - Lower end of letter rating category

S&P Short-Term Credit Ratings:

A-1 - Highest rated, strong capacity to meet obligations

A-2 - Somewhat more susceptible to adverse effects of changes in financial conditions; satisfactory

A-3 - Exhibits adequate protection parameters

B - Significant speculative characteristics, faces major ongoing uncertainties

C - Vulnerable to non-payment

D - Payment default

Modifiers:

+ or - show relative standing within the category.

S&P Outlook Definitions:

Positive - A rating may be raised

Negative - A rating may be lowered

Stable - A rating is not likely to change

Developing - May be raised or lowered

NM - Not meaningful

S&P Long-Term Debt Ratings:

AAA - Highest rating, extremely strong

AA - Differs slightly from highest rating, very strong

A - More susceptible to adverse effects of change in economic condition, strong

BBB - Exhibits adequate protection parameters

BB, B - Have significant speculative characteristics. BB least speculative

CCC, CC, C - C highest degree

D - Payment default

Modifiers:

+ or - show relative standing within the category.

Section XIII.

Defined Contribution Plan



2016 YTD Performance Summary

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	
		Mgr.	AUM	Gross	Net	Net	Rev	Recent Returns		Annualized Total Returns as of 9/30/2016										Since
As of 11/30/16	Ticker	Tenure	\$ Millions	ER	ER	%-ile	Share	1mo.	YTD	1 Year	%-ile	3 Year	%-ile	5 Year	%-ile	10 Year	%-ile	Incep.		
TIAA Stable Value****	Current crediting rate = 1.80							0.15	1.74	1.88		1.89						1.87		
FIXED INCOME																				
Intermediate-Term Bond																				
Vanguard Total Bond Market Index Adm	VBTLX	3.67	174,847.91	0.06	0.06	2	0.00	(2.63)	2.34	5.31	47	3.98	38	3.00	70	4.77	44	4.54		
Barclays U.S. Aggregate Float Adjusted Index								(2.41)	2.59	5.34		4.04		3.11		4.81				
Intermediate-Term Bond Median				0.87	0.75			(2.25)	2.75	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	(1.98)	5.05	6.69	22	1.94	24	1.99	5	4.69	3			
Barclays US Treasury US TIPS TR USD								(1.92)	4.79	6.58		2.40		1.93		4.48				
Inflation-Protected Bond Median				0.87	0.73			(1.77)	4.34	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	3.70	9.76	15.41	11	11.13	5	16.35	11	7.24	20	9.44		
S&P 500 TR USD								3.70	9.79	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	4.53	11.47	15.27	12	9.04	53	15.22	49	7.04	27			
Russell 3000 TR USD								4.48	10.58	14.96		10.44		16.36		7.37				
Large Blend Median				1.10	1.00			3.78	8.85	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																				
Vanguard Mid Cap Index Adm	VIMAX	18.42	73,636.12	0.08	0.08	2	0.00	4.69	10.49	12.64	40	9.90	6	16.52	14	8.20	26	9.49		
Spliced Mid Cap Index *								4.69	10.52	12.68		9.96		16.58		8.24				
CRSP US Mid Cap TR USD								4.69	10.52	12.68		9.96		16.54		8.22				
Mid-Cap Blend Median				1.23	1.15			6.92	13.80	11.89		7.50		15.06		7.07				
Mid-Cap Blend Number of Funds				480	480						440		414		382		328			
Small Cap Blend																				
Vanguard Small Cap Index Adm	VSMAX	0.50	63,296.59	0.08	0.08	1	0.00	8.60	16.13	14.97	36	7.92	18	16.70	21	8.42	12	8.74		
Spliced Small Cap Index **								8.61	16.09	14.93		7.91		16.68		8.35				
CRSP US Small Cap TR USD								8.61	16.09	14.93		7.91		16.75		8.84				
Small Blend Median				1.36	1.22			10.68	17.41	13.69		6.25		15.19		6.54				
Small Blend Number of Funds				879	879						856		755		696		589			



2016 YTD Performance Summary

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)
		Mgr.	AUM	Gross	Net	Net	Rev	Recent Returns		Annualized Total Returns as of 9/30/2016								Since	
As of 11/30/16	Ticker	Tenure	\$ Millions	ER	ER	%-ile	Share	1mo.	YTD	1 Year	%-ile	3 Year	%-ile	5 Year	%-ile	10 Year	%-ile	Incep.	
Foreign Large Blend																			
TIAA-CREF International Eq Idx Instl	TCIEX	11.17	7,639.90	0.06	0.06	1	0.00	(1.78)	(1.43)	6.57	43	0.72	46	7.85	30	2.00	36		
								(1.99)	(2.34)	6.52		0.48		7.39		1.82			
								(2.21)	(1.83)	6.07		0.61		7.25		1.61			
											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	(4.34)	11.91	15.84	47	0.19	40	3.44	55	3.91	40	4.85	
								(4.38)	11.57	15.67		0.07		3.13		3.99			
								(4.38)	10.11	15.73		0.84		3.57		4.61			
								(4.81)	12.35	16.75		0.37		3.20		4.34			
								(4.60)	10.94	16.78		(0.56)		3.03		3.95			
								(4.80)	8.49	15.54		(0.43)		3.70		3.56			
											894		657		528		275		
Miscellaneous Sector																			
TIAA Real Estate Account	VA	1.17	24,003.73	0.89	0.89		0.24	0.65	4.70	5.59		8.62		9.31		3.46			
Lifecycle																			
Vanguard Target Retirement Income Trust II				0.07	0.07		0.00	(0.70)	4.41	7.63		4.75		5.99				4.99	
								(0.67)	4.47	7.79		4.89		6.11					
								(0.48)	4.25	7.06		3.68		5.34		4.19			
											199		178		162		90		
Vanguard Target Retirement 2010 Trust II				0.07	0.07		0.00	(0.66)	4.44	7.91		5.13		7.32				5.16	
								(0.63)	4.53	8.08		5.28		7.42					
								(0.20)	5.05	8.24		4.55		7.17		4.03			
											123		110		98		50		
Vanguard Target Retirement 2015 Trust II				0.07	0.07		0.00	(0.17)	5.15	9.19		5.79		8.67				5.54	
								(0.19)	5.19	9.36		5.92		8.76					
								0.00	5.24	8.76		4.72		7.95		4.86			
											138		114		102		30		
Vanguard Target Retirement 2020 Trust II				0.07	0.07		0.00	0.11	5.68	10.14		6.32		9.71				5.75	
								0.12	5.72	10.40		6.46		9.85					
								0.15	5.21	8.71		4.78		7.93		4.32			
											255		230		195		91		



2016 YTD Performance Summary

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	
			Mgr.	AUM	Gross	Net	Net	Rev	Recent Returns		Annualized Total Returns as of 9/30/2016								Since
As of 11/30/16	Ticker	Tenure	\$ Millions	ER	ER	%-ile	Share	1mo.	YTD	1 Year	%-ile	3 Year	%-ile	5 Year	%-ile	10 Year	%-ile	Incep.	
Vanguard Target Retirement 2025 Trust II				0.07	0.07			0.00	0.39	6.03	10.75		6.55		10.47				5.83
Vanguard Target Retirement 2025 Composite Lx									0.39	6.04	11.01		6.68		10.60				
Target Date 2021-2025 Median				1.08	0.86				0.49	5.60	9.75		5.23		9.23		4.76		
Target Date 2021-2025 Number of Funds				237	237							217		189		156		42	
Vanguard Target Retirement 2030 Trust II				0.07	0.07			0.00	0.70	6.29	11.22		6.70		11.19				5.86
Vanguard Target Retirement 2030 Composite Lx									0.67	6.33	11.52		6.86		11.32				
Target Date 2026-2030 Median				1.12	0.91				0.76	5.88	10.31		5.47		9.77		4.43		
Target Date 2026-2030 Number of Funds				275	275							255		230		195		91	
Vanguard Target Retirement 2035 Trust II				0.07	0.07			0.00	1.00	6.62	11.73	7	6.88		11.90				6.02
Vanguard Target Retirement 2035 Composite Lx									0.96	6.60	12.02		7.04		12.03				
Target Date 2031-2035 Median				1.12	0.88				1.13	6.20	10.97		5.72		10.59		4.79		
Target Date 2031-2035 Number of Funds				237	237							217		189		156		42	
Vanguard Target Retirement 2040 Trust II				0.07	0.07			0.00	1.31	6.91	12.16		6.94		12.22				6.18
Vanguard Target Retirement 2040 Composite Lx									1.24	6.86	12.51		7.13		12.37				
Target Date 2036-2040 Median				1.19	0.95				1.37	6.23	11.28		5.79		10.81		4.52		
Target Date 2036-2040 Number of Funds				275	275							255		230		195		91	
Vanguard Target Retirement 2045 Trust II				0.07	0.07			0.00	1.38	6.99	12.26		6.94		12.23				6.15
Vanguard Target Retirement 2045 Composite Lx									1.32	6.97	12.59		7.14		12.38				
Target Date 2041-2045 Median				1.20	0.90				1.60	6.42	11.48		5.93		11.34		4.68		
Target Date 2041-2045 Number of Funds				237	237							217		189		149		37	
Vanguard Target Retirement 2050 Trust II				0.07	0.07			0.00	1.38	7.00	12.25		6.92		12.19				6.17
Vanguard Target Retirement 2050 Composite Lx									1.32	6.97	12.59		7.14		12.38				
Target Date 2046-2050 Median				1.31	0.95				1.59	6.47	11.48		5.98		11.37		4.60		
Target Date 2046-2050 Number of Funds				265	265							245		220		183		24	
Vanguard Target Retirement 2055 Trust II				0.07	0.07			0.00	1.38	7.02	12.27		6.88						11.12
Vanguard Target Retirement 2055 Composite Lx									1.32	6.97	12.59		7.14						
Target Date 2051-2055 Median				1.38	0.90				1.70	6.49	11.56		6.02						
Target Date 2051-2055 Number of Funds				235	235							214		156					
Vanguard Target Retirement 2060 Trust II				0.07	0.07			0.00	1.37	7.03	12.28		6.90						8.39
Vanguard Target Retirement 2060 Composite Lx									1.32	6.97	12.59		7.14						
Target Date 2060+ Median				1.82	0.87				1.88	6.31	11.71		5.62						
Target Date 2060+ Number of Funds				164	164							91		9					



2016 YTD Performance Summary

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)
As of 11/30/16	Mgr.	AUM	Gross	Net	Net	Rev	Recent Returns		Annualized Total Returns as of 9/30/2016									Since
	Ticker	Tenure	\$ Millions	ER	ER	%-ile	Share	1mo.	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 11/30/2016. All other data as of 9/30/2016

VA = Variable Annuity

Since Incep. = Since Inception [Incep. Date = Inception Date

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

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

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

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

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

"Since Inception" performance is calculated from this date.

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

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

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

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

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

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

Section XV.

OPEB Trust

TOTAL NET OF FEES
11/30/2016

Account Name Benchmark Name	Market Value	% of Total	Month	YTD	Fiscal YTD	1 Year	Annualized				Inception Date
							3 Years	5 Years	10 Years	ITD	
Mackay Shields OPEB	65,264,106.9	33.6	-2.43	2.07	-2.78	1.66	2.66			1.54	5/1/2013
Bloomberg Barclays U.S. Aggregate Bond Index			-2.37	2.50	-2.67	2.17	2.79			1.66	5/1/2013
SSGA S&P 500 INDX	129,026,411.8	66.4	3.70	9.82	5.74	8.08	9.09	14.40		12.13	5/1/2011
S&P 500 - Total Return Index			3.70	9.79	5.73	8.06	9.07	14.45		11.32	5/1/2011
Total OPEB	194,290,518.7	100.0	1.55	7.23	2.70	6.00	6.91	9.12		8.40	5/1/2011
OPEB Custom Blend ¹			1.58	7.34	2.77	6.11	6.99	8.87		7.51	5/1/2011

END NOTES

11/30/2016

1	RI7GX0903OPE	OPEB Custom Blend	35% Barclays Aggregate and 65% S&P 500
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TOTAL NET OF FEES
11/30/2016

Account Name Benchmark Name	Market Value	% of Total	YTD	Month	Cumulative		2015	2014	2013	Inception Date
					10/1/2016 - 10/31/2016	9/1/2016 - 9/30/2016				
Mackay Shields OPEB	65,264,106.9	33.6	2.07	-2.43	-0.82	-0.10	0.46	6.03		5/1/2013
Bloomberg Barclays U.S. Aggregate Bond Index			2.50	-2.37	-0.76	-0.06	0.55	5.97		5/1/2013
SSGA S&P 500 INDX	129,026,411.8	66.4	9.82	3.70	-1.81	0.02	1.46	13.63	32.09	5/1/2011
S&P 500 - Total Return Index			9.79	3.70	-1.82	0.02	1.38	13.69	32.39	5/1/2011
Total OPEB ¹	194,290,518.7	100.0	7.23	1.55	-1.46	-0.03	1.16	11.00	15.77	5/1/2011
OPEB Custom Blend ²			7.34	1.58	-1.45	-0.01	1.31	11.00	15.73	5/1/2011

END NOTES

11/30/2016

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