# STATE OF RHODE ISLAND INVESTMENT COMMISSION MEETING

DATA AT April 30, 2016

May 25, 2016 MEETING

# MEMBERS OF THE STATE INVESTMENT COMMISSION

## Honorable Seth Magaziner, Chair

Mr. Robert K. Benson Ms. Faith LaSalle

Mr. J. Michael Costello
Ms. Paula M. McNamara
Mr. Thomas P. Fay
Mr. Thomas Mullaney
Mr. Frank J. Karpinski
Ms. Marcia Reback

Ms. Marie Langlois

# 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 Wednesday, May 25<sup>th</sup> 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 April 27<sup>th</sup>, 2016\*
- Recommendation on Defined Contribution Plan Target Retirement Funds \*/\*\*
- CollegeBoundfund Semi-Annual Performance Review
  - Capital Cities
- Recommendation on 529 Investment Policy Statement\*/\*\*
  - Capital Cities
- Recommendation on CollegeBoundfund Auditor \*/\*\*
- Briefing: Community Deposit Program
- Recommendation on Short-Term Investment Policy Changes \*/\*\*
- Recommendation on Community Deposit Program Investment Policy \*/\*\*
- Briefing: Pension Liabilities
  - Gabriel Roeder
- Recommendation on Commissioning Asset/Liability Study \*/\*\*
  - Pension Consulting Alliance
- Legal Counsel Report
- Chief Financial Officer Report
- Treasurer's General Comments

#### **POSTED ON May 20, 2016**

Anyone wishing to attend this meeting who may have special needs for access or services such as an interpreter, please contact Kyle Lynch at (401) 462-7687 twenty-four hours in advance of the scheduled meeting.

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

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

# Section II.

**Approval of Minutes** 



# **State Investment Commission**

Monthly Meeting Minutes Wednesday, April 27, 2016 9:00 a.m. Room 205, State House

The Monthly Meeting of the State Investment Commission (SIC) was called to order at 9:04 a.m., Wednesday, April 27, 2016 in Room 205, State House.

## I. Roll Call of Members

The following members were present: Mr. Robert Benson, Mr. J. Michael Costello, Mr. Thomas Fay, Ms. Marie Langlois, Ms. Faith LaSalle, Mr. Thomas Mullaney, Ms. Marcia Reback, Ms. Paula McNamara and Treasurer Seth Magaziner. Mr. Frank Karpinski arrived at 9:06.

Also in attendance: Joyce Marsilia, Steven Johnson and Kerri Polk of Fidelity; Allan Emkin and John Burns of Pension Consulting Alliance (PCA), general consultant; Mr. David Iden and Mr. Larry Brown of TIAA; Ms. Sally Dowling of Adler Pollock & Sheehan P.C., legal counsel; Ms. Anne-Marie Fink, Chief Investment Officer; Mr. Jeff Padwa, Chief of Staff; Kerri Baker, Interim Cash Manager and members of the Treasurer's office staff.

Treasurer Magaziner called the meeting to order at 9:04 a.m.

# II. Approval of Minutes

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

VOTED: to approve the draft of the minutes of the March 23, 2016 meeting of the State Investment Commission.

# III. Defined Contribution Plan Quarterly Performace Review

Mr. Iden began by drawing attention to the rebranding of TIAA CREF, which will now be known simply as TIAA. Ms. McNamara asked if the rebranding or name change was indicative of a management change and Mr. Iden responded there had been no changes of this type, rather the company wanted to return to basics based on the marketplace demands.

Mr. Iden summarized investment performance of the plans over the past 12 months. In response to a question from Mr. Benson, Mr. Brown stated that \$454 million have been contributed by employer and employee since the program's inception. Turning to employee engagement, Mr. Iden characterized it as "very robust" with 655 people attending seminars and workshops. Mr. Iden also noted that as members are becoming more aware of services, they are utilizing them more.

Mr. Brown then began describing the investments. He highlighted that 97% of the plan's total assets are in index strategies with only one actively managed mutual fund in the mix. He reminded the SIC that the money market option is being eliminated and assets remapped to the stable value fundwith an expected 6-8 weeks to complete the process.

Mr. Fay asked how TIAA's stable value returns compare to competitors. Mr. Brown did not have the information, but would look into it. Ms. Fink said the crediting rate was comparable to those of the stable value funds in the state's 529 plan and its 457s.

Mr. Brown continued his summation of performance. He noted that the biggest return this year, which is a complete reversal from last year, is the emerging market stock index up 13% in March alone. The board asked questions.

# IV. Ocean State Investment Pool (OSIP) Annual Review

Steve Johnson, Kerri Polk and Joyce Marsilia represented Fidelity.

Mr. Johnson explained that given GASB (Government Accounting Standards Board) Statement 79, the rules regarding accounting for Local Government Investment Pools (LGIPs), such as OSIP, have changed, and Fidelity must adapt their strategy on how the pool is managed to comply and maintain the current accounting treatment.

Mr. Johnson outlined the new requirements and noted the requirements are similar to how OSIP is currently managed. One rule change that will impact OSIP is that all investments in the LGIPs now have to be all Tier 1 securities, which means Fidelity can no longer buy non-traditional repucharse agreements for the fund. The other main change is relates the one-week liquidity. Currently the pool is managed with 20% one week liquidity in the pool and the new guidelines increase that to 30%.

Mr. Johnson concluded by noting this pool is doing "extremely well".

The board asked questions.

# V. Short-Term Investment Policy Change Recommendation

Treasurer Magaziner introduced Ms. Baker and her new role as the Interim Cash Manager. Ms. Baker then recommended a change to the Short Term Investment Policy that would add a requirement that OSIP conform to the requirements in GASB Statement 79, as well as the current requirement in the policy that all the holdings in OSIP conform with Rule 2a7 requirements that governs money market accounts. Ms. Fink added that after the SIC changed the policy, the investment staff would them work with Fidelity to implement the change in the State's investment management agreement with the manager. Additionally, Ms. Fink asked to change the incorrect usage of "principle" (pointed out by Mr. Mullaney and Mr. Fay) throughout the document to reflect the correct "principal" spelling. Also, the 2a7 rule spells out a 397 day maximum term for investments, whereas the policy says 365 days. Ms. Fink requested that if the 365 day limit is not specified in the legislation, the policy be changed to coincide with the 397 day as outlined in the 2a7 rule.

The board asked questions.

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

VOTED: to approve changes in the short term investment policy statement to conform with GASB 79, the correct the spelling of "principal" and to allow investments up to 397 days, if consistent with the law governing OSIP.

Treasurer Magaziner concluded the short-term investment policy discussion by stating that staff will be evaluating, over the next month, further updates to the policy as some of the verbiage is out of date. He specifically identified the standard requiring banks to have a AA rating, since there are very few AA-rated banks any more, and the restriction from investing with credit unions, which might be a viable option to obtain better rates.

# VI. Legal Counsel Report

There was no legal counsel report.

# VII. Chief Investment Officer Report

Ms. Fink reviewed the performance of the portfolio for March.

She described strong market performace in March due in part to dovish statements from the Federal Reserve and more optimistic sentiment in the markets, as well as stabilization and recovery in oil prices. Overall, the

fund returned 4% for the month, trimming fiscal year-to-date losses to -2.1%. She noted that performance on a relative basis, however, was disappointing. The fund underperformed both the bottom-up benchmark and the basic 60/40 allocation. Hedge funds and private infrastructure were the worst performers. Ms. Fink stated an asset allocation study in the second half of the year is forthcoming and the office will continue to evaluate these allocations. She also noted that while the month was disappointing for hedge funds, the funds have provided good downside protection in the three substantial market drops since the allocation was added. On a more positive note, Ms. Fink highlighted the MLPs, which were up 8%, benefitting from the aforementioned increase in oil prices. Emerging markets were up 13%. On a longer term perspective, the fund is outperforming the basic 60/40 on a 3- and 5-year basis.

Next, Ms. Fink explained the 529 Plan transition is ongoing, moving apace with still much work to do, including creating lots of new documentation and setting up the process to move more than \$6 billion in assets and hundreds of thousands of account records. She said the program management agreement with Ascensus has been signed and the actual transition date has been set for July 8th in order to account for the July 4<sup>th</sup> holiday.

Ms. Fink disclosed the office has received a large public records request for documents related to the State's real estate investment from 2006 to present. The request required the office to search, retrieve and redact as necessary more than 30,000 documents. Ms. Fink noted that this request coupled with the CollegeBound*fund* transition will preoccupy the office for the next couple months. Treasurer Magaziner confirmed the tremendous workload of the staff and pledged completion of the request.

Ms. Fink reiterated her earlier statement that the office is seeking to start an asset allocation study in the summer, when the substantial public records request and 529 conversion projects will be completed.

## VIII. Treasurer's General Comments

Treasurer Magaziner affirmed the full workload of the office and praised the staff for their hardwork.

There being no other business to come before the Board, on a motion by Ms. Reback and seconded by Mr. Fay the meeting adjourned at 10:01 a.m.

Respectfully submitted,

Seth Magaziner, General Treasurer

# Section III.

**Staff Summary** 



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

Seth Magaziner General Treasurer

May 18, 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 April 30, 2016.

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

Asset Class	Base Market Value
Grand Total	7,543,424,214
CASH EQUIVALENT*	191,630,902
<b>EQUITY HEDGE FUNDS**</b>	575,703,090
GLOBAL PUBLIC EQUTIY	3,284,428,035
CREDIT	385,871,116
INFLATION-LINKED BDS	289,741,415
PRIVATE EQUITY**	525,987,084
REAL ESTATE**	484,672,374
REAL RET HEDGE FUNDS**	494,189,315
INFRASTRUCTURE**	229,505,156
US TRADITIONAL FIXED	1,081,695,727

Plan Allocations	%	Base Market Value
Grand Total	100.00%	7,543,424,214
STATE EMP RET PLAN	76.06%	5,737,384,446
MUNI EMP RET PLAN	17.84%	1,345,952,191
TEACHER'S SURVIVOR BENEFIT	3.78%	284,900,422
STATE POLICE RET PL	1.52%	114,979,496
JUDICIAL RET PLAN	0.79%	59,612,046
NON-CONTRIB JUD RET	0.01%	595,613

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

Respectfully submitted,

Kerri Baker

Acting Cash Manager

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

# **Portfolio Highlights**

#### PORTFOLIO PERFORMANCE

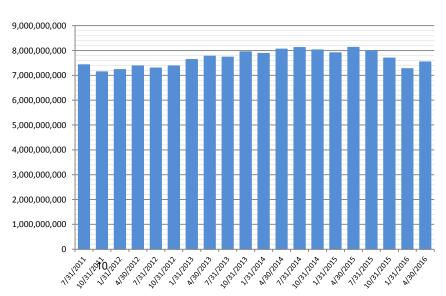
#### April 2016

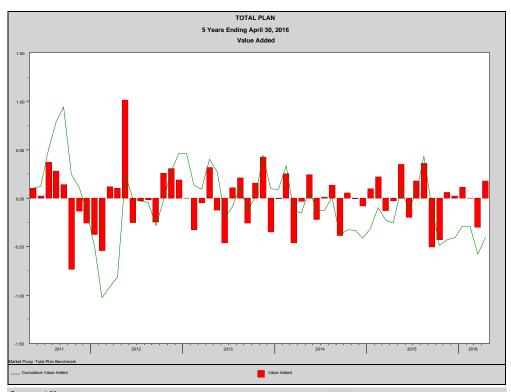
For the month, the total portfolio value increased by \$57.8 million to \$7.54 billion. The month's increase comes from \$95.4 million of positive investment performance reduced by \$37.6 million of transfers out to meet pension payroll in excess of pension contributions. On a percentage basis, the portfolio rose by 1.3%, exceeding the 1.1% return of the benchmark and the 1.0% return from a basic allocation of 60% global equity and 40% fixed income. As global growth prospects and oil prices improved, the portfolio experienced strong returns from infrastructure, high-yielding corporate loans and bonds, and international developed equities. Additionally, there was an extraordinary gain in the cash account from proceeds of a class action settlement.

For the calendar year-to-date, the total portfolio value increased by \$23.1 million, with portfolio gains of \$153.1 million offset by \$129.6 million in pension payments. The portfolio's 2.1% investment gain was in line with the benchmark, while lagging the 60/40 allocation's 2.5% return. By the end of April, equity markets had entirely recovered from the 10% drop in January and early February. Bonds outperformed equities as markets anticipated continued low interest rates.

For the fiscal year-to-date, the total portfolio value decreased by \$423.7 million. Investments declined by \$71.6 million and pension payments deducted \$352.1 million. The portfolio dropped 0.9%, underperforming the benchmark's -0.6% and the 60/40 allocation's -0.1%. The portfolio's larger allocation to equities and other assets that benefit from growth hurt as bonds outperformed during this period. Over the longer 3- and 5-year time frames, the portfolio has outperformed the 60/40 allocation by 0.5 and 0.8 percentage points per year, respectively.

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





Account Name Benchmark Name	Market Value (M)	Month	Fiscal YTD
US Public Equity	1,288.08	0.61	0.34
Non-US Public Equity	1,278.92	2.62	-7.35
Equity Hedge Funds	575.70	0.69	-7.75
Private Equity	526.07	-0.32	5.78
Traditional Fixed Income	1,092.32	0.54	3.77
Real Estate	484.67	0.61	11.68
Real Return Hedge Funds	494.19	0.54	-1.02
Publicly Traded Infrastructure	158.88	11.91	-20.23
Priv Listed Infrastructure	74.72	7.27	7.93
Credit Aggregate	411.87	1.96	-0.55
Inflation-Linked Bonds	281.53	0.19	2.18
Total Cash	96.38	0.35	0.68
TOTAL PLAN	7,543.42	1.28	-0.87

## BNY MELLON ASSET SERVICING

# Section IV.

**Asset Allocation** 

# **Asset Summary**

Balance Date: 4/29/2016



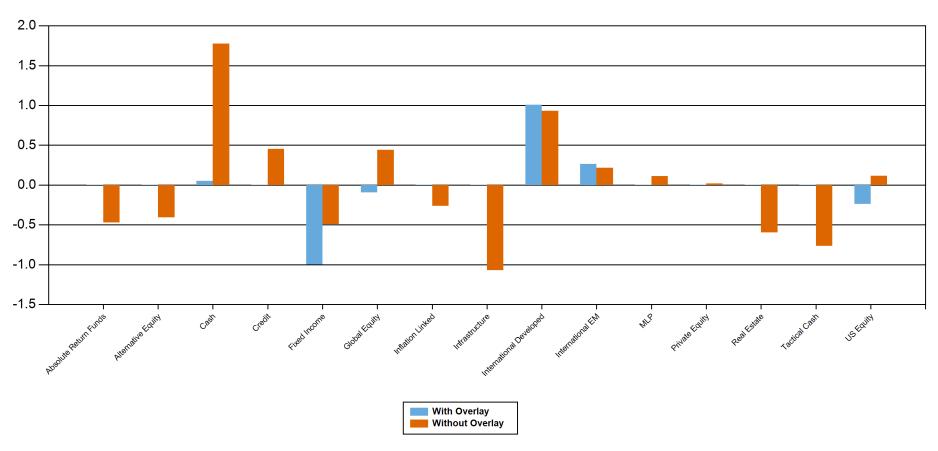
Asset Class	Physical E	xposure	Synthetic Ex	(posure	Net Po	<u>sition</u>	Overlay	<u>Target</u>	Policy Ta	rget
Total Market Value	7,528.7	100.0 %	0.0	0.0 %	7,528.7	100.0 %	7,528.7	100.0 %	7,528.7	100.00 %
Cash	133.5	1.8 %	-116.2	-1.5 %	17.3	0.2 %	13.4	0.2 %	0.0	0.00 %
Cash	133.5	1.8 %	-116.2	-1.5 %	17.3	0.2 %	13.4	0.2 %	0.0	0.00 %
Equity	4,390.5	58.3 %	116.2	1.5 %	4,506.7	59.9 %	4,435.8	58.9 %	4,291.4	<b>57.00</b> %
Alternative Equity	571.7	7.6 %	0.0	0.0 %	571.7	7.6 %	571.7	7.6 %	602.3	8.00 %
Global Equity	763.4	10.1 %	0.0	0.0 %	763.4	10.1 %	770.4	10.2 %	730.3	9.70 %
International Developed	920.9	12.2 %	52.6	0.7 %	973.5	12.9 %	897.5	11.9 %	850.7	11.30 %
International EM	317.6	4.2 %	20.0	0.3 %	337.6	4.5 %	317.7	4.2 %	301.1	4.00 %
Private Equity	528.4	7.0 %	0.0	0.0 %	528.4	7.0 %	528.4	7.0 %	527.0	7.00 %
US Equity	1,288.5	17.1 %	43.6	0.6 %	1,332.1	17.7 %	1,350.2	17.9 %	1,279.9	17.00 %
Fixed	1,092.3	14.5 %	0.0	0.0 %	1,092.3	14.5 %	1,167.3	15.5 %	1,129.3	15.00 %
Fixed Income	1,092.3	14.5 %	0.0	0.0 %	1,092.3	14.5 %	1,167.3	15.5 %	1,129.3	15.00 %
Other	1,912.3	25.4 %	0.0	0.0 %	1,912.3	25.4 %	1,912.3	25.4 %	2,108.0	28.00 %
Absolute Return Funds	491.5	6.5 %	0.0	0.0 %	491.5	6.5 %	491.5	6.5 %	527.0	7.00 %
Credit	410.5	5.5 %	0.0	0.0 %	410.5	5.5 %	410.5	5.5 %	376.4	5.00 %
Inflation Linked	281.5	3.7 %	0.0	0.0 %	281.5	3.7 %	281.5	3.7 %	301.1	4.00 %
Infrastructure	70.0	0.9 %	0.0	0.0 %	70.0	0.9 %	70.0	0.9 %	150.6	2.00 %
MLP	158.9	2.1 %	0.0	0.0 %	158.9	2.1 %	158.9	2.1 %	150.6	2.00 %
Real Estate	482.0	6.4 %	0.0	0.0 %	482.0	6.4 %	482.0	6.4 %	527.0	7.00 %
Tactical Cash	17.8	0.2 %	0.0	0.0 %	17.8	0.2 %	17.8	0.2 %	75.3	1.00 %

# **Asset Summary**

Balance Date: 4/29/2016



## **Percent Deviation from Overlay Target**

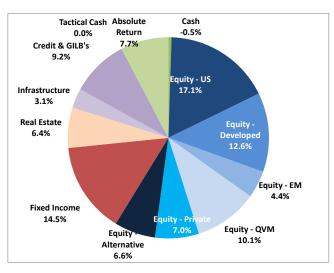


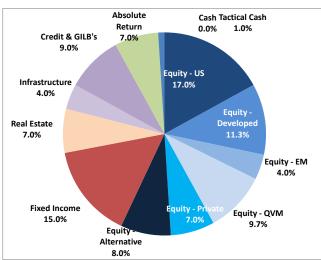
**Total Absolute Notional Value: 116.2 (USD)** 

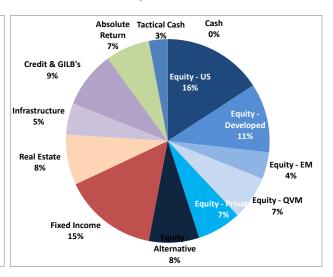
#### **Actual Allocation**

#### **Tactical Allocation**

## **Policy Allocation**



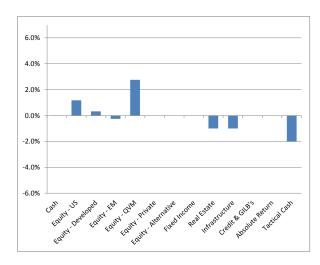




#### **Actual vs. Tactical**

# 2.0% 1.0% -1.0% -2.0% -3.0% Cest to the content of the conten

**Tactical vs. Policy** 



#### Notes:

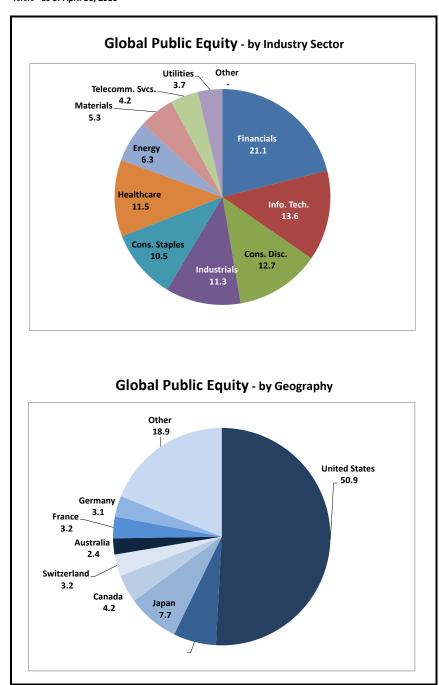
 $\underline{Actual\ vs.\ Tactical:}\ SIC\ policy\ allows\ for\ fluctuations\ of\ \pm 2\%\ from$   $Tactical\ to\ accommodate\ market\ movements\ while\ minimizing$   $trading\ costs\ for\ rebalancing,\ and\ lags\ in\ rebalancing\ to\ less\ liquid$  asset classes.

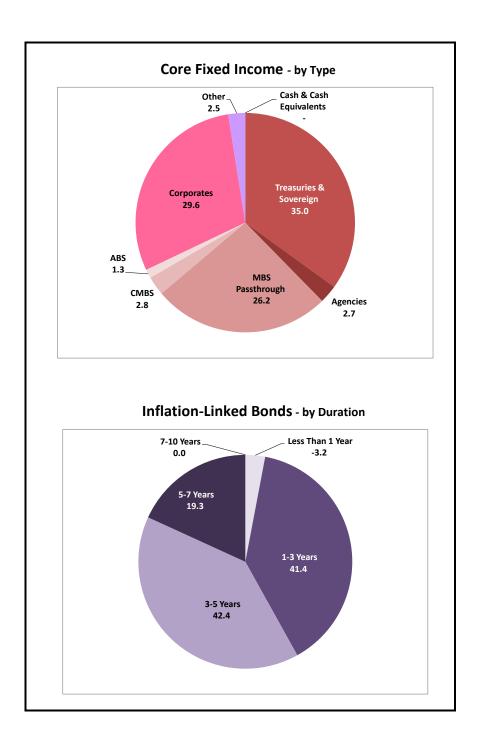
<u>Tactical vs. Policy:</u> Tactical allocations diverge from policy to allow time to vet third-party managers allowing prudent implementation of SIC policy decisions, and to diversify vintage-year exposure for drawdown funds (e.g., private equity, real estate, infrastructure).

Currently tactical allocations are (4) percentage points (pps) below policy on real estate and (5) pps on infrastructure & MLP's, due to timing required to deploy funds. An additional +9 pps in equity offers interim exposure to economic growth and protection from interest rate volatility, capturing similar macroeconomic exposures to underallocated asset classes.

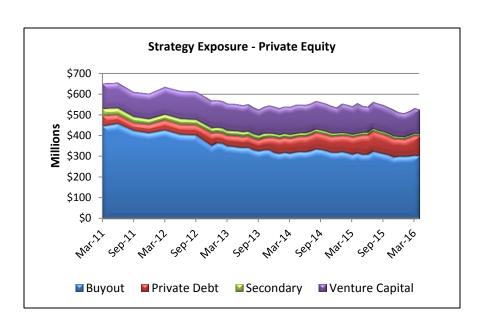
# ERSRI Asset Allocation Public-Asset Portfolios

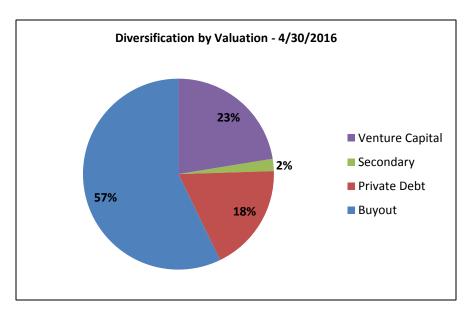
%%% - as of April 30, 2016

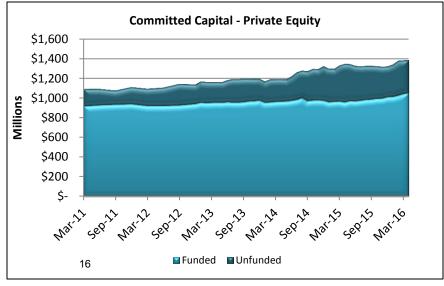


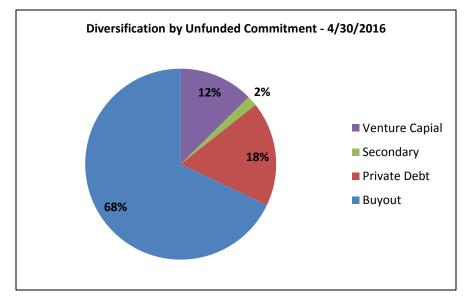


# **Strategy Exposure & Committed Capital – Private Equity**







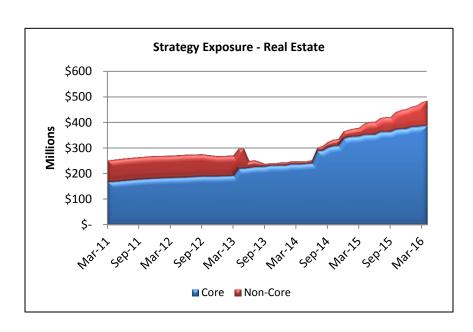


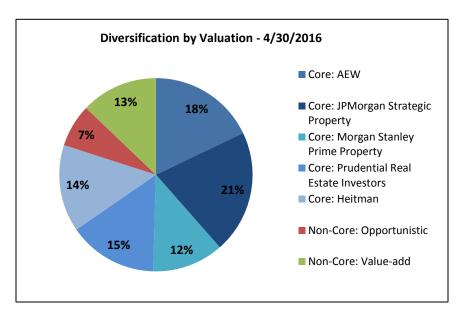
# State of Rhode Island Private Equity Unfunded Commitment April 2016

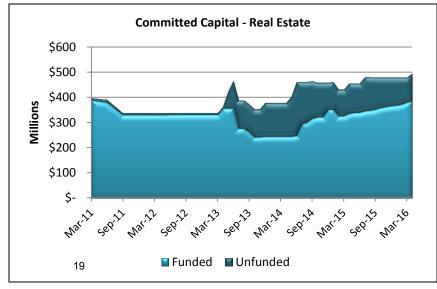
Partnership Investment	Total Commitment			Unfunded		
				_		
Advent Global Private Equity Fund VII	\$	20,000,000.00	\$	4,690,000.00		
Alta BioPhama Partners III	\$	15,000,000.00	\$	750,000.00		
Alta Partners VIII	\$	15,000,000.00	\$	-		
Aurora Equity Partners III	\$	15,000,000.00	\$	835,850.00		
Avenue Special Situations Fund IV Avenue V	\$	20,000,000.00	\$ •	-		
	\$ •	20,000,000.00	\$ e	-		
Bain X Baring Asia Private Equity Fund VI, L.P.	\$	25,000,000.00	\$ •	762,500.00		
Birch Hill Equity Partners III	\$ \$	15,000,000.00	\$ ¢	10,459,401.64		
Braemar Energy Ventures III	Ф \$	14,337,954.00	\$ \$	279,925.29		
Carlyle Asia Partners IV	φ \$	10,000,000.00	Ф \$	3,293,781.00		
Cartile III	Ф \$	30,000,000.00 5,000,000.00	э \$	14,902,324.00		
Centerbridge	φ \$	15,000,000.00	Ф \$	1 005 504 00		
Centerbridge Capital Partners III	φ \$	25,000,000.00	φ \$	1,095,594.00 18,724,322.00		
Centerbridge Special Credit Partners II	φ \$	25,000,000.00	Ф \$	2,500,000.00		
Charterhouse Capital Partners VIII	Ф \$	15,777,863.72	э \$	647,884.27		
Coller International Capital IV	φ \$		Ф \$			
Coller International Capital V  Coller International Capital V	Ф \$	14,250,000.00 15,000,000.00	э \$	150,000.00		
Constellation III				3,270,000.00		
CVC European Equity Partners III	\$ ¢	15,000,000.00	\$ ¢	1,235,787.33 899,966.00		
CVC European Equity Partners IV	\$ \$	20,000,000.00	\$ ¢			
CVC V	Ф \$	18,890,503.50 22,897,580.00	\$ ¢	2,197,738.42 1,062,857.42		
CVC VI	Ф \$	17,173,185.00	\$ \$	10,952,003.12		
EnCap Energy Fund IX	φ \$	18,000,000.00	φ \$	7,022,343.03		
EnCap Energy Fund X	φ \$	25,000,000.00	Ф \$	22,199,214.32		
Fenway Partners Capital Fund II	φ \$	15,000,000.00	φ \$	232,336.00		
Fenway I II	\$	15,000,000.00	\$	1,266,241.00		
First Reserve Fund X	φ \$	20,000,000.00	φ \$	1,200,241.00		
First Reserve Fund XI	\$	20,000,000.00	\$	_		
Focus Ventures III	\$	15,000,000.00	\$	_		
Garrison Opportunity Fund IV	\$	30,000,000.00	\$	14,382,700.00		
Granite Global Ventures II	\$	15,000,000.00	\$	675,000.00		
Granite Global Ventures III	\$	15,000,000.00	\$	375,000.00		
Green Equity Investors V	\$	20,000,000.00	\$	1,731,092.40		
Industry Ventures Partnership Holdings III	\$	25,000,000.00	\$	9,250,000.00		
Industry Ventures Partnership Holdings III -C	\$	15,000,000.00	\$	13,012,500.00		
Industry Ventures Partnership Holdings IV	\$	10,000,000.00	\$	10,000,000.00		
Kayne Anderson Energy Fund III	\$	15,000,000.00	\$	366,426.00		
Kayne Anderson Energy Fund IV	\$	15,000,000.00	\$	-		
Leapfrog Ventures II	\$	10,000,000.00	\$	510,000.00		
Leeds Weld Equity Partners IV	\$	10,000,000.00	\$	1,099,639.00		
Lighthouse Capital Partners V	\$	11,250,000.00	\$	787,500.00		
Lighthouse Capital Partners VI	\$	15,000,000.00	\$	750,000.00		
LNK Partners	\$	12,500,000.00	\$	456,854.52		
MHR Institutional Partners III	\$	20,000,000.00	\$	6,974,396.00		
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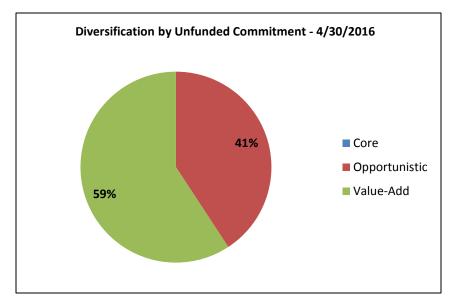
Nautic Partners V	\$	20,000,000.00	\$ 641,734.81
Nautic Partners VI	\$	20,000,000.00	\$ 774,192.96
Nautic Partners VII	\$	20,000,000.00	\$ 9,831,614.27
Nautic Partners VIII	\$	20,000,000.00	\$ 20,000,000.00
Nordic Capital Fund V	\$	16,733,036.27	\$ -
Nordic Capital Fund VI	\$	17,173,185.00	\$ -
Nordic VII	\$	17,173,185.00	\$ 1,677,679.95
Nordic VIII	\$	17,173,185.00	\$ 8,299,831.11
Oaktree European Principal Fund III	\$	20,000,000.00	\$ 4,524,412.00
Paine & Partners Capital Fund IV	\$	30,000,000.00	\$ 23,373,462.00
Palladin III	\$	10,000,000.00	\$ 1,060,919.00
Parthenon Investors ll	\$	23,960,000.00	\$ 1,813,102.00
Point 406	\$	10,000,000.00	\$ 630,000.00
Point Judith II	\$	5,000,000.00	\$ 255,571.96
Providence Equity Partners IV	\$	25,000,000.00	\$ 1,995,291.00
Providence Equity Partners V	\$	25,000,000.00	\$ 2,198,098.00
Providence Equity Partners VI	\$	25,000,000.00	\$ 1,887,050.00
Providence Equity Partners VII	\$	25,000,000.00	\$ 13,318,878.00
Riverside VI	\$	20,000,000.00	\$ 8,668,713.00
Riverside Micro-Cap Fund III	\$	20,000,000.00	\$ 2,337,030.00
Sorenson Capital Partners III	\$	30,000,000.00	\$ 21,306,685.00
Summit Partners	\$	20,000,000.00	\$ -
Summit Partners II	\$	25,000,000.00	\$ 10,584,499.62
Tenex Capital Partners II	\$	25,000,000.00	\$ 23,114,051.80
Thomas McNerney & Partners	\$	15,000,000.00	\$ -
Thomas McNerney & Partners II	\$	15,000,000.00	\$ 862,500.00
TPG Partners IV	\$	13,953,742.00	\$ 64,421.00
TPG Partners V	\$	20,000,000.00	\$ 1,774,959.00
TPG VI	\$	10,000,000.00	\$ 952,186.00
Trilantic IV	\$	11,098,351.00	\$ 1,216,747.10
W Capital Partners	\$	15,000,000.00	\$ 802,500.00
W Capital Partners II	\$	15,000,000.00	\$ 1,596,691.00
WLR	\$	8,000,000.00	\$ 765,256.00
Total Private E	quity \$	1,385,341,770.49	\$ 336,129,253.33

# **Strategy Exposure & Committed Capital – Real Estate**





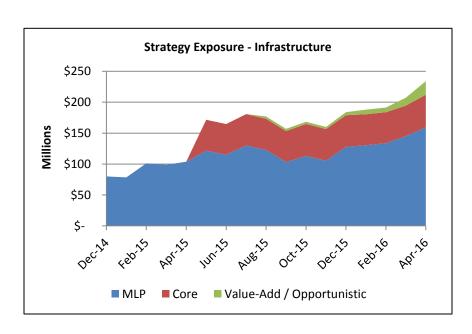


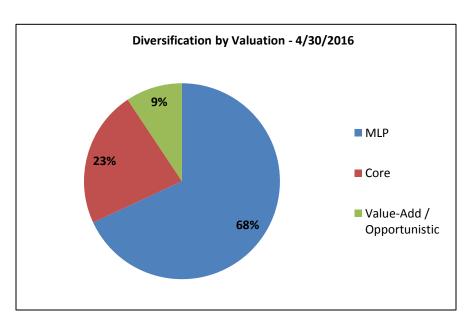


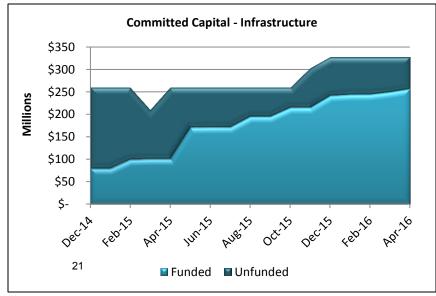
# **State of Rhode Island Real Estate Unfunded Commitment April 2016**

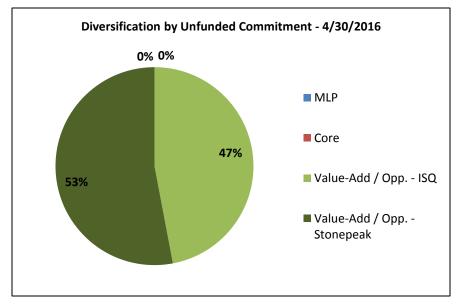
Partnership Investment	Tot	al Commitment	Unfunded
AEW	\$	60,000,000.00	\$ -
Crow Holdings Retail Fund, LP	\$	24,000,000.00	\$ 17,786,307.00
Exeter Industrial Value Fund III	\$	30,000,000.00	\$ 13,500,000.00
GEM Realty V	\$	50,000,000.00	\$ 27,819,375.00
Heitman	\$	60,000,000.00	\$ -
IC Berkeley Partners III	\$	18,000,000.00	\$ 1,961,673.88
IC Berkeley Partners IV	\$	15,000,000.00	\$ 15,000,000.00
JPMorgan Strategic Property Fund	\$	75,000,000.00	\$ -
Lone Star Real Estate Fund IV	\$	24,260,817.00	\$ 17,660,338.57
Magna Hotel	\$	4,000,000.00	\$ 596,956.57
Morgan Stanley Prime Property Fund	\$	35,000,000.00	\$ -
Prudential Real Estate Investors (PRISA)	\$	50,000,000.00	\$ -
Tri Continential Fund VII	\$	15,000,000.00	\$ 428,467.00
Waterton Venture Fund XII	\$	35,000,000.00	\$ 16,320,191.00
Total Real Estate	\$	495,260,817.00	\$ 111,073,309.02

# **Strategy Exposure & Committed Capital – Infrastructure**







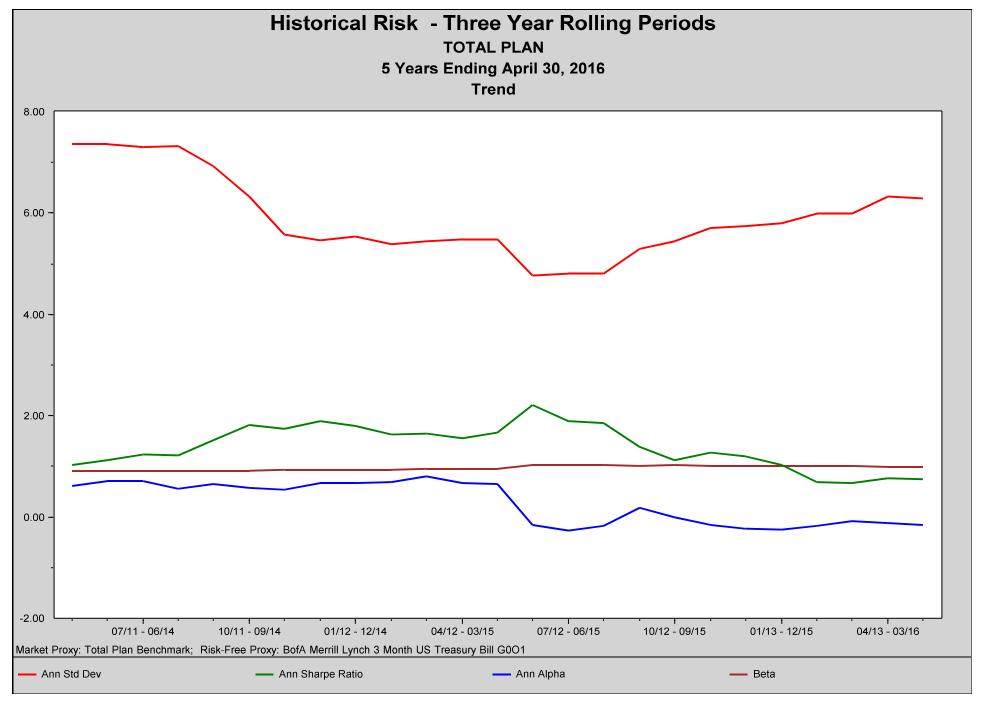


# **State of Rhode Island Infrastructure Unfunded Commitment April 2016**

Partnership Investment	Tota	al Commitment	Unfu	ınded
Harvest Fund Advisors, LLC	\$	185,000,000.00	\$	_
IFM Global Infrastructure, L.P.	\$	50,000,000.00	\$	-
ISQ Global Infrastructure Fund, L.P.	\$	50,000,000.00	\$	33,278,919.00
Stonepeak Infrastructure Fund II, L.P.	\$	43,000,000.00	\$	37,499,170.00
Total Infrastructure	\$	328,000,000.00	\$	70,778,089.00

# Section V.

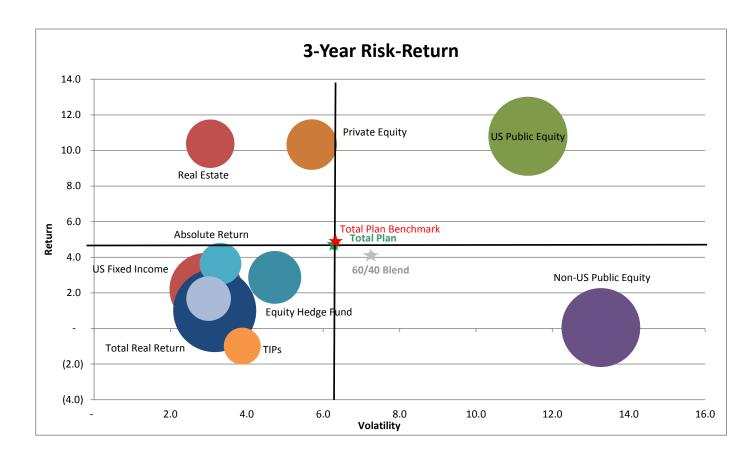
**Risk Overview** 

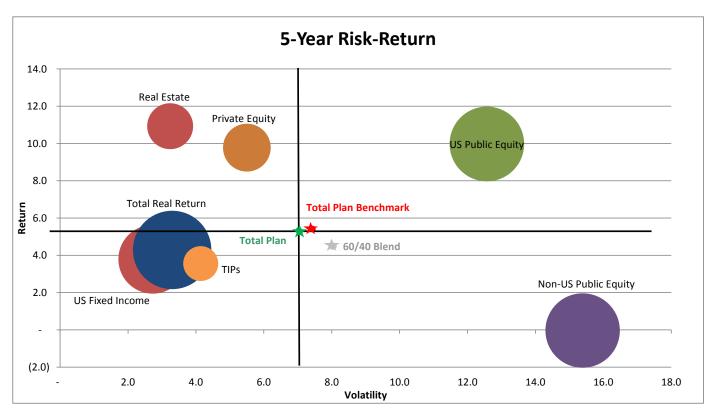


# 5 Years Ending April 30, 2016 Comparison

	TOTAL PLAN	Total Plan Benchmark	60/40 Blend
Ann Return	5.34	5.42	4.50
Ann Ex Ret vs Mkt	-0.08		
Ann Tracking Error	1.01		
Ann Std Dev	7.04	7.44	8.05
Beta	0.94		
R-Squared	0.98		
Ann Alpha	0.23		
Ann Sharpe Ratio	0.76	0.74	0.58

## % - as of April 30, 2016





# Risk Exposures

3 Years Ending April 30, 2016

	Annualized Return	Ann Std Dev	Beta (ACWI)	Beta (BC AGG)	Beta (GSCI)	Beta (CPI)
US Public Equity	10.84	11.37	0.9	2 -0.05	0.17	0.83
Non-US Public Equity	0.05	13.27	1.09	9 0.63	0.33	2.35
Equity Hedge Funds	2.87	4.73	0.2	4 -0.26	0.04	0.39
Private Equity	10.34	5.73	-0.0	0 -0.35	0.09	1.72
Traditional Fixed Income	2.20	2.93	0.0	4 0.99	-0.02	-0.39
Real Estate	10.39	3.04	0.0	6 0.56	-0.02	-0.61
Real Return Hedge Funds	2.99	2.79	0.0	9 0.17	-0.01	-0.05
Inflation-Linked Bonds	-1.00	3.88	0.0	9 1.12	0.01	-0.02
Cash	0.58	0.37	0.0	0 -0.01	-0.00	-0.04
Russell Overlay Fd	-0.02	0.08	-0.0	0.00	-0.00	-0.02
TOTAL PLAN	4.57	6.29	0.5	3 0.32	0.13	0.87

# 3 Years Ending April 30, 2016 Correlation

# Ann Return

	US Pub EQ	Non-US Pub EQ	Eq HF	PE	FI	RE	RR HF	TIPS	Cash	Overlay	Total
US Pub	1.00										
Non-US P	0.85	1.00									
Eq HF	0.64	0.52	1.00								
PE	0.01	-0.01	0.04	1.00							
FI	0.07	0.24	-0.10	-0.18	1.00						
RE	0.16	0.23	0.06	-0.21	0.55	1.00					
RR HF	0.38	0.33	0.66	-0.05	0.22	0.11	1.00				
TIPS	0.11	0.36	-0.09	-0.09	0.87	0.59	0.19	1.00			
Cash	0.10	0.05	0.00	-0.11	-0.06	-0.14	0.15	-0.09	1.00		
Overlay	-0.40	-0.25	-0.45	-0.12	0.01	0.09	-0.27	0.01	-0.01	1.00	
Total	0.94	0.97	0.63	0.05	0.24	0.25	0.43	0.32	0.07	-0.34	1.00
Tot BM	0.94	0.97	0.59	-0.01	0.22	0.22	0.40	0.29	0.06	-0.31	0.99

# 5 Years Ending April 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	0.88	1.00									
Eq HF											
PE	0.07	0.07		1.00							
FI	0.10	0.25		-0.19	1.00						
RE	0.07	0.16		-0.10	0.32	1.00					
RR HF											
TIPS	-0.01	0.16		-0.10	0.74	0.24		1.00			
Cash	0.07	0.03		-0.10	-0.08	-0.05		-0.16	1.00		
Overlay	0.19	0.27		0.15	0.09	0.11		0.19	-0.10	1.00	
Total	0.95	0.97		0.11	0.25	0.14		0.16	0.04	0.25	1.00
Tot BM	0.96	0.97		0.07	0.23	0.12		0.11	0.04	0.28	0.99

Section VI.

Performance Overview

Report ID: IPM0005

## TOTAL NET OF FEES 4/30/2016

Reporting Currency: USD

Account Name Benchmark Name	Market Value	% of Total	Month	YTD	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	ITD	Inception Date
SSGA R3000 INDEX Russell 3000 Index	1,288,083,189	17	0.61 <i>0.6</i> 2	1.70 1.59	0.34 <i>0.14</i>	-0.01 -0.18	10.85 <i>10.77</i>			12.84 <i>12.77</i>	10/1/2012 10/1/2012
US Public Equity Russell 3000 Index	1,288,083,263	17	<b>0.61</b> 0.62	<b>1.70</b> 1.59	<b>0.34</b> <i>0.14</i>	<b>-0.01</b> -0.18	<b>10.84</b> <i>10.77</i>	<b>9.99</b> 10.50		<b>6.44</b> 6.43	<b>8/1/2007</b> 8/1/2007
SSGA MSCI EAFE MSCI EAFE Net Dividend Index	844,404,842	11	2.98 2.90	-0.10 -0.20	-6.05 -6.19	-9.11 -9.32	1.70 <i>1.4</i> 8			6.95 6.69	9/1/2012 9/1/2012
SSGA MSCI CANADA MSCI Canada Net Dividend Index	106,448,004	1	6.75 6.69	18.95 <i>18.7</i> 3	-2.80 -3.27	-9.84 -10.38	-0.34 -0.96			0.85 <i>0.20</i>	9/1/2012 9/1/2012
SSGA MSCI EM MSCI Emerging Markets Net Dividend Index	327,564,227	4	0.55 <i>0.54</i>	6.16 <i>6.29</i>	-12.19 -12.16	-18.03 -17.87	-4.72 <i>-4.57</i>			-1.17 -0.98	9/1/2012 9/1/2012
Non-US Public Equity Total International Equity BM	1,278,920,280	17	<b>2.62</b> 2.63	<b>2.35</b> 2.25	<b>-7.35</b> -7.28	<b>-11.33</b> -11.28	<b>0.05</b> -0.02	<b>-0.04</b> -0.02		<b>7.79</b> 6.95	<b>5/1/2009</b> 5/1/2009
QVM Tilt MSCI World Net Dividend Index	763,422,104	10	1.17 <i>1.5</i> 8	0.94 1.23						6.81 <i>6.7</i> 9	10/1/2015 10/1/2015
Global Public Equity  MSCI All Country World Net Index	3,330,425,648	44	<b>1.50</b> 1.48	<b>1.95</b> <i>1.72</i>	<b>-3.47</b> -3.26	<b>-5.73</b> -5.66	<b>5.40</b> 5.06	<b>5.64</b> <i>4.6</i> 9	<b>4.50</b> 3.89	3.67	<b>7/1/2000</b> 7/1/2000
Private Equity  ILPA All Fds Custom BM 1Q Lag	526,068,132	7	-0.32 -0.32	4.10 <i>4.10</i>	5.78 <i>7.57</i>	10.83 9.30	10.34 12.71	9.79 13.17	8.21 <i>9.55</i>	9.12	2/1/1989 2/1/1989
Equity Hedge Funds HFRI Equity Hedge (Total) Index	575,703,090	8	<b>0.69</b> 1.03	<b>-5.00</b> -0.70	<b>-7.75</b> -5.31	<b>-6.66</b> -5.29	<b>2.87</b> 2.80			<b>4.87</b> <i>4.00</i>	<b>11/1/2011</b> 11/1/2011
Total Equity	4,432,196,870	59	1.17	1.23	-3.05	-4.18	5.62	5.67	4.66	8.78	6/1/1996
MACKAY SHIELDS  Barclays U.S. Aggregate Bond Index	540,335,593	7	0.38 <i>0</i> .38	3.24 3.43	3.73 4.10	2.20 2.72	2.27 2.29			2.26 2.22	11/1/2012 11/1/2012
PYRAMIS GLOBAL ADV  Barclays U.S. Aggregate Bond Index	551,984,068	7	0.69 <i>0.38</i>	3.68 3.43	3.81 <i>4.10</i>	2.34 2.72	2.14 2.29			2.17 2.22	11/1/2012 11/1/2012
<b>Traditional Fixed Income</b> Barclays U.S. Aggregate Bond Index	1,092,321,288	14	<b>0.54</b> 0.38	<b>3.46</b> 3.43	<b>3.77</b> <i>4.10</i>	<b>2.27</b> 2.72	<b>2.20</b> 2.29	<b>3.79</b> 3.60	<b>4.95</b> 4.95	<b>5.50</b> 5.39	<b>7/1/2000</b> 7/1/2000

Report ID: IPM0005

**Reporting Currency: USD** 

## TOTAL NET OF FEES 4/30/2016

Account Name Benchmark Name	Market Value	% of Total	Month	YTD	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	ITD	Inception Date
Real Return Hedge Funds HFRI Fund of Funds Composite Index	494,189,315	7	<b>0.54</b> 0.46	<b>0.72</b> -2.64	<b>-1.02</b> -5.46	<b>-1.47</b> -5.50	<b>2.99</b> 1.63			<b>4.17</b> 2.72	<b>11/1/2011</b> 11/1/2011
PIMCO 30%BoA1-3BB-BHY/70% JPMB/BBLLI	210,741,307	3	1.28 1.59	3.05 3.60	1.43 1.62	1.19 <i>1.61</i>	2.51 3.29			2.51 3.29	5/1/2013 5/1/2013
WAMCO 30% BoA 1-3 BB-B HY/70% CS LLI	201,131,277	3	2.67 1.90	3.31 3.55	-2.53 <i>0.5</i> 8	-3.09 <i>0.55</i>	0.85 2.82			1.04 3.00	4/1/2013 4/1/2013
Credit Aggregate Credit Aggregate	411,872,584	5	<b>1.96</b> 1.74	<b>3.18</b> 3.58	<b>-0.55</b> 1.10	<b>-0.95</b> 1.08	<b>1.68</b> 3.11			<b>1.68</b> 3.11	<b>5/1/2013</b> 5/1/2013
BROWN BROTHERS HARR BBH Inflation-Linked Custom BM	281,529,442	4	0.19 <i>0.23</i>	3.83 2.67	2.18 <i>1.74</i>	1.25 <i>0.65</i>	-1.00 <i>-1.10</i>			0.52 <i>0.24</i>	11/1/2012 11/1/2012
Inflation-Linked Bonds Total Inflation Linked Custom	281,529,442	4	<b>0.19</b> <i>0.23</i>	<b>3.83</b> 2.67	<b>2.18</b> 1.74	<b>1.25</b> <i>0.65</i>	<b>-1.00</b> -1.10	<b>3.56</b> 3.24		<b>4.43</b> <i>4.</i> 26	<b>11/1/2009</b> 11/1/2009
Harvest Fund Advisor Alerian MLP Index	158,879,454	2	11.91 <i>11.04</i>	5.79 <i>6.4</i> 2	-23.13 -19.40	-28.46 -28.71				-21.03 -22.05	1/1/2015 1/1/2015
Priv Listed Infrastructure CPI + 4%	74,721,889	1	7.27 <i>0.7</i> 8	5.17 2.48	7.93 3.58	1.55 <i>5.1</i> 3				1.33 <i>5.66</i>	3/1/2015 3/1/2015
Total Real Return	1,421,192,683	19	2.36	3.05	-1.32	-2.52	1.01	4.30	5.59	5.32	6/1/2004
Real Estate NFI-ODCE Index	484,672,374	6	0.61 <i>0.5</i> 9	3.71 3.75	11.68 <i>10.4</i> 8	12.57 13.96	10.39 <i>12.7</i> 9	10.93 <i>13.03</i>	3.01 8.69	2.68 9.93	1/1/2005 1/1/2005
ERSRI CASH BofA Merrill Lynch 3 Month US Treasury Bill G0O1	94,912,526	1	0.37 0.03	0.55 <i>0.10</i>	0.73 <i>0.14</i>	0.73 <i>0.15</i>	0.60 <i>0.0</i> 8	0.41 <i>0.08</i>	2.37 1.11	13.43 1.73	7/1/2000 7/1/2000
Total Cash	96,384,214	1	0.35	0.53	0.68	0.69	0.58	0.41	1.65	2.43	4/1/2004
Russell Overlay Fd	16,220,011	0	0.02	0.03	0.07	0.06	-0.02	0.16		-0.07	9/1/2008
<b>TOTAL PLAN</b> Total Plan Benchmark 60/40 Blend	7,543,424,213	100	<b>1.28</b> 1.10 1.04	<b>2.05</b> 2.04 2.52	<b>-0.87</b> -0.58 -0.11	<b>-1.97</b> -1.83 -2.13	<b>4.57</b> 4.85 4.12	<b>5.34</b> 5.42 4.50	<b>4.56</b> 4.72 4.69	4.49	<b>7/1/2000</b> 7/1/2000 7/1/2000
Total Plan ex PE,RE & Priv Inf Total Plan BM ex PE RE	6,457,961,818	86	<b>1.40</b> 1.24	<b>1.75</b> <i>1.76</i>	<b>-2.19</b> -1.86	<b>-3.79</b> -3.56	<b>3.75</b> <i>4.02</i>	<b>4.40</b> <i>4.77</i>	<b>4.22</b> 4.27	6.07	<b>4/1/1996</b> 4/1/1996

Report ID: IPM0005

Reporting Currency: USD

## TOTAL NET OF FEES 4/30/2016

				Cumı	ılative					
Account Name Benchmark Name	Market Value	% of Total	Month	3/1/2016 - 3/31/2016	2/1/2016 - 2/29/2016	YTD	2015	2014	2013	Inception Date
SSGA R3000 INDEX Russell 3000 Index	1,288,083,189	17	0.61 <i>0.6</i> 2	7.06 7.04	0.01 -0.03	1.70 1.59	0.60 <i>0.48</i>	12.59 12.56	33.49 33.55	10/1/2012 10/1/2012
US Public Equity Russell 3000 Index	1,288,083,263	17	<b>0.61</b> 0.62	<b>7.06</b> 7.04	<b>0.01</b> -0.03	<b>1.70</b> 1.59	<b>0.60</b> 0.48	<b>12.57</b> 12.56	<b>33.48</b> 33.55	<b>8/1/2007</b> 8/1/2007
SSGA MSCI EAFE MSCI EAFE Net Dividend Index	844,404,842	11	2.98 2.90	6.51 <i>6.51</i>	-1.82 <i>-1.</i> 83	-0.10 <i>-0.20</i>	-0.59 <i>-0.81</i>	-4.64 -4.90	23.08 22.78	9/1/2012 9/1/2012
SSGA MSCI CANADA MSCI Canada Net Dividend Index	106,448,004	1	6.75 6.69	9.99 9.97	3.85 3.81	18.95 <i>18.7</i> 3	-23.70 -24.16	2.17 1.51	6.35 5.63	9/1/2012 9/1/2012
SSGA MSCI EM MSCI Emerging Markets Net Dividend Index	327,564,227	4	0.55 <i>0.54</i>	13.19 <i>13.23</i>	-0.19 <i>-0.16</i>	6.16 <i>6.29</i>	-15.16 <i>-14.9</i> 2	-2.34 -2.19	-2.81 -2.60	9/1/2012 9/1/2012
Non-US Public Equity Total International Equity BM	1,278,920,280	17	<b>2.62</b> 2.63	<b>8.10</b> 8.13	<b>-1.05</b> -1.14	<b>2.35</b> 2.25	<b>-5.77</b> -5.66	<b>-3.63</b> -3.87	<b>15.18</b> <i>15.29</i>	<b>5/1/2009</b> 5/1/2009
QVM Tilt  MSCI World Net Dividend Index	763,422,104	10	1.17 <i>1.5</i> 8	6.80 <i>6.79</i>	-0.79 -0.74	0.94 1.23				10/1/2015 10/1/2015
Global Public Equity  MSCI All Country World Net Index	3,330,425,648	44	<b>1.50</b> <i>1.4</i> 8	<b>7.57</b> 7.41	<b>-0.55</b> -0.69	<b>1.95</b> 1.72	<b>-2.48</b> -2.36	<b>4.35</b> <i>4.16</i>	<b>23.90</b> 22.80	<b>7/1/2000</b> 7/1/2000
Private Equity  ILPA All Fds Custom BM 1Q Lag	526,068,132	7	-0.32 -0.32	3.03 3.03	1.42 1.42	4.10 <i>4.10</i>	7.08 7.30	8.02 16.42	14.86 25.14	2/1/1989 2/1/1989
Equity Hedge Funds HFRI Equity Hedge (Total) Index	575,703,090	8	<b>0.69</b> 1.03	<b>-0.86</b> 3.44	<b>-1.94</b> -0.47	<b>-5.00</b> -0.70	<b>1.27</b> -0.97	<b>2.64</b> 1.81	<b>17.11</b> 14.28	<b>11/1/2011</b> 11/1/2011
Total Equity	4,432,196,870	59	1.17	5.86	-0.51	1.23	-0.95	4.51	21.95	6/1/1996
MACKAY SHIELDS  Barclays U.S. Aggregate Bond Index	540,335,593	7	0.38 <i>0</i> .38	0.99 <i>0.9</i> 2	0.52 <i>0.71</i>	3.24 3.43	0.48 <i>0.55</i>	6.00 5.97	-1.79 -2.02	11/1/2012 11/1/2012
PYRAMIS GLOBAL ADV  Barclays U.S. Aggregate Bond  Index	551,984,068	7	0.69 <i>0</i> .38	1.35 <i>0.92</i>	0.61 <i>0.71</i>	3.68 3.43	0.01 <i>0.55</i>	5.83 5.97	-1.93 <i>-2.0</i> 2	11/1/2012 11/1/2012
<b>Traditional Fixed Income</b> Barclays U.S. Aggregate Bond Index	1,092,321,288	14	<b>0.54</b> <i>0.38</i>	<b>1.17</b> <i>0.92</i>	<b>0.57</b> 0.71	<b>3.46</b> 3.43	<b>0.25</b> 0.55	<b>5.91</b> 5.97	<b>-1.86</b> <i>-2.02</i>	<b>7/1/2000</b> 7/1/2000

Report ID: IPM0005

**Reporting Currency: USD** 

# **TOTAL NET OF FEES**

4/30/2016

				Cumulative						
Account Name Benchmark Name	Market Value	% of Total	Month	3/1/2016 - 3/31/2016	2/1/2016 - 2/29/2016	YTD	2015	2014	2013	Inception Date
Real Return Hedge Funds HFRI Fund of Funds Composite Index	494,189,315	7	<b>0.54</b> 0.46	<b>0.01</b> <i>0.60</i>	<b>0.17</b> -1.16	<b>0.72</b> -2.64	<b>0.86</b> -0.27	<b>4.70</b> 3.37	<b>6.96</b> 8.96	<b>11/1/2011</b> 11/1/2011
PIMCO 30%BoA1-3BB-BHY/70% JPMB/BBLLI	210,741,307	3	1.28 1.59	2.04 2.49	-0.04 <i>0.0</i> 2	3.05 3.60	1.13 1.00	1.22 2.11		5/1/2013 5/1/2013
WAMCO 30% BoA 1-3 BB-B HY/70% CS LLI	201,131,277	3	2.67 1.90	3.25 2.52	-0.61 <i>-0.11</i>	3.31 3.55	-3.69 <i>-0.18</i>	0.10 2.03		4/1/2013 4/1/2013
Credit Aggregate Credit Aggregate	411,872,584	5	<b>1.96</b> 1.74	<b>2.63</b> 2.50	<b>-0.32</b> -0.04	<b>3.18</b> 3.58	<b>-1.29</b> <i>0.4</i> 9	<b>0.66</b> 2.11		<b>5/1/2013</b> 5/1/2013
BROWN BROTHERS HARR BBH Inflation-Linked Custom BM	281,529,442	4	0.19 <i>0.23</i>	1.34 1.09	0.95 <i>0.30</i>	3.83 2.67	-0.26 <i>0.14</i>	1.72 2.04	-5.03 -5.13	11/1/2012 11/1/2012
Inflation-Linked Bonds Total Inflation Linked Custom	281,529,442	4	<b>0.19</b> <i>0.23</i>	<b>1.34</b> 1.09	<b>0.95</b> <i>0.30</i>	<b>3.83</b> 2.67	<b>-0.26</b> <i>0.14</i>	<b>1.72</b> 2.04	<b>-5.03</b> -5.13	<b>11/1/2009</b> 11/1/2009
Harvest Fund Advisor Alerian MLP Index	158,879,454	2	11.91 <i>11.04</i>	8.30 8.32	-0.56 -0.48	5.79 <i>6.4</i> 2	-31.01 -32.59			1/1/2015 1/1/2015
Priv Listed Infrastructure CPI + 4%	74,721,889	1	7.27 <i>0.7</i> 8	-1.32 <i>0.75</i>	0.00 <i>0.43</i>	5.17 2.48				3/1/2015 3/1/2015
Total Real Return	1,421,192,683	19	2.36	1.77	0.11	3.05	-2.76	2.74	3.39	6/1/2004
Real Estate NFI-ODCE Index	484,672,374	6	0.61 <i>0.59</i>	1.07 1.07	0.18 <i>0.20</i>	3.71 3.75	14.22 13.17	10.90 <i>12.26</i>	5.65 12.00	1/1/2005 1/1/2005
ERSRI CASH BofA Merrill Lynch 3 Month US Treasury Bill G0O1	94,912,526	1	0.37 0.03	0.14 <i>0.0</i> 5	0.03 <i>0.0</i> 2	0.55 <i>0.10</i>	0.40 0.05	0.75 0.03	0.14 <i>0.07</i>	7/1/2000 7/1/2000
Total Cash	96,384,214	1	0.35	0.13	0.03	0.53	0.38	0.74	0.13	4/1/2004
Russell Overlay Fd	16,220,011	0	0.02	0.01	0.00	0.03	0.00	-0.02	0.17	9/1/2008
TOTAL PLAN  Total Plan Benchmark  60/40 Blend	7,543,424,213	100	<b>1.28</b> 1.10 1.04	<b>4.03</b> 4.33 4.81	<b>-0.18</b> -0.18 -0.13	<b>2.05</b> 2.04 2.52	<b>-0.28</b> -0.28 -0.98	<b>4.52</b> 5.05 4.96	<b>14.06</b> 14.47 12.32	<b>7/1/2000</b> 7/1/2000 7/1/2000
Total Plan ex Overlay Total Plan Benchmark	7,527,204,202	100	<b>1.26</b> <i>1.10</i>	<b>4.01 4.33</b>	<b>-0.18</b> -0.18	<b>2.02</b> 2.04	<b>-0.28</b> -0.28	<b>4.54</b> 5.05	<b>13.87</b> <i>14.47</i>	<b>8/1/2008</b> 8/1/2008

Report ID: IPM0005

Reporting Currency: USD

## **TOTAL NET OF FEES**

4/30/2016

		Cumulative									
Account Name Benchmark Name	Market Value	% of Total	Month	3/1/2016 - 3/31/2016	2/1/2016 - 2/29/2016	YTD	2015	2014	2013	Inception Date	
Total Plan ex PE,RE & Priv Inf Total Plan BM ex PE RE	6,457,961,818	86	<b>1.40</b> 1.24	<b>4.39</b> 4.62	<b>-0.34</b> -0.34	<b>1.75</b> 1.76	<b>-1.68</b> -1.64	<b>3.98</b> 3.90	<b>14.33</b> <i>14.57</i>	<b>4/1/1996</b> <i>4/1/1996</i>	



Report ID: IPM0005

Reporting Currency: USD

## **END NOTES**

## 4/30/2016

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



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

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

						Ret	urns					Sharpe	Incep
Fund	Market Value	Actual %	Apr	QTD	YTD	FYTD	1 Year	3 Year	5 Year	Incep	Std Dev	Ratio	Date
Global Equities													
Ascend ERSRI Fund LP	68,250,947	6.3%	0.16%	0.16%	-6.87%	-6.52%	-6.58%	2.75%	-	2.90%	3.50%	0.73	Nov-11
Davidson Kempner Institutional Partners, L.P.	76,340,211	7.1%	0.53%	0.53%	1.17%	1.06%	1.15%	3.93%	-	5.50%	2.12%	2.38	Nov-11
Elliott Associates, L.P.	89,486,342	8.3%	2.70%	2.70%	5.51%	5.45%	8.11%	8.71%	-	9.29%	3.91%	2.21	Nov-11
ESG Cross Border Equity Fund LP	39,780,271	3.7%	-2.60%	-2.60%	-9.46%	-13.32%	-15.14%	-	-	-11.21%	8.35%	-1.42	Jun-14
Indus Asia Pacific Fund, LP	450,808	0.0%	-0.13%	-0.13%	-0.62%	-32.77%	-33.15%	-17.26%	-	-10.34%	14.33%	-0.70	Jan-12
Luxor Capital Partners, LP	33,715,445	3.1%	0.38%	0.38%	-6.79%	-27.54%	-24.53%	-	-	-17.88%	10.23%	-1.89	May-14
PFM Diversified Fund, L.P.	75,436,832	7.0%	0.81%	0.81%	-8.87%	-10.63%	-7.76%	5.55%	-	5.83%	9.36%	0.62	Mar-12
Samlyn Onshore Fund, L.P.	101,067,180	9.4%	1.34%	1.34%	-5.46%	-12.12%	-11.02%	4.39%	-	7.03%	6.66%	1.00	Jan-12
Viking Global Equities, LP	93,542,924	8.7%	0.20%	0.20%	-8.59%	-6.21%	-4.04%	9.42%	-	10.58%	7.26%	1.38	Dec-11
Total Global Equities	578,070,960	53.5%	0.71%	0.71%	-4.63%	-7.61%	-6.22%	3.01%	-	4.92%	4.51%	1.01	Nov-11
MSCI AC World Index Free - Net			1.48%	1.48%	1.72%	-3.26%	-5.66%	5.06%	-	8.24%	11.94%	0.70	Nov-11
Russell 3000 Index (DRI)			0.62%	0.62%	1.59%	0.14%	-0.18%	10.78%	-	13.90%	10.91%	1.22	Nov-11
HFRI Equity Hedge (Total) Index			1.29%	1.29%	-0.47%	-5.08%	-5.07%	2.88%	-	4.05%	6.47%	0.59	Nov-11
Real Return													
Brevan Howard LP	76,965,702	7.1%	-0.89%	-0.89%	-1.81%	-5.26%	-5.38%	-2.85%	-	0.58%	5.36%	0.07	Nov-11
Brigade Leveraged Capital Structures Fund LP	54,468,414	5.0%	4.74%	4.74%	9.23%	-6.34%	-7.33%	0.29%	-	2.08%	5.76%	0.33	Mar-12
Capula Global Relative Value Fund Ltd.	64,232,929	5.9%	0.67%	0.67%	2.43%	5.65%	6.62%	7.72%	-	5.84%	1.90%	2.80	Dec-11
Claren Road Credit Fund, Ltd.	23,201,582	2.1%	0.17%	0.17%	-1.38%	-3.55%	-9.52%	-6.08%	-	-5.50%	7.19%	-0.79	Apr-13
DE Shaw Composite Fund LLC	93,110,143	8.6%					11.05%	14.29%	-	14.82%	4.27%	3.19	Nov-11
Graham Absolute Return Trading Ltd.	55,403,684	5.1%	-0.82%	-0.82%	0.06%	-0.64%	-0.75%	1.57%	-	2.40%	4.54%	0.47	Jan-12
OZ Domestic Partners II, L.P.	98,862,298	9.2%	0.52%	0.52%	-3.14%	-7.46%	-7.05%	3.30%	-	6.33%	4.79%	1.23	Nov-11
Winton Futures Fund Limited	36,051,336	3.3%	-2.01%	-2.01%	-2.20%	0.65%	-1.77%	4.11%	-	4.25%	8.95%	0.47	Dec-11
Total Real Return	502,296,087	46.5%	0.55%	0.55%	0.85%	-0.97%	-1.46%	2.82%	-	4.16%	2.70%	1.39	Nov-11
ML 3-month T-Bills			0.03%	0.03%	0.10%	0.14%	0.15%	0.08%	-	0.08%	0.03%	-	Nov-11
HFRI Fund of Funds Composite Index			0.03%	0.03%	-3.03%	-5.83%	-5.87%	1.50%	-	2.63%	3.61%	0.64	Nov-11
Total Hedge Fund Portfolio	1,080,367,047	100.0%	0.63%	0.63%	-2.13%	-4.60%	-4.06%	2.94%	-	4.58%	3.40%	1.23	Nov-11
HFRI Fund of Funds Composite Index			0.03%	0.03%	-3.03%	-5.83%	-5.87%	1.50%	-	2.63%	3.61%	0.64	Nov-11
		[											



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

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

		Returns										Sharpe	Incep
Fund	Market Value	Actual %	Apr	QTD	YTD	FYTD	1 Year	3 Year	5 Year	Incep	Std Dev	Ratio	Date
Market Indices													
Libor3Month			0.05%	0.05%	0.21%	0.40%	0.45%	0.31%	-	0.34%	0.04%	-	Nov-11
Barclays Aggregate Bond Index			0.38%	0.38%	3.43%	4.13%	2.75%	2.29%	-	2.89%	2.69%	0.95	Nov-11
Barclays High Yield Credit Bond Index			3.92%	3.92%	7.40%	0.08%	-1.12%	2.55%	-	6.26%	5.87%	1.01	Nov-11
S&P 500 TR			0.39%	0.39%	1.74%	1.89%	1.21%	11.26%	-	14.17%	10.68%	1.27	Nov-11
MSCI EAFE - Net			2.90%	2.90%	-0.20%	-6.19%	-9.32%	1.48%	-	5.60%	14.03%	0.43	Nov-11
MSCI EMF (Emerging Markets Free) - Net			0.54%	0.54%	6.29%	-12.16%	-17.87%	-4.57%	-	-1.38%	16.81%	-0.02	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 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 April 30, 2016

						Tra	ailing Retur	ns		Calen	dar Year Re	eturns		5 Yr		Sharpe Rati	io	Start
Fund	QTD	YTD	Apr	Mar	Feb	1 Year	3 Year	5 Year	2015	2014	2013	2012	2011	Std Dev	3 yr	5 yr	Incep.	Date
Global Equities																		
Ascend ERSRI Fund LP	0.16%	-6.87%	0.16%	-1.38%	-2.84%	-6.58%	2.75%	2.90%	2.22%	5.01%	12.11%	2.11%	-0.60%	3.50%	0.61	0.73	0.73	Nov-11
Davidson Kempner Institutional Partners, L.P.	0.53%	1.12%	0.53%	0.83%	-0.53%	1.10%	3.89%	4.07%	1.51%	4.45%	9.52%	6.87%	1.27%	2.57%	1.58	1.43	1.53	Mar-96
Elliott Associates, L.P.	2.70%	5.51%	2.70%	0.10%	4.30%	7.52%	8.29%	8.36%	2.51%	8.24%	12.44%	13.18%	3.94%	3.61%	2.00	2.15	1.90	Jan-90
ESG Cross Border Equity Fund LP	-2.60%	-9.48%	-2.60%	-3.50%	-5.40%	-15.24%	-5.40%	0.12%	-5.06%	-7.16%	13.59%	6.74%	9.45%	7.12%	-0.74	0.00	0.66	Jan-04
Indus Asia Pacific Fund, LP	-0.13%	-0.62%	-0.13%	2.80%	-0.90%	-33.15%	-17.13%	-10.29%	-33.23%	-15.60%	4.97%	8.21%	-7.18%	13.81%	-1.07	-0.73	0.18	Dec-00
Luxor Capital Partners, LP	0.38%	-6.85%	0.38%	-2.61%	0.54%	-24.77%	-9.35%	-4.37%	-19.05%	-9.83%	19.53%	5.21%	-2.89%	8.62%	-1.03	-0.51	0.73	Apr-02
PFM Diversified Fund, L.P.	0.81%	-8.84%	0.81%	0.06%	-2.32%	-7.69%	5.40%	4.10%	8.10%	2.84%	22.17%	5.59%	-3.35%	8.70%	0.55	0.47	0.81	Nov-04
Samlyn Onshore Fund, L.P.	1.30%	-5.45%	1.30%	0.28%	-2.67%	-11.25%	4.06%	4.08%	-1.29%	9.24%	18.93%	10.49%	-5.05%	7.61%	0.55	0.52	0.97	Mar-07
Viking Global Equities, LP	0.20%	-8.43%	0.20%	1.20%	-7.10%	-4.02%	9.37%	9.63%	8.27%	13.47%	22.65%	12.75%	7.71%	7.17%	1.07	1.27	1.44	Oct-99
Real Return																		
Brevan Howard LP	-0.89%	-1.80%	-0.89%	-1.98%	0.58%	-5.38%	-2.94%	2.22%	-1.98%	-0.78%	2.68%	3.91%	12.21%	5.98%	-0.58	0.34	0.94	Sep-05
Brigade Leveraged Capital Structures Fund LP	4.74%	9.22%	4.74%	4.14%	-0.70%	-7.33%	0.29%	1.84%	-10.73%	0.61%	6.13%	6.91%	2.55%	5.38%	0.03	0.30	0.57	Jan-07
Capula Global Relative Value Fund Ltd.	0.67%	2.42%	0.67%	0.05%	0.71%	6.61%	7.71%	6.27%	7.53%	8.14%	7.60%	0.41%	6.19%	2.02%	4.20	2.84	1.86	Oct-05
Claren Road Credit Fund, Ltd.	0.38%	1.91%	0.38%	0.06%	0.01%	-7.60%	-5.66%	-1.38%	-7.96%	-10.10%	5.43%	1.49%	6.88%	6.28%	-0.81	-0.24	0.69	Jan-06
DE Shaw Composite Fund LLC						11.07%	13.55%	12.07%	14.62%	15.57%	11.51%	13.94%	3.69%	4.26%	2.93	2.63	1.59	Mar-01
Graham Absolute Return Trading Ltd.	-0.82%	0.00%	-0.82%	-0.80%	0.87%	-1.55%	5.73%	5.30%	1.50%	10.42%	10.50%	9.29%	4.64%	8.05%	0.67	0.64	1.02	Jan-05
OZ Domestic Partners II, L.P.	0.53%	-2.91%	0.53%	0.82%	-2.29%	-6.68%	3.13%	4.57%	-0.44%	5.45%	14.20%	12.01%	0.17%	4.67%	0.56	0.91	0.99	Jan-04
Winton Futures Fund Limited	-2.01%	-2.20%	-2.01%	-4.03%	2.08%	-1.76%	4.12%	3.75%	0.95%	13.88%	9.43%	-3.56%	6.29%	8.91%	0.43	0.42	0.69	Oct-97
Benchmark																		
HFRI Fund of Funds Composite Index	0.03%	-3.03%	0.03%	0.61%	-1.16%	-5.87%	1.50%	1.05%	-0.27%	3.37%	8.96%	4.79%	-5.72%	4.00%				Jan-90
HFRI Fund Weighted Composite Index	0.97%	0.33%	0.97%	2.00%	-0.02%	-3.85%	2.26%	1.71%	-1.12%	2.98%	9.13%	6.36%	-5.25%	4.95%				Jan-90
This is and Weighted composite mack	0.5770	0.5570	0.5770	2.0070	0.0270	3.0370	2.2070	217 270	111270	2.5070	3.1370	0.5070	3.2370	1.5570				34.1.30
Market Indices																		
3 Month Libor - BOM	0.05%	0.21%	0.05%	0.05%	0.05%	0.45%	0.31%	0.34%	0.33%	0.23%	0.27%	0.42%	0.35%	0.04%				Jan-87
Barclays Aggregate Bond Index	0.38%	3.43%	0.38%	0.92%	0.71%	2.75%	2.29%	3.60%	0.57%	5.94%	-2.02%	4.23%	7.86%	2.73%				Jan-76
Barclays High Yield Credit Bond Index	3.92%	7.40%	3.92%	4.44%	0.57%	-1.12%	2.55%	5.42%	-4.46%	2.46%	7.46%	15.81%	4.98%	6.68%				Jul-83
S&P 500 (TR)	0.39%	1.74%	0.39%	6.78%	-0.13%	1.21%	11.26%	11.02%	1.38%	13.69%	32.39%	16.00%	2.11%	12.19%				Jun-88
MSCI EAFE - Net - USD	2.90%	-0.20%	2.90%	6.51%	-1.83%	-9.32%	1.48%	1.69%	-0.81%	-4.90%	22.78%	17.31%	-12.13%	15.36%				Dec-69
MSCI EMF (EMERGING MARKETS FREE) - Net - USD	0.54%	6.29%	0.54%	13.23%	-0.16%	-17.87%	-4.57%	-4.61%	-14.92%	-2.19%	-2.60%	18.23%	-18.42%	18.72%				Dec-87
,																		

Note: The above is manager composite history.

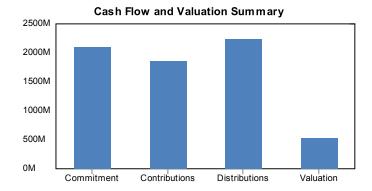
## **Portfolio Summary**

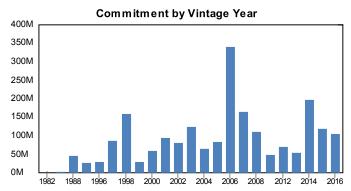
4/30/2016

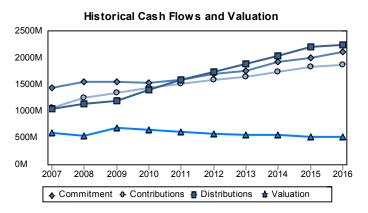
All Portfolio Investments

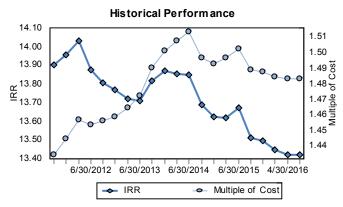
#### **Performance Summary**

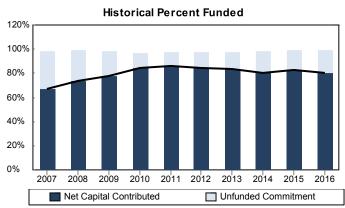
Asset Class	Investment Type	Number of Investments	Commitment	Contributions	Distributions	Adjusted Valuation	Multiple of Cost	IRR	TWR
Private Equity Fund	ds								
1. 7	Agriculture	1	30,000,000	6,633,397	0	5,228,709	0.79	-29.75	-91.83
	Buyout	74	1,225,804,682	1,137,420,629	1,458,367,383	281,221,083	1.53	13.04	13.12
	Direct Lending	3	75,000,000	34,636,409	16,174,142	22,821,182	1.13	8.07	7.68
	Distressed Debt	14	238,000,000	213,972,047	220,098,335	73,828,556	1.37	10.40	10.09
	Energy	8	148,000,000	127,617,116	176,985,082	16,361,505	1.52	23.79	6.15
	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	57,545,930	10,838,430	1.25	6.46	5.12
	Venture Capital	22	281,250,000	245,769,377	203,428,012	118,321,390	1.31	5.47	2.19
Total: Private Equ	uity Funds	127	2,103,054,682	1,865,958,539	2,239,347,705	528,620,855	1.48	13.42	10.87
Total:	•	127	2,103,054,682	1,865,958,539	2,239,347,705	528,620,855	1.48	13.42	10.87

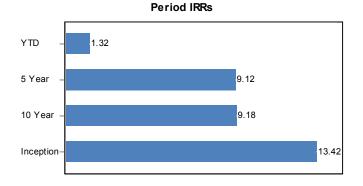












# Employees' Retirement System of Rhode Island Private Equity Performance 12/31/2015

Cumulative Cash Flows (\$)

Cumulative Performance\*

Current Partnerships	Vintage Year	Amount Committed (In \$ unless otherwise noted)	Amount Drawn	Amount Distributed	Valuation (\$)	Net IRR (%)	Net Multiple of Investment
Advent International GPE VII	2012	20,000,000	15,150,000	2,420,000	16,035,111	12.0	1.2
Alta BioPharma Partners III	2003	15,000,000	14,250,000	20,297,956	460,994	5.8	
Alta Partners VIII	2006	15,000,000	15,000,000	22,518,408	10,948,348	18.0	
Aurora Equity Partners III	2004	15,000,000	16,241,318	26,592,641	1,710,570	15.7	1.7
Avenue Special Situations Fund IV	2006	20,000,000	25,179,595	32,706,000	178,824	8.3	
Avenue Special Situations Fund V	2007	20,000,000	20,329,267	26,322,021	151,805	10.6	
Bain Capital Fund X Baring Asia Private Equity Fund VI	2008 2015	25,000,000 15,000,000	24,300,000 2,787,136	18,122,013	14,782,336 2,428,605	7.3 -23.2	
Birch Hill Equity Partners III	2015	CAD 18,000,000	18,862,686	27,218,846	6,019,349	11.9	
Carlyle Asia Partners IV	2014	30,000,000	15,603,547	565,712	13,531,159	-12.9	
Castile Ventures III	2006	5,000,000	5,009,730	1,350,518	1,704,750	-10.7	0.6
Centerbridge Capital Partners	2006	15,000,000	23,528,475	34,456,758	8,032,450	20.7	1.8
Centerbridge Capital Partners III	2015	25,000,000	5,518,421	-	5,911,676	12.0	
Centerbridge Special Credit Partners II	2012	25,000,000	22,500,000	3,127,733	19,816,333	0.8	
Charterhouse Capital Partners VIII	2006	€15,000,000	18,183,957	14,927,673	2,870,874	-0.3	1.0
Coller International Partners IV	2002	15,000,000	13,294,667	17,405,935	704,397	11.7	1.4
Coller International Partners V	2006	15,000,000	12,520,679	13,413,710	4,892,901	9.3	1.5
CVC European Equity Partners III	2001	20,000,000	23,158,043	59,551,716	520,502	41.1	2.6
CVC European Equity Partners IV	2005	€16,500,000	21,266,657	35,072,602	3,868,553	16.6	
CVC European Equity Partners V	2008	€20,000,000	28,668,360	26,956,853	12,931,477	11.2	
CVC Capital Partners VI	2014	€15,000,000	6,622,932	307,415	5,616,314	-25.4	
EnCap Energy Capital Fund IX	2013	18,000,000	11,322,560	602,765	11,557,254	6.0	
EnCap Energy Capital Fund X	2015	25,000,000	1,730,428		1,266,877	-44.5	
Fenway Partners Capital Fund II	1998	15,000,000	18,513,234	20,153,002	1,966,390	4.9	
Fenway Partners Capital Fund III First Reserve Fund X	2006 2004	15,000,000 20,000,000	16,976,092 19,999,999	12,822,077 36,485,800	6,046,965 102,297	2.3 31.1	1.1 1.8
First Reserve Fund X	2004	20,000,000	22,125,580	13,820,741	2,425,920	-8.4	0.7
Focus Ventures III	2006	15,000,000	15,000,000	5,411,619	4,747,748	-6.4 -7.5	
Garrison Opportunity Fund IV	2014	30,000,000	9,918,659	3,411,019	10,953,963	5.0	
Granite Global Ventures II	2004	15,000,000	14,333,475	8,295,316	13,675,129	6.0	
Granite Global Ventures III	2004	15,000,000	14,625,433	18,870,360	15,137,630	17.2	
Green Equity Investors V	2007	20,000,000	20,422,385	23,394,682	13,619,622	17.5	
Industry Ventures Partnership Holdings III	2014	25,000,000	13,812,702	816,859	15,553,184	22.7	1.2
Industry Ventures Partnership Holdings III C	2015	15,000,000	922,500		897,742	-2.8	1.0
Kayne Anderson Energy Fund III	2005	15,000,000	15,965,344	14,983,550	447,457	-1.9	1.0
Kayne Anderson Energy Fund IV	2007	15,000,000	16,605,519	15,128,431	2,861,103	2.9	1.1
Leapfrog Ventures II	2005	10,000,000	9,490,000	6,811,564	4,191,084	2.8	1.2
Leeds Equity Partners IV	2003	10,000,000	10,209,327	10,606,829	3,069,471	4.8	
Lighthouse Capital Partners V	2003	11,250,000	10,462,500	12,023,162	283,952	3.8	
Lighthouse Capital Partners VI	2007	15,000,000	14,250,000	18,725,726	2,107,172	7.4	1.5
LNK Partners	2006	12,500,000	12,010,585	16,598,907	3,664,945	11.8	
MHR Institutional Partners III	2006	20,000,000	20,800,000	20,133,259	8,499,216	7.1	1.4
Nautic Partners V	2000	20,000,000	20,325,743	40,372,953	1,688,114	17.3	
Nautic Partners VI Nautic Partners VII	2007 2014	20,000,000	23,968,648	37,598,621 1,593,776	13,937,277 12,797,439	17.5 108.7	2.2 1.6
Nordic Capital Fund V	2014	20,000,000 €14,615,550	8,867,248 21,434,529	57,791,355	1,036,022	21.1	2.7
Nordic Capital Fund VI	2003	€ 15,000,000	22,422,359	21,122,495	12,292,080	7.0	
Nordic Capital Fund VII	2008	€ 15,000,000	20,148,263	4,925,924	18,810,914	3.6	
Nordic Capital Fund VIII	2013	€15,000,000	9,265,171	355,697	8,006,565	-7.7	
Oaktree European Principal Fund III	2011	20,000,000	16,550,000	1,684,935	18,581,886	9.2	
Paine & Partners Capital Fund IV	2015	30,000,000	6,492,734	-	5,088,046	-50.3	
Paladin III	2008	10,000,000	11,109,084	5,470,861	9,063,100	7.7	1.3
Parthenon Investors II	2001	23,960,000	23,409,381	36,875,200	1,029,562	12.4	1.6
Point 406 Ventures I	2006	10,000,000	10,081,265	4,123,844	13,667,218	11.7	1.8
Point Judith Venture Fund II	2006	5,000,000	5,899,014	1,992,739	3,621,965	-1.1	1.0
Providence Equity Partners IV	2000	25,000,000	35,971,884	68,389,613	244,082	23.9	1.9
Providence Equity Partners V	2005	25,000,000	31,095,401	30,377,342	7,910,535	4.0	1.2
Providence Equity Partners VI	2007	25,000,000	28,539,465	23,468,140	14,920,781	6.7	1.4
Providence Equity Partners VII	2012	25,000,000	13,858,789	3,281,714	12,163,608	9.0	
Riverside Capital Appreciation Fund VI	2013	20,000,000	10,715,624	13,598	11,995,536	12.3	
Riverside Micro-Cap Fund III	2014	20,000,000	16,902,526	(4,719)	19,804,350	16.7	1.2
Sorenson Capital Partners III	2014	30,000,000	8,105,083	-	6,798,302	-19.5	
TPG Partners IV	2003	15,000,000	16,672,684	28,475,865	4,357,889	16.0	
TPG Partners V	2006	20,000,000	20,697,887	16,803,606	10,984,877	5.1	1.3
TPG Partners VI	2008	10,000,000	13,401,482	10,361,438	7,263,463	9.5	
Trilantic Capital Partners IV	2007	11,098,351	11,169,893	13,654,272	3,691,255	13.9	
W Capital Partners	2004	15,000,000	14,197,500	10,062,238	1,164,580	-7.5	
W Capital Partners II WLR Recovery Fund IV	2007 2007	15,000,000 8,000,000	14,896,718 7,277,318	16,133,252 8,135,900	4,766,316 1,739,781	11.4 8.1	1.4 1.4
Other funds in aggregate**	various	120,000,000	102,094,629	93,459,014	43,445,616	0.1	1.4
Total		\$ 1,345,339,887	\$ 1,183,042,114				

\*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 circle to consider a fund's start date (vintage year) when assessing IRRs. Multiple of investment is another indicator of returns, and is calculated by dividing the fund's cumulative distributions and current value, after fees, by the amount of capital paid in. Please note that performance calculations are specific to the ERSRI investment, and were not prepared, reviewed or approved by the General Partners.

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

#### **PORTFOLIO SUMMARY**

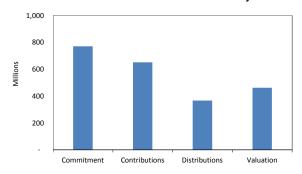
#### 12/31/2015

All Portfolio Investments - Real Estate

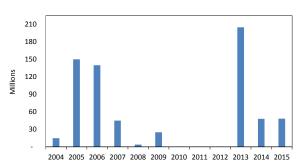
#### Performance Summary

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	431,444,460	237,413,058	384,362,327	1.4x	5.2%	5.5%
	Non-Core	19	365,260,817	260,468,166	129,397,939	78,192,586	0.8x	-5.8%	0.1%
Total: Real Estate Funds		27	770,260,817	691,912,626	366,810,997	462,554,913	1.2x	3.3%	4.5%
Total:		27	770,260,817	691,912,626	366,810,997	462,554,913	1.2x	3.3%	4.5%

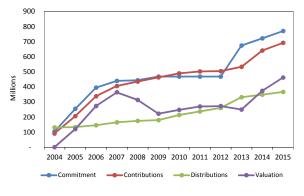
#### **Cash Flow and Valuation Summary**



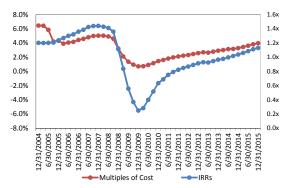
#### Commitment by Vintage Year



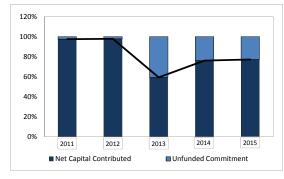
#### **Historical Cash Flows and Valuation**



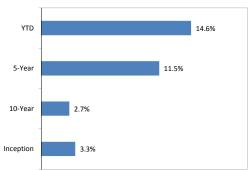
#### **Historical Performance**



#### **Historical Percent Funded**



#### Period IRRs



# Employees' Retirement System of Rhode Island Real Estate Performance 12/31/2015

Cumulative Cash Flows (\$)

Cumulative Performance\*

Current Partnerships	Vintage Year	Amount Committed (In \$ unless otherwise noted)	Amount Drawn	Amount Distributed	Valuation (\$)	Net IRR (%)	Net Multiple of Investment
AEW Core Property Trust	open-end	60,000,000	60,000,000	10,480,447	86,071,586	13.8%	1.6
Crow Holdings Retail Fund	2015	24,000,000	1,059,978	-	902,992	n/a	n/a
Exeter Industrial Value Fund III	2014	30,000,000	13,500,000	291,849	14,793,903	13.6%	1.1
Fillmore East Fund	2006	10,000,000	10,000,000	8,195,874	-	-9.6%	0.8
GEM Realty Fund V	2013	50,000,000	22,180,625	875,000	23,517,003	3.2%	1.1
Heitman America Real Estate Trust	open-end	60,000,000	60,000,000	2,331,888	70,860,976	13.3%	1.2
IC Berkeley Partners III	2013	18,000,000	13,158,326	977,760	14,085,887	17.3%	1.1
JP Morgan Strategic Property Fund	open-end	75,000,000	75,000,000	20,602,854	98,513,016	6.0%	1.6
JP Morgan Alternative Property Fund	2006	20,000,000	20,000,000	14,727,125	190,431	-0.8%	0.7
Lone Star Real Estate Fund IV	2015	24,260,817	7,077,984	524,415	6,313,406	-3.7%	1.0
Magna Hotel Fund III	2008	4,000,000	3,387,357	3,785,281	2,890,342	17.3%	2.0
Morgan Stanley Prime Property Fund	open-end	35,000,000	35,000,000	17,048,764	57,440,037	7.5%	2.1
Prudential (PRISA)	open-end	50,000,000	50,000,000	14,604,726	71,476,712	5.7%	1.7
TriCon Capital Fund VII	2005	15,000,000	14,571,533	3,692,644	1,245,378	-18.2%	0.3
Waterton Fund XII	2014	35,000,000	13,032,324	1,801,917	14,253,244	30.9%	1.2
Total		\$ 510,260,817	\$ 397,968,127	\$ 99,940,543	\$ 462,554,913		

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

Section VII.

Cash Flow



# Monthly Valuation Change

Period: 2016-04-01 - 2016-04-30

Category	Source Account Name	Closing Balance	Market Value Increase/(Decrease)	Transfer In/(Out)	Opening Balance
Grand Total		7,543,424,213.03	95,463,379.33	(37,632,643.73)	7,485,593,477.43
Total Global Equity	у	4,390,297,830.35	56,683,673.23	226,107,401.03	4,107,506,756.09
Global Equity		3,814,594,740.18	52,714,695.88	226,107,401.03	3,535,772,643.27
	SSGA R3000 INDEX	1,288,083,189.13	8,007,377.47	(29,957,300.22)	1,310,033,111.8
	SSGA MSCI EAFE	844,404,842.35	24,408,650.65	66,385.95	819,929,805.7
	SSGA MSCI CANADA	106,448,003.54	6,733,451.07	7,305.74	99,707,246.7
	SSGA MSCI EM	327,564,227.45	1,777,301.35	75,041.27	325,711,884.8
	QVM TILT	763,422,104.13	8,846,218.21	253,233,221.54	501,342,664.3
	REAL ESTATE	484,672,373.58	2,941,697.13	2,682,746.75	479,047,929.70
Global Equity H	ledge Funds	575,703,090.17	3,968,977.35	0.00	571,734,112.82
	DAVIDSON KEMPNER	76,340,210.64	427,064.72	0.00	75,913,145.92
	ELLIOTT ASSOCIATES	87,105,037.27	2,205,190.82	0.00	84,899,846.4
	INDUS ASIA PACIFIC	450,808.38	(608.00)	0.00	451,416.38
	PFM DIVERSIFIED	75,436,832.38	581,243.74	0.00	74,855,588.64
	SAMLYN ON/OFFSHORE	101,067,179.95	1,333,095.16	0.00	99,734,084.79
	VIKING GLOBAL EQUITI	93,542,924.34	216,634.83	0.00	93,326,289.5
	LUXOR CAP PTNS LP	33,728,879.81	126,634.88	0.00	33,602,244.9
	ESG CBE FUND LP	39,780,270.55	(1,080,920.17)	0.00	40,861,190.7
	ASCENT ERSRI FUND LP	68,250,946.85	160,641.37	0.00	68,090,305.4
Private Equity		526,068,132.36	(1,714,965.88)	(15,255,288.90)	543,038,387.14
Private Equity		526,068,132.36	(1,714,965.88)	(15,255,288.90)	543,038,387.14
	PRIVATE EQUITY	526,068,132.36	(1,714,965.88)	(15,255,288.90)	543,038,387.1
Total Fixed Income	e	1,092,319,661.32	5,831,811.64	0.00	1,086,487,849.68
<b>Fixed Income</b>		1,092,319,661.32	5,831,811.64	0.00	1,086,487,849.68
	MACKAY SHIELDS	540,335,593.16	2,061,014.04	0.00	538,274,579.1
	PYRAMIS GLOBAL ADV	551,984,068.16	3,770,797.60	0.00	548,213,270.5
<b>Total Real Return</b>		1,421,192,683.12	32,881,046.46	(978,330.98)	1,389,289,967.64
Alternative Abso	olute Return	360,393,161.82	(77,381.44)	(506,905.83)	360,977,449.09
	BLUE CREST CAP	0.00	0.00	(506,905.83)	506,905.83
	BREVAN HOWARD	76,965,701.57	(660,741.20)	0.00	77,626,442.7
	DE SHAW	93,110,143.19	1,179,464.09	0.00	91,930,679.1
	OZ DOMESTIC PTRS	98,862,297.59	594,708.53	0.00	98,267,589.0
	WINTON FUTURE FD	36,051,335.80	(738,207.23)	0.00	36,789,543.0
	GRAHAM ABS RETURN	55,403,683.67	(452,605.63)	0.00	55,856,289.3
Alternative Fixe	ed Income	133,796,152.95	2,753,398.82	(8,106,772.15)	139,149,526.28
	BRIGADE LEV CAP	54,468,413.73	2,464,963.54	0.00	52,003,450.19
	CAPULA GLOBAL	64,232,929.48	410,833.80	0.00	63,822,095.68
	CLAREN ROAD CR. FUND	15,094,809.74	(122,398.52)	(8,106,772.15)	23,323,980.4
Credit		411,872,584.04	7,905,904.61	0.00	403,966,679.43
	PIMCO	210,741,307.21	2,669,879.67	0.00	208,071,427.5
	WAMCO	201,131,276.83	5,236,024.94	0.00	195,895,251.89
GILBs		281,529,441.62	525,349.65	0.00	281,004,091.97
44	BROWN BROTHERS HARR	281,529,441.62	525,349.65	0.00	281,004,091.97



# Monthly Valuation Change

Period: 2016-04-01 - 2016-04-30

Category	Source Account Name	Closing Balance	Market Value Increase/(Decrease)	Transfer In/(Out)	Opening Balance
Publicly Trad	ed Infrastructure	233,601,342.69		7,635,347.00	204,192,220.87
	PRIV INFRASTR AGGR	74,721,889.07	4,862,573.24	7,635,347.00	62,223,968.83
	HARVEST FUND ADVISOR	158,879,453.62	16,911,201.58	0.00	141,968,252.04
Total Cash		96,384,213.73	187,287.79	5,726,796.66	90,470,129.28
Cash Accoun	its	96,384,213.73	187,287.79	5,726,796.66	90,470,129.28
	ERSRI CASH	94,912,525.73	187,287.79	8,109,443.66	86,615,794.28
	CITIZENS CASH	1,471,688.00	0.00	(2,382,647.00)	3,854,335.00
Total Other		16,220,011.28	1,577,246.31	0.00	14,642,764.97
Other		16,220,011.28	1,577,246.31	0.00	14,642,764.97
	RUSSELL OVERLAY FD	16,220,011.28	1,577,246.31	0.00	14,642,764.97
Total Miscellane	eous	941,680.87	17,279.78	(253,233,221.54)	254,157,622.63
Miscellaneou	s Accounts	941,680.87	17,279.78	(253,233,221.54)	254,157,622.63
	RI TRANS ACCT	5,423.09	170.41	0.00	5,252.68
	SHOTT CAPITAL	431,349.98	269,492.90	0.00	161,857.08
	DOM EQUITY TRANS	74.25	0.00	0.00	74.25
	NON-US EQUITY TRANS	503,206.80	(253,042.78)	(253,233,221.54)	253,989,471.12
	FIXED INC TRANS	1,626.37	659.25	0.00	967.12
	MACKAY SHIELDS LLC	0.38	0.00	0.00	0.38

#### CASH FLOW ANALYSIS - INCOME & EXPENSES

#### Employees Retirement System

FISCAL YEAR 2016	FY 2015-16												
	TOTAL	Projected June	Projected <b>May</b>	Projected <b>April</b>	Projected <b>March</b>	Actual February	Actual January	Actual December	Actual November	Actual October	Actual September	Actual August	Actual July
							2016						2015
MEMBER BENEFITS	845,553,692	68,822,584	68,919,626	69,591,552	69,695,809	69,767,583	69,720,118	69,303,742	69,781,920	69,843,354	69,772,741	80,698,833	69,635,830
ADMINISTRATIVE EXPENSES	10,492,238	1,455,990	718,107	1,403,401	1,327,462	490,334	490,349	1,455,574	415,373	920,437	908,661	670,460	236,090
INVESTMENT EXPENSES	8,517,851	5,025	1,202,775	290,754	1,489,542	391,688	449,787	(6,984)	1,354,605	517,439	680,230	1,476,800	666,191
TOTAL OUTFLOW	864,563,781	70,283,599	70,840,507	71,285,706	72,512,813	70,649,606	70,660,254	70,752,331	71,551,899	71,281,229	71,361,632	82,846,093	70,538,111
CONTRIBUTIONS	482,055,417	45,522,759	38,392,495	36,341,134	44,799,731	37,789,948	42,154,006	51,049,618	43,254,275	37,105,170	25,941,084	25,205,629	54,499,568
OTHER INCOME*	86,739,948	7,804,570	15,712,147	3,394,010	6,136,870	6,008,319	3,843,075	10,795,323	5,469,260	12,649,680	6,878,007	3,189,206	4,859,480
TOTAL INCOME	568,795,365	53,327,329	54,104,642	39,735,144	50,936,601	43,798,267	45,997,081	61,844,941	48,723,535	49,754,850	32,819,091	28,394,835	59,359,048
DIFFERENCE	(295,768,416)	(16,956,270)	(16,735,865)	(31,550,563)	(21,576,211)	(26,851,338)	(24,663,173)	(8,907,390)	(22,828,363)	(21,526,379)	(38,542,542)	(54,451,258)	(11,179,063)

#### Municipal Employees Retirement System

	TOTAL	Projected June	Projected May	Projected April	Projected March	Actual February	Actual January 2016	Actual December	Actual November	Actual October	Actual September	Actual August	Actual July 2015
MEMBER BENEFITS	91,819,616	7,241,105	7,233,247	7,584,040	7,566,902	7,561,126	7,549,161	7,529,997	7,473,519	7,434,266	7,392,781	9,908,223	7,345,248
ADMINISTRATIVE EXPENSES	2,281,914	315,299	155,113	302,293	285,305	105,032	108,534	321,127	91,498	202,078	198,842	145,660	51,133
INVESTMENT EXPENSES	1,851,548	1,088	259,802	62,628	320,139	83,902	99,556	(1,541)	298,392	113,602	148,855	320,840	144,285
TOTAL OUTFLOW	95,953,079	7,557,493	7,648,162	7,948,961	8,172,346	7,750,060	7,757,250	7,849,583	7,863,410	7,749,947	7,740,478	10,374,722	7,540,667
CONTRIBUTIONS	61,274,262	5,713,207	4,617,072	4,513,754	5,412,174	4,816,573	5,669,644	5,706,992	6,283,320	4,631,697	7,458,495	2,105,073	4,346,261
OTHER INCOME*	18,885,705	1,690,105	3,393,857	731,070	1,318,966	1,287,012	850,625	2,381,654	1,204,769	2,777,190	1,505,113	692,866	1,052,477
TOTAL INCOME	80,159,967	7,403,312	8,010,929	5,244,824	6,731,140	6,103,585	6,520,269	8,088,646	7,488,089	7,408,887	8,963,608	2,797,939	5,398,738
DIFFERENCE	(15,793,112)	(154,181)	362,768	(2,704,137)	(1,441,206)	(1,646,475)	(1,236,981)	239,063	(375,321)	(341,059)	1,223,130	(7,576,783)	(2,141,929)

#### CASH FLOW ANALYSIS - INCOME & EXPENSES

State Poli	ce
Retirement	System

Retirement System	TOTAL	Projected June	Projected May	Projected April	Projected March	Actual February	Actual January 2016	Actual December	Actual November	Actual October	Actual September	Actual August	Actual July 2015
MEMBER BENEFITS	4,116,440	253,947	231,479	370,798	370,798	367,746	367,044	367,043	359,327	352,382	355,382	374,882	345,612
ADMINISTRATIVE EXPENSES	189,204	26,024	12,771	24,801	23,304	8,553	9,202	26,978	7,672	16,913	16,596	12,153	4,236
INVESTMENT EXPENSES	153,587	90	21,391	5,138	26,150	6,833	8,441	(129)	25,019	9,508	12,424	26,769	11,954
TOTAL OUTFLOW	4,459,231	280,061	265,642	400,738	420,252	383,132	384,687	393,891	392,018	378,802	384,402	413,803	361,802
CONTRIBUTIONS	5,661,440	383,947	351,479	400,798	380,798	467,746	427,044	1,202,043	379,327	412,382	380,382	384,882	490,612
OTHER INCOME*	1,567,740	139,496	279,439	59,980	107,736	104,808	72,121	200,081	101,017	232,436	125,622	57,808	87,196
TOTAL INCOME	7,229,180	523,443	630,918	460,778	488,534	572,554	499,165	1,402,125	480,343	644,818	506,004	442,690	577,808
DIFFERENCE	2,769,950	243,382	365,276	60,040	68,282	189,422	114,478	1,008,233	88,325	266,016	121,602	28,887	216,006

Judicial													
Retirement System		Projected	Projected	Projected	Projected	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual
	TOTAL	June	May	April	March	February	January 2016	December	November	October	September	August	July 2015
							2016						2010
MEMBER BENEFITS	2,378,469	174,233	159,357	212,336	212,336	212,336	204,749	204,749	204,749	204,749	204,314	196,571	187,987
ADMINISTRATIVE	97,979	13,458	6,598	12,804	12,022	4,410	4,768	14,034	3,987	8,786	8,616	6,304	2,192
EXPENSES	31,313	15,450	0,550	12,004	12,022	4,410	4,700	14,054	3,307	0,700	0,010	0,504	2,132
INVESTMENT EXPENSES	79,534	46	11,051	2,653	13,490	3,523	4,373	(67)	13,004	4,939	6,450	13,886	6,186
EAFENSES													
TOTAL OUTFLOW	2,555,983	187,737	177,006	227,793	237,849	220,270	213,890	218,716	221,741	218,475	219,380	216,761	196,366
CONTRIBUTIONS	3,438,469	284,233	279,357	262,336	252,336	252,336	254,749	404,749	264,749	264,749	254,314	261,571	402,987
	,,	. ,	.,	,	,	,	,	,	,	,	, ,	, -	, , , ,
OTHER INCOME*	812,116	72,137	144,363	30,965	55,579	54,043	37,366	104,081	52,503	120,750	65,217	29,987	45,124
TOTAL INCOME	4,250,585	356,370	423,720	293,302	307,915	306,380	292,115	508,830	317,253	385,500	319,531	291,558	448,111
TOTAL INCOME	4,230,363	336,370	423,720	293,302	307,913	300,380	232,115	508,830	317,233	365,500	319,531	291,556	440,111
DIFFERENCE	1,694,602	168,633	246,714	65,509	70,067	86,110	78,225	290,115	95,512	167,025	100,151	74,797	251,745

 $<sup>\</sup>star \text{includes}$  income from Real Estate Investments, Private Equity, and Cash Accounts

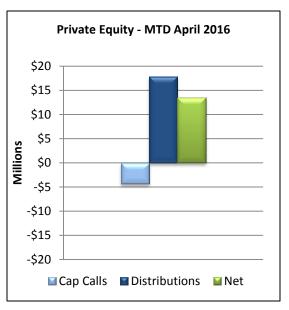
FISCAL YEAR 2016 DIRECT BILLED INVESTMENT MANAGER FEES, PROFESSIONAL FEES & OPERATING EXPENSES

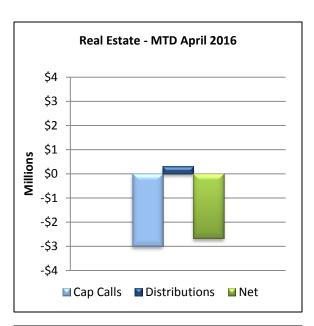
ERSRI & MERSRI ACCRUAL BASIS

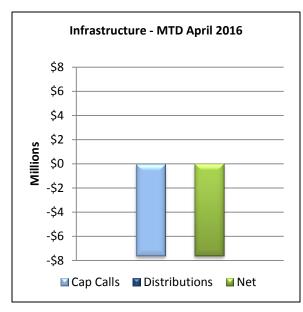
	Actual Jul 15	Actual Aug	Projected Sept	Actual Oct	Projected Nov	Projected Dec	Projected Jan 16	Projected Feb	Projected Mar	Projected Apr	Projected May	Projected June	Projected TOTAL
EQUITIES US			54 540			40.100			62.000			62.000	220 027
SSGA Russell 3000			54,749			49,189			63,000			63,000	229,937
Shott Capital/Hamilton Lane			31,173			<u>65</u>			1,700			1,700	34,639 264,576
			85,922			49,254			64,700			64,700	204,570
FIXED INCOME													
Pyramis			176,955			180,000			180,000			180,000	716,955
Mackay Shields			186,890			195,000			195,000			195,000	771,890
Brown Bros.TIPS/GILB			83,521			85,000			85,000			85,000	338,521
			447,366			460,000			460,000			460,000	1,827,366
INT'L EQUITIES													
SSGA MSCI EAFE			88,284			78,348			100,000			100,000	366,632
SSGA MSCI CAD			9,040			7,868			11,000			11,000	38,907
SSGA MSCI Emerg Mkts			93,432			84,844			110,000			110,000	398,275
			190,755			171,060			221,000			221,000	803,815
CREDIT													
WAMCO			151,745			155,000			155,000			155,000	616,745
PIMCO			135,000 286,745			135,000 290,000			135,000 290,000			135,000 290,000	540,000 1,156,745
Infrastructure			200,743			290,000			290,000			290,000	1,150,745
Harvest Partners			206,672			204,856			200,000			200,000	811,528
REAL ESTATE													
Direct Billed Real Estate	468,839	325,859	449,048	480,045	174,409	0	493,165	154,786	71,488	252,069	0	0	2,869,709
ALTERNATIVE INVESTMENTS													
Direct Billed Private Equity	359,830	1,512,554	398,963	165,487	1,516,731	(8,723)	69,034	331,185	1,777,922	109,124	1,495,106	6,250	7,733,463
SUB TOTAL-INV MGMT FEES	828,668	1,838,414	2,065,470	645,532	1,691,140	1,166,447	562,199	485,971	3,085,110	361,194	1,495,106	1,241,950	15,467,201
PROFESSIONAL FEES													
T1	12 550	•	2 665	10 100	0.410	2 257	^	15 503	E 027	11 500	22 202	7 (40	103,247
Legal	13,550	0	2,665	12,190	8,418	3,357	0	15,597	5,937	11,500	22,393	7,642	347,295
BNY Mellon - Custodial	28,127	28,151	29,372	29,616	29,112	29,063	28,772	28,779	28,166	28,136	30,000	30,000	412,500
Cliffwater PCA/Russell	37,500 14,583	14,583	37,500 61,776	37,500 14,583	37,500 33,333	37,500 63,695	37,500 14,583	37,500 14,583	37,500 94,421	37,500 14,583	37,500 33,333	37,500 80,000	454,057
PCA Real Estate	10,417	14,583 10,417	10,417	14,583 10,417	10,417	10,417	10,417	10,417	10,417	10,417	10,417	10,417	125,004
ICA REAL BSTATE	104,177	53,150	141,729	104,306	118,780	144,032	91,273	106,877	176,441	102,137	133,643	165,559	1,442,103
OPERATING EXPENSE	101/11	00,100	,	101,000	110,.00	111,002	31,273	100,077	1.0,111	102,107	100,010	100,000	.,,100
Retirement Transfers	322,692	584,691	701,368	677,969	330,009	1,625,828	520,000	502,277	1,482,832	1,620,074	778,206	1,631,781	10,777,729
Other Expense	<u>0</u>	<u>0</u>	<u>0</u>	1,125	<u>0</u>	38,335	1,625	<u>0</u>	6,000	0	1,000	13,532	61,617
	322,692	584,691	701,368	679,094	330,009	1,664,163	521,625	502,277	1,488,832	1,620,074	779,206	1,645,313	10,839,345
TOTAL:	1,255,537	2,476,255	2,908,567	1,428,933	2,139,929	2,974,642	1,175,097	########	4,750,383	2,083,404	2,407,955	3,052,822	27,748,649

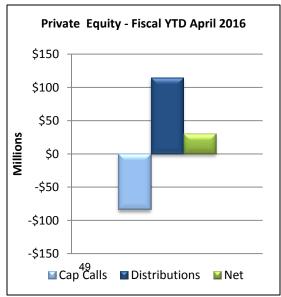
Note: Numbers in bold are actual.

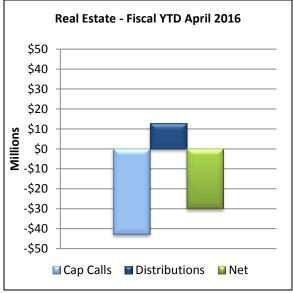
# Private Equity, Real Estate, and Infrastructure Cash Flows

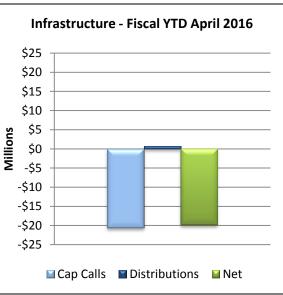








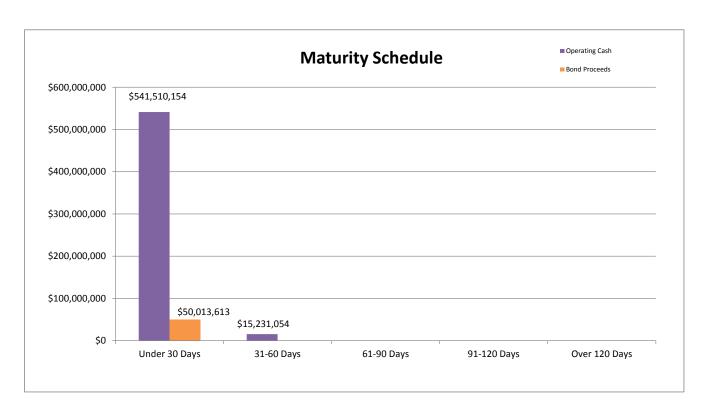




Section VIII.

**Short-Term Investments** 

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



Vendor	СР	CD	Agency	Money Mkt	PIP	Repo	GID	OSIP	Total (\$)
Guidelines-Total/Vendor	25%/10%	50%/20%	75%/35%	75%/35%	75%/35%	100%/20%	75%/35%	50%/50%	, in the second
OSIP	0	0	0	0	0	0	0	280,300,115	280,300,115
	0%	0%	0%	0%	0%	0%	0%	50%	50%
Bank RI	0	15,231,054	0	15,068,615	0	0	0	0	30,299,668
	0%	3%	0%	3%	0%	0%	0%	0%	5%
Santander Bank	0	0	0	0	23,167,013	0	0	0	23,167,013
	0%	0%	0%	0%	4%	0%	0%	0%	4%
Citizens Bank	0	0	0	0	60,255,837	0	0	0	60,255,837
	0%	0%	0%	0%	11%	0%	0%	0%	11%
Webster Bank	0	0	0	0	5,668,483	0	0	0	5,668,483
	0%	0%	0%	0%	1%	0%	0%	0%	1%
Customers Bank	0	0	0	0	83,819,858	0	0	0	83,819,858
	0%	0%	0%	0%	15%	0%	0%	0%	15%
Washington Trust	0	0	0	60,667,521	0	0	0	0	60,667,521
	0%	0%	0%	11%	0%	0%	0%	0%	11%
TD Bank	0	0	0	0	12,562,715	0	0	0	12,562,715
	0%	0%	0%	0%	2%	0%	0%	0%	2%
TOTALS	-	15,231,054	-	75,736,135	185,473,905	-	-	280,300,115	556,741,209
(%) PORTFOLIO	0.00%	2.74%	0.00%	13.60%	33.31%	0.00%	0.00%	50.35%	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

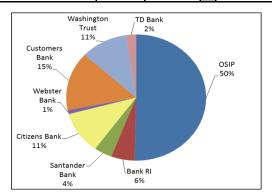
# April 01, 2016 to April 30, 2016 Beginning Balance Ending Balance Average Daily Balance Earnings Yield(Annual)

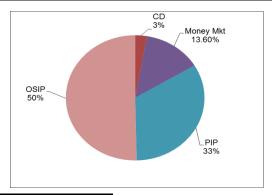
		Арі	il 01	, 2016 to April 30, 201	16				
Fund Name	Ве	ginning Balance		Ending Balance		verage Daily Balance		Earnings	Yield(Annual
GENERAL FUND	\$	233,102,754.64	\$	253,424,224.58		291,699,421.31	\$	121,469.94	0.5066%
H.A.V.A	\$	296.46	\$	296.58	\$	296.46	\$	0.12	0.4925%
GENERAL FUND (HIST PRES)	\$	539,535.80	\$	539,773.41	\$	539,535.80	\$	237.61	0.5358%
HISTORIC TAX CREDITS	\$	2,913,722.08	\$	2,914,989.91		2,913,722.08	\$	1,267.83	0.5294%
HIGHWAY FUND	\$	30,305,600.80	\$	35,319,350.26	\$	31,718,934.13	\$	13,749.46	0.5274%
r.D.I. RESERVE (DET)	\$	94,249,911.25	\$		\$	88,816,577.92	\$	20,368.10	0.2790%
		34,243,311.23		83,270,279.33	Ş	88,810,377.92		20,306.10	0.2750/6
EMPLOYER PENSION CONTRIBUTION	\$	-	\$	-			\$	•	
RICAP GL FUND 21	\$	96,787,355.15	\$	89,122,934.19	\$	93,734,021.82	\$	35,579.04	0.4618%
BOND CAPITAL FUND	\$	748,227.85	\$	1,249,513.23	\$	3,141,561.18	\$	1,285.38	0.4978%
R.I. CLEAN WATER ACT	\$	3,193,217.17	\$	3,194,596.57	\$	3,193,217.17	\$	1,379.40	0.5256%
STATE LOTTERY FUND	\$	48,062,156.91	\$	49,580,817.84	\$	43,335,490.24	\$	18,660.93	0.5239%
ASSESSED FRINGE BEN ADM	\$	1,811,719.93	\$	1,812,471.67	\$	1,811,719.93	\$	751.74	0.5048%
AUTO EQUIPMENT SERVICE									
	\$	1,250.35	\$	1,250.86	\$	1,250.35	\$	0.51	0.4963%
HEALTH INSURANCE FUND	\$	30,389,486.50	\$	25,301,561.81		27,696,153.17	\$	12,075.31	0.5305%
FLEET REVOLVING LOAN FUND	\$	3,758,067.05	\$	3,759,268.63	\$	3,758,067.05	\$	1,201.58	0.3890%
EMPLOYEES RETIREMENT	\$	410,125.69	\$	117,312.50	\$	17,536,792.36	\$	7,186.81	0.4986%
MUNICIPAL EMPLOYEES RET.	\$	831,120.05	\$	982,257.90	\$	2,956,120.05	\$	1,137.85	0.4683%
RETIREE HEALTH FUND	\$	639,775.63	\$	640,055.52	\$	639,775.63	\$	279.89	0.5323%
BOG RETIREE FUND	\$	122,702.57	\$	62,734.28	\$	72,702.57	\$	31.71	0.5307%
RIPTA HEALTH FUND	\$	35,845.07	\$	35,860.85	\$	35,845.07	\$	15.78	0.5356%
PERMANENT SCHOOL FUND	\$	1,941,565.83	\$	1,942,420.87	\$	1,941,565.83	\$	855.04	0.5358%
TEACHER RETIREE HEALTH FUND	\$	1,677,551.55	\$	1,178,134.00	\$	1,410,884.88	\$	582.45	0.5023%
RI ST POL RETIREE HEALTH	\$	123,587.84	\$	123,638.59	\$	123,587.84	\$	50.75	0.4996%
RI LEG RETIREE HEALTH	\$	100,554.74	\$	100,595.95	\$		\$	41.21	0.4986%
						100,554.74			
RI JUDICIAL RETIREE HEALTH	\$	40,368.56	\$	40,385.10	\$	40,368.56	\$	16.54	0.4985%
UNIVERSITY COLLEGE	\$	12,189.45	\$	12,194.74	\$	12,189.45	\$	5.29	0.5280%
HIGHER EDUCATION	\$	-	\$	-			\$	-	
INDUS. BLDG. & MTG. INS.	\$	2,013,401.82	\$	2,014,288.51	\$	2,013,401.82	\$	886.69	0.5358%
Operating Funds Totals	\$	553,812,090.74	\$	556,741,207.70	\$	619,243,757.41	\$	239,116.96	0.470%
	ć		ć						
G.O. NOTE 1991 SER. B	\$	-	\$	-			\$	-	
CCDL1993A	\$	-	\$	-			\$	-	
BOND CCDL 1994 SERIES A	\$	-	\$	-			\$	-	
BOND CCBL96A	\$	-	\$	-			\$	-	
CAP DEV OF 1997 SERIES A	\$	_	\$	_			\$	_	
	\$		\$				\$		
CCDL1998A		-		-				-	
CCDL 1998B	\$	-	\$	-			\$	-	
MMG099 1999	\$	-	\$	-			\$	-	
BOND CAPITOL CCDL2000A	\$	-	\$	-			\$	-	
MULTI-MODAL GEN OBL 2000	\$	_	\$	_			Ś	_	
	\$		Ś				Ś		
CCDL2001C		-		-			۶	-	
CCDL2002B	\$	-	\$	-			\$	-	
CCDL 2004 SERIES A	\$	1,822,923.14	\$	1,239,066.90	\$	1,355,190.75	\$	597.90	0.5368%
BOND CCDL 2005 SERIES C	\$	-	\$	-			\$	-	
BOND CCDL 2005 SERIES E	\$	_	Ś	-			Ś	_	
	\$		ć				ċ		
BOND CCDL 2006 SERIES B			۶				Ş		
BOND CCDL 2006 SERIES C	\$	874,219.55	\$	874,198.86	\$	873,814.04	\$	384.82	0.5358%
GO BND-NTAX 2007 SERIES A	\$	1,250,030.42	\$	1,250,000.96	\$	1,249,450.71	\$	550.25	0.5358%
GO BND-TAX 2007 SERIES B	\$	-	\$	-			\$	-	
GO BND-NTAX 2008 SERIES B	\$		\$	_			Ś		
		_		_			ب	_	
GO BND-TAX 2008 SERIES C	\$		\$	-			>	-	
CCDL10B BOND CAPITAL COMPONENT	\$	950,440.77	\$	950,418.38		950,000.00	\$	418.38	0.5358%
CCDL10C	\$	159,690.69	\$	159,761.02	\$	159,690.69	\$	70.33	0.5358%
CCDL10D	\$	-	\$	-			\$	-	
CCDL2011A	\$	7,933,862.99	\$	7,914,285.90	Ś	7,914,675.32	\$	3,485.62	0.5358%
CCDL2011A									
	\$	6,295,497.28	\$	6,295,301.25	\$	6,292,530.05	\$	2,771.20	0.5358%
GO CCDL 2013A	\$	5,774,517.01	\$	5,513,993.88		-	\$	2,450.66	0.5359%
GO CCDL 2013B	\$	6,252,899.80	\$	6,252,752.47	\$	-	\$	2,752.47	0.5358%
GO CCDL 2014A	\$	17,816,140.75	\$	11,368,268.33	\$	-	\$	5,583.71	0.5370%
GO CCDL 2014B	\$	6,293,582.94	\$	6,293,434.65		_	\$	2,770.38	0.5358%
		0,233,302.34		0,233,434.03	Ý	=	\$	2,770.30	0.555070
CLEAN WATER CCDL 1998B	\$	-	\$	-			\$	-	
CLEAN WATER CCDL 1994 (A)	\$	-	\$	-			\$	-	
CAP DEV. OF 1997 SERIES A	\$	-	\$	-			\$	-	
CLEAN WATER CCDL 2002 B	\$	-	\$	-			\$	-	
CLEAN WATER 2004 SERIES A	\$	175,552.62	\$	175,548.49	\$	175,471.21	\$	77.28	0.5358%
CLN WATER CCDL 2005 SER E	\$	,552.52	Ś	5,5 .0.45	+	5, ., 1,21	ć		
		-		-			ب	-	
CAP DEV. OF 1997 SERIES A	\$	-	\$	-			\$	-	
RI POLLUT. CONT 94 SER. A	\$	-	\$	-			\$	-	
CCDL99A 1999A	\$	206,665.23	\$	206,660.36	\$	206,569.39	\$	90.97	0.5358%
POL. CTRL CCDL 2006 SER C	\$	· ·	\$	· ·		•	\$	-	
CLEAN WATER 2007 SERIES A	\$	283,383.48	Ś	283,376.80	¢	283,252.06	\$	124.74	0.5358%
		203,303.48		203,370.80	۶	203,232.06	•	124.74	0.3336%
RI POLLUTION CONTROL 2008 B	\$	-	\$	-			\$	-	
CCDL10B CLEAN WATER COMPONENT	\$	-	\$	-			\$	-	
CCDL2011A CLEAN WATER COMPONENT	\$	1,236,573.46	\$	1,236,544.33	\$	1,236,000.00	\$	544.33	0.5358%
CCDL2011A POLL CTRL CMPNT	\$	-	\$				\$	-	
Bond Proceeds Fund Totals	\$	57,325,980.13	\$	50,013,612.58	\$	20,696,644.22	\$	22,673.04	0.536%
TANS PROCEEDS	\$	-	\$	-	\$	-	\$	-	
Granto Totals	\$	611,138,070.87	\$	606,754,820.28	\$	639,940,401.63	Ś	261,790.00	0.475%
	7	0==,100,070.07	Ψ.	555,75-7,020.20	7	223,340,401.03	Ψ.	_01,, 30.00	57.570

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

#### Issuer Credit Rating April 30, 2016

			Issuer Ratings	S-T Deb	t Rating	L-T Deb	t Rating	Credit Outlook
Issuer	Type of Instrument*	Month End % Portfolio	Moody's	Moody's	S&P	Moody's	S&P	S&P
Bank RI	3,4	6%	N/R	N/A	N/A	N/A	N/A	N/A
Santander Bank	3,4	4%	Baa2	P-1	A-2	A2	BBB+	Stable
Bank of America		0%	Baa1	P-2	A-2	Baa1	A-	N/A
JP Morgan Chase		0%	A3	P-2	A-1	A3	Α	N/A
Fidelity		0%	N/R	N/A	N/A	N/A	N/A	N/A
State Street Bank & Trust Company		0%	A1	P-1	A-1+	Aa2	AA-	Stable
RBS Citizens	3,4	11%	Baa1	P-1	A-2	A1	A-	Stable
Webster Bank	3,4	1%	Baa1	P-1	A-2	A1	BBB	Positive
Ocean State Investment Pool	6	50%	N/R	N/A	N/A	N/A	N/A	N/A
Washington Trust	3,7	11%	N/R	N/A	N/A	N/A	N/A	N/A
TD Bank	3	2%	Aa1	P-1	A-1+	Aa1	AA-	Negative
Customers Bank	4	15%	N/R	N/A	N/A	N/A	N/A	N/A





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

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

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

#### Moody's Issuer Rating Symbols:

Aaa - Offer exceptional financial security (high-grade)

Aa - Offer excellent financial security (high-grade)

A - Offer good financial security

Baa - Offer adequate financial security

Ba - Offer questionable financial security

- Offer poor financial security

Caa - Offer very poor financial security

Ca - Offer extremely poor financial security

- Lowest rated class, usually in default

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

Aaa - Best Quality

Aa - High Quality

A - Posess many favorable investment attributes

Baa - Medium-grade obligations

Ba - Posess speculative elements

- Generally lack characteristics of desirable investments

Caa - Poor standing

Ca - Speculative in a high degree

- Lowest rated class of bonds

#### Modifiers:

- 1 Higher end of letter rating category

2 - Mid-range of letter rating category3 - Lower end of letter rating category

#### **Ratings Definitions**

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

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

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

A-3 - Exhibits adequate protection parameters

B - Significant speculative characteristics, faces major ongoing uncertainties

C - Vulnerable to non-payment

D - Payment default

Modifiers:

+ or - show relative standing within the category.

#### S&P Outlook Definitions:

Positive - A rating may be raised

Negative - A rating may be lowered Stable - A rating is not likely to change

Developing - May be raised or lowered

NM - Not meaningful

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

AAA - Highest rating, extremely strong

 ${\bf AA}\,$  - Differs slightly from highest rating, very strong

 $\boldsymbol{\mathsf{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 IX.

**Defined Contribution Plan** 

				2	01	ô Y	TD	Per	for	mar	ıce	Su	mm	nary										
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(1)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)	(W)	(X)	(Y)
TIAA-CREF	1	Manager	AUM	Gross	Net	Net	Rev	Recent R	eturns			Annualize	d Total Re	eturns as (	of 3/31/201	16		Since	Incep. S	Sharpe Rat	io :	Std. Devia		Trackin Error
As of 4/30/16	Ticker	Tenure	\$ Millions	ER	ER	%-ile	Share	1 Month	YTD	1 Year	%-ile	3 Year	%-ile	5 Year	%-ile	10 Year	%-ile	Incep.	Date	3 Year	%-ile	3 Year	%-ile	3 Year
TIAA Stable Value****	urrent crediting	g rate = 1.80						0.15	0.62	1.85		1.86						1.87	03/31/12					
- Noney Market																								
Vanguard Prime Money Market Inv	VMMXX	12.75	139,004.32	0.16	0.16		0.00	0.03	0.13	0.14		0.06		0.05		1.24		5.21	06/04/75	(0.81)		0.03		0.02
Current 7-day Yield: 0.01																								
Citi 3-Month Treasury Bill								-	-	0.12		0.07		0.07		1.07								
IXED INCOME																								
Nenguerd Total Road Market Index Adm	VDTLV	2 17	157.044.22	0.07	0.07	1	0.00	0.20	2.40	1.02	12	2.20	24	2.71	41	4.04	39	4 50	11/12/01	0.75	27	2 11	52	0.2
Vanguard Total Bond Market Index Adm	VBTLX	3.17	157,966.22	0.07	0.07	'	0.00	0.39 0.41	3.49 3.54	1.82 1.96	13	2.38 2.50	24	3.71 3.78	41	4.86 4.90	39	4.50	11/12/01	0.75 0.82	27	3.11 3.00	32	0.2
Barclays U.S. Aggregate Float Adjusted Index Intermediate-Term Bond Median				0.86	0.76			0.41	3.28	0.90		1.98		3.63		4.71				0.63		3.10		0.95
Intermediate-Term Bond Number of Funds				1,117	1,117			0.03	3.20	0.70	1085	1.70	1043	3.03	994	4.71	867			0.03	1044	3.10	1044	0.70
nflation-Linked Bond				1,117	1,117						1003		1043		774		007				1044		1044	
PIMCO Real Return Instl	PRRIX	8.33	10,944.88	0.50	0.45	20	0.00	0.53	4.68	(0.30)	68	(1.65)	57	2.65	11	4.76	2		01/29/97	(0.25)	42	6.24	95	1.50
Barclays US Treasury US TIPS TR USD		0.00	10/711100	0.00	0.10	20	0.00	0.35	4.82	1.51		(0.71)	•	3.02	•	4.62	_		01127177	(0.12)		5.31	,,	
Inflation-Protected Bond Median				0.86	0.75			0.37	4.32	0.40		(1.44)		2.06		3.92				(0.27)		5.16		0.91
Inflation-Protected Bond Number of Funds				256	256						249	. ,	237		195		146			. /	237		237	
quity																								
arge Cap Blend																								
Vanguard Institutional Index I	VINIX	15.33	199,079.28	0.04	0.04	1	0.00	0.39	1.73	1.77	13	11.79	10	11.55	9	7.01	16	9.37	07/31/90	1.04	8	11.35	31	0.01
S&P 500 TR USD								0.39	1.74	1.78		11.82		11.58		7.01				1.04		11.36		
TIAA-CREF Social Choice Eq InstI	TISCX	10.33	2,644.79	0.18	0.18	4	0.00	0.95	2.64	(1.52)	49	9.44	62	10.05	49	6.50	34		07/01/99	0.83	58	11.61	53	0.99
Russell 3000 TR USD								0.62	1.59	(0.34)		11.15		11.01		6.90				0.97		11.56		
Large Blend Median				1.13	1.02			0.41	1.03	(1.59)		10.12		10.01		6.14				0.88		11.56		2.37
Large Blend Number of Funds Mid Cap Blend				1,681	1,681						1,626		1,517		1,403		1,225				1,523		1,523	
Vanguard Mid Cap Index Adm	VIMAX	17.92	67,296.86	0.09	0.09	3	0.00	0.54	1.71	(4.29)	38	10.78	8	10.03	12	7.24	26	9.49	11/12/01	0.90	10	12.07	30	0.03
Spliced Mid Cap Index *								0.54	1.71	(4.27)		10.84		10.08		7.28								
CRSP US Mid Cap TR USD								0.54	1.71	(4.27)		10.84		10.37		7.35				0.91		12.08		
Mid-Cap Blend Median				1.26	1.17			0.79	2.45	(5.33)		8.46		8.28		6.33				0.70		12.53		3.56
Mid-Cap Blend Number of Funds				470	470						439		414		373		305				415		415	
Small Cap Blend																								
Vanguard Small Cap Index Adm	VSMAX	24.33	55,192.14	0.09	0.09	1	0.00	1.74	2.76	(7.14)	42	8.51	25	8.80	21	6.81	13	8.34	11/13/00	0.66	17	13.76	23	0.04
Spliced Small Cap Index **								1.73	2.75	(7.16)		8.51		8.77		6.75				0.44		10.7/		
CRSP US Small Cap TR USD Small Blend Median				1.36	1.24			1.73 1.17	2.75 1.40	(7.16) (8.02)		8.51 7.05		9.03 7.26		7.33 5.11				0.66 0.54		13.76 14.49		3.65
Small Blend Number of Funds				854	854			1.17	1.40	(0.02)	804	7.03	725	7.20	671	5.11	563			0.54	726	14.47	726	3.03
oreign Large Blend																								
TIAA-CREF International Eq Idx InstI	TCIEX	10.67	6,612.55	0.06	0.06	-	0.00	2.32	(0.48)	(8.21)	47	2.24	40	2.44	30	1.91	35		10/01/02	0.23	41	13.35	74	1.96
MSCI EAFE NR USD								2.90	(0.20)	(8.27)		2.23		2.29		1.80				0.22		13.61		
Foreign Large Blend Median				1.33	1.16			1.66	(0.53)	(8.35)		1.89		1.73		1.44				0.20		12.93		3.39
Foreign Large Blend Number of Funds				916	916						820		783		720		532				783		783	
Diversified Emerging Markets																								

	(D)	(C)	(D)	(E)	(E)	(C)	(11)	//\	(1)	(1/)	(1)	(8.6)	(01)	(0)	(D)	(0)	(D)	(C)	(T)	(1.1)	00	010	//	00
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(1)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)	(W)	(X)	(Y) Trackir
TIAA-CREF		Manager	AUM	Gross	Net	Net	Rev	Recent R	eturns			Annualize	d Total Re	eturns as o	of 3/31/201	6		Since	Incep. S	Sharpe Rat	io	Std. Devia		Error
As of 4/30/16	Ticker	Tenure	\$ Millions	ER	ER	%-ile	Share	1 Month	YTD	1 Year	%-ile	3 Year	%-ile	5 Year	%-ile	10 Year	%-ile	Incep.	Date	3 Year	%-ile	3 Year	%-ile	3 Yea
Vanguard Emerging Mkts Stock ldx Adm	VEMAX	7.67	51,516.57	0.15	0.15	-	0.00	0.80	6.18	(12.67)	66	(4.36)	46	(4.16)	54	2.82	41	4.05	06/23/06	(0.19)	38	16.90	86	
Spliced Emerging Markets Index ***								0.68	6.15	(12.45)		(4.16)		(3.96)										
FTSE Emerging NR USD								0.91	7.03	(12.04)		(3.93)		(3.88)		3.43				(0.16)		17.00		
MSCI EM NR USD								0.54	6.29	(12.03)		(4.50)		(4.13)		3.02				(0.20)		16.66		
Diversified Emerging Mkts Median				1.81	1.50			0.95	4.20	(11.51)		(4.68)		(3.94)		2.44				(0.23)		15.59		4.7
Diversified Emerging Mkts Number of Funds				939	939						870		655		494		270				665		665	
Miscellaneous Sector																								
TIAA Real Estate Account	V. Annuity	11.33	23,020.63	0.87	0.87		0.24	0.28	2.17	7.02		10.00		10.27		4.09			10/02/95	6.44		1.47		
Miscellaneous Sector Median																								
Miscellaneous Sector Number of Funds																								
Lifecycle																								
Vanguard Target Retirment Income Trust II				0.08	0.08		0.00	0.53	2.86	0.40		3.70		5.01				4.80	02/29/08					
Vanguard Target Retirement Income Compos. Lx								0.59	2.86	0.59		3.86		5.10										
Retirement Income Median				1.09	0.84			0.80	2.58	(1.17)		2.40		3.60		3.92				0.57		4.90		2.1
Retirement Income Number of Funds				192	192						183		162		148		81				162		162	
Vanguard Target Retirment 2010 Trust II				0.08	0.08		0.00	0.57	2.81	0.14		4.47		5.48				4.97	02/29/08					
Vanguard Target Retirement 2010 Compos. Lx								0.63	2.83	0.34		4.63		5.56										
Target Date 2000-2010 Median				1.02	0.79			0.91	2.54	(1.22)		3.54		4.46		3.81				0.64		5.72		1.20
Target Date 2000-2010 Number of Funds				139	139						134		112		106		52				116		116	
Vanguard Target Retirment 2015 Trust II				0.08	0.08		0.00	0.72	2.70	(0.50)		5.38		6.07				5.29	02/29/08					
Vanguard Target Retirement 2015 Compos. Lx								0.82	2.73	(0.36)		5.52		6.14										
Target Date 2011-2015 Median				1.07	0.84			0.94	2.45	(1.38)		3.75		4.65		4.51				0.63		6.31		1.32
Target Date 2011-2015 Number of Funds				183	183						170		142		124		17				142		142	
Vanguard Target Retirment 2020 Trust II				0.08	0.08		0.00	0.88	2.67	(1.05)		6.07		6.50				5.43	02/29/08					
Vanguard Target Retirement 2020 Compos. Lx								0.97	2.71	(0.86)		6.23		6.71										
Target Date 2016-2020 Median				1.11	0.87			0.98	2.37	(2.01)		4.22		4.80		3.99				0.64		6.93		1.5
Target Date 2016-2020 Number of Funds				262	262						249		210		184		81				214		214	
Vanguard Target Retirment 2025 Trust II				0.08	0.08		0.00	0.93	2.50	(1.43)		6.43		6.76				5.47	02/29/08					
Vanguard Target Retirement 2025 Composite Lx								1.07	2.61	(1.28)		6.60		6.96										
Target Date 2021-2025 Median				1.10	0.89			1.04	2.19	(2.44)		4.94		5.35		4.25				0.65		8.05		1.6
Target Date 2021-2025 Number of Funds				233	233						220		187		150		35				187		187	
Vanguard Target Retirment 2030 Trust II				0.08	0.08		0.00	1.04	2.37	(1.92)		6.76		6.99				5.47	02/29/08					
Vanguard Target Retirement 2030 Composite Lx								1.16	2.48	(1.74)		6.94		7.20										
Target Date 2026-2030 Median				1.16	0.93			1.02	2.04	(2.96)		5.27		5.50		3.85				0.61		8.91		1.7
Target Date 2026-2030 Number of Funds				262	262						249		210		184		81				214		214	
Vanguard Target Retirment 2035 Trust II				0.08	0.08		0.00	1.08	2.22	(2.33)	7	7.21		7.21				5.60	02/29/08					
Vanguard Target Retirement 2035 Composite Lx								1.25	2.36	(2.20)		7.28		7.42										
Target Date 2031-2035 Median				1.14	0.93			1.03	1.76	(3.52)		5.71		5.90		4.25				0.62		9.86		1.50
Target Date 2031-2035 Number of Funds				233	233						220		187		150		35				187		187	
Vanguard Target Retirment 2040 Trust II				0.08	0.08		0.00	1.18	2.07	(2.95)		7.20		7.36				5.73	02/29/08					

#### **2016 YTD Performance Summary** (D) Tracking **TIAA-CREF** Since Error Manager AUM Gross Net Net Rev Recent Returns Annualized Total Returns as of 3/31/2016 Incep. Sharpe Ratio Std. Deviation As of 4/30/16 ER %-ile Incep Ticker Tenure 1 Year 3 Year 3 Year Vanguard Target Retirement 2040 Composite Lx 1.34 2.23 (2.68)7.45 7.60 Target Date 2036-2040 Median 5.88 3.97 10.34 1.22 0.95 1.03 1.62 (3.93)5.87 0.60 1.71 Target Date 2036-2040 Number of Funds 249 210 184 214 214 262 262 81 Vanguard Target Retirment 2045 Trust II 0.08 0.08 0.00 1.18 2.04 (2.99)7.19 7.36 5.70 02/29/08 Vanauard Target Retirement 2045 Composite Lx 1.36 7.43 7.59 2.21 (2.71)10.61 Target Date 2041-2045 Median 1.22 0.94 1.03 1.48 (3.92)6.11 6.18 4.36 0.61 1.58 Target Date 2041-2045 Number of Funds 233 233 220 187 149 22 187 187 Vanguard Target Retirment 2050 Trust II 0.08 0.08 0.00 1.18 2.03 (3.05)7.16 7.32 5.71 02/29/08 Vanguard Target Retirement 2050 Composite Lx 1.36 2.21 (2.71)7.43 7.59 Target Date 2046-2050 Median 4.25 1.35 0.96 1.07 1.51 (4.10)6.08 6.13 0.60 10.69 1.54 Target Date 2046-2050 Number of Funds 251 251 238 199 155 203 203 Vanguard Target Retirment 2055 Trust II 0.08 0.08 0.00 1.19 2.06 (3.13)7.11 10.87 08/31/10 Vanguard Target Retirement 2055 Composite Lx 7.43 1.36 2.21 (2.71)Vanguard Target Retirment 2060 Trust II 0.08 0.08 0.00 1.19 2.03 (3.13)7.15 8 44 03/01/12 7.43 Vanguard Target Retirement 2060 Composite Lx 1.36 2.21 (2.71)Target Date 2051+ Median 1.60 0.93 1.09 1.48 (3.89)6.32 6.42 0.62 10.71 1.48 Target Date 2051+ Number of Funds 378 378 279 152 152 152

Source: Morningstar & TIAA-CREF

Data for 1-month and YTD return as of 4/30/2016. All other data as of 3/31/2016

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

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

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

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

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

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

<sup>-</sup>Tracking error calculated using "Morningstar Analyst Assigned Benchmark"

<sup>\* =</sup> 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

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

<sup>\*\*\*\* =</sup> Spliced Emerging Markets Index reflects performance of the Select Emerging Markets Index through August 23, 2006; the MSCI Emerging Markets Index through January 9, 2013; FTSE Emerging Transition Index through June 27, 2013;

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

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

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

# Disclosures



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.

# **Disclosures**



%-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 TIAA-CREF 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.





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.

# **Disclosures**



#### **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.

# Disclosures

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

Information Ratio (Source: Morningstar Direct) Benchmark Specific

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

Beta (Source: Morningstar Direct) Benchmark Specific

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

Alpha (Source: Morningstar Direct) Benchmark Specific

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

Tracking Error (Source: Morningstar Direct) Benchmark Specific

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

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

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

Downside (Source: Morningstar Direct) Benchmark Specific

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

R-Square (Source: Morningstar Direct) Benchmark Specific

Reflects the percentage of a portfolio's movements that can be explained by movements in its benchmark.

You cannot invest directly in index.

TIAA-CREF reported performance may differ from Morningstar source returns for the

same option over the same time period. We would expect an occasional one to two basis point difference. Morningstar Direct calculates returns by one share owned by a hypothetical investor over the requested time period. So the return for one year is calculated using the same formula as one month. TIAA-CREF calculates returns by \$1,000 owned by hypothetical investor for one month then links returns for requested time period. Both set of returns include dividends and capital gains.

C12205

Section XI.

**OPEB Trust** 

Report ID: IPM0005

Reporting Currency: USD

## TOTAL NET OF FEES 4/30/2016

									Annu	alized		
Account Name Benchmark Name		Market Value	% of Total	Month	YTD	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	ITD	Inception Date
Mackay Shields OPEB Barclays U.S. Aggregate Bond Index		59,111,822.4	34.7	0.28 <i>0.38</i>	3.10 3.43	3.62 <i>4.</i> 10	2.21 2.72	2.18 2.29			2.18 2.29	5/1/2013 5/1/2013
SSGA S&P 500 INDX S&P 500 - Total Return Index		111,076,521.5	65.3	0.39 <i>0.</i> 39	1.77 1.74	2.01 1.89	1.32 1.21	11.26 <i>11.</i> 26	11.92 <i>11.0</i> 2		11.92 <i>11.0</i> 2	5/1/2011 5/1/2011
Total OPEB OPEB Custom Blend	1	170,188,343.9	100.0	<b>0.35</b> <i>0.39</i>	<b>2.38</b> 2.41	<b>2.77</b> 2.88	<b>1.84</b> 1.96	<b>8.09</b> 8.20	<b>8.42</b> 7.41		<b>8.42</b> 7.41	<b>5/1/2011</b> 5/1/2011



Report ID: IPM0005

Reporting Currency: USD

## **END NOTES** 4/30/2016

1 RI7GX0903OPE

OPEB Custom Blend

35% Barclays Aggregate and 65% S&P 500

Report ID: IPM0005

Reporting Currency: USD

## **TOTAL NET OF FEES**

4/30/2016

						Cumi	ulative					
Account Name Benchmark Name		Market Value	% of Total	YTD	Month	3/1/2016 - 3/31/2016	2/1/2016 - 2/29/2016	2015	2014	2013	Inception Date	
Mackay Shields OPEB Barclays U.S. Aggregate Bond Index		59,111,822.4	34.7	3.10 3.43	0.28 <i>0</i> .38	0.90 <i>0</i> .92	0.55 <i>0.71</i>	0.46 <i>0.55</i>	6.03 5.97		5/1/2013 5/1/2013	
SSGA S&P 500 INDX S&P 500 - Total Return Index		111,076,521.5	65.3	1.77 1.74	0.39 <i>0</i> .39	6.79 <i>6.7</i> 8	-0.12 -0.13	1.46 1.38	13.63 <i>13.69</i>	32.09 32.39	5/1/2011 5/1/2011	
<b>Total OPEB</b> OPEB Custom Blend	1 2	170,188,343.9	100.0	<b>2.38</b> 2.41	<b>0.35</b> 0.39	<b>4.66</b> <i>4.7</i> 3	<b>0.20</b> 0.16	<b>1.16</b> 1.31	<b>11.00</b> <i>11.00</i>	<b>15.77</b> 15.73	<b>5/1/2011</b> 5/1/2011	



Report ID: IPM0005

Reporting Currency: USD

## **END NOTES**

4/30/2016

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