STATE OF RHODE ISLAND INVESTMENT COMMISSION MEETING

DATA AT February 28th, 2019

March 27th, 2019 MEETING

MEMBERS OF THE STATE INVESTMENT COMMISSION

Honorable Seth Magaziner, Chair

Mr. Robert K. Benson
Mr. Frank J. Karpinski
Mr. Erik Carleton
Ms. Sylvia Maxfield
Mr. J. Michael Costello
Mr. Thomas Mullaney
Mr. Thomas P. Fay
Ms. Marcia Reback
Ms. Karen Hammond



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, March 27th, 2019 at 9:00 a.m. in the Executive Conference Room, Department of Administration, 1 Capitol Hill, Providence.

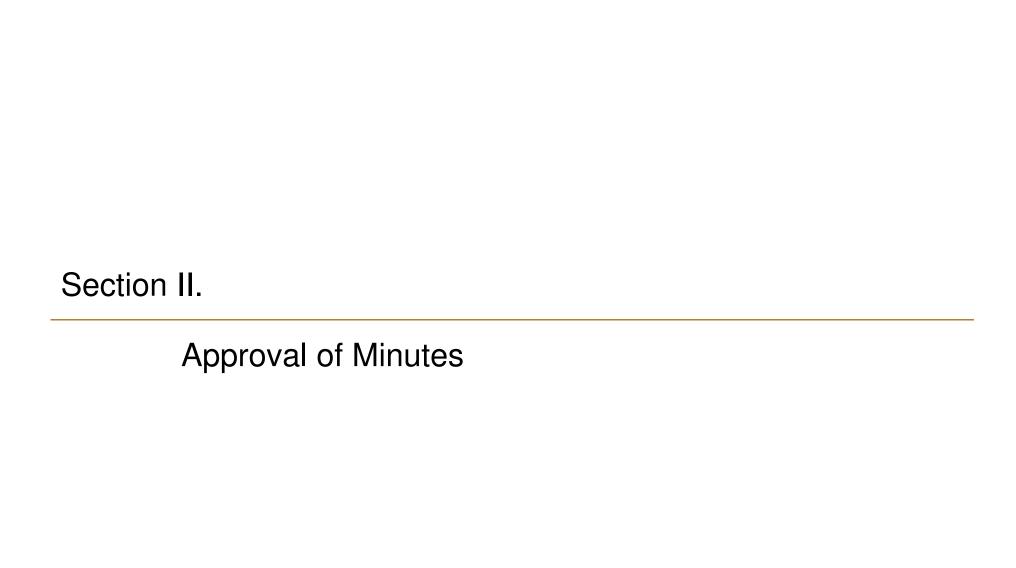
AGENDA

- Chairperson Call to Order
- Membership Roll Call
- Approval of Minutes ¹
 - State Investment Commission Meeting held February 27th, 2019
- Private Equity Investment Recommendation, Advent International GPE IX ¹
 - Bob Weaver & Sarah Smith, Advent International
 - Tom Lynch, Cliffwater
- Private Infrastructure Investment Recommendation, Star Infrastructure Fund II, L.P. 1
 - Christophe Petit & William Marino, Star America
 - Mark Williams & Tom Lynch, Cliffwater
- Stonepeak Infrastructure Master Co-Investment Fund Amendment Recommendation ¹
 - Mark Williams & Tom Lynch, Cliffwater
- Fee Monitoring Service ¹
 - Tom Lynch, Cliffwater
- Secondary Investing
 - Tom Lynch, Cliffwater
- Legal Counsel Report
- Chief Investment Officer Report
- Treasurer's General Comments

POSTED ON March 22, 2019

Anyone wishing to attend this meeting who may have special needs for access or services such as an interpreter, please contact Justin Maistrow at (401) 574-9246 twenty-four hours in advance of the scheduled meeting.

¹ Commission members may be asked to vote on this item.





State Investment Commission

Monthly Meeting Minutes Wednesday, February 27th, 2019 9:00 a.m.

Executive Conference Room, Department of Administration

The Monthly Meeting of the State Investment Commission (SIC) was called to order at 9:05 AM, Wednesday, February 27th, 2019 in the Executive Conference Room, Department of Administration.

I. Roll Call of Members

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

Also in attendance: Glenn Gistis & Michael Sullivan, Linchris Capital Partners; David Glickman & Karen Reeves, PCA; Thomas Lynch, Cliffwater; Vincent Izzo, Treasury; Bob Dollard & Jim Mahoney, BNY Mellon; Mr. Alec Stais, Chief Investment Officer; Ms. Nicole Verdi, Adler, Pollock & Sheehan, legal counsel; and other members of the Treasurer's staff.

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

II. Approval of Minutes

On a motion by Mr. Thomas Fay and seconded by Ms. Sylvia Maxfield, it was unanimously **VOTED: to** approve the draft minutes of the January 23rd, 2019 meeting of the State Investment Commission.

III. Linchris Capital Opportunity Fund II & Recommendation

Mr. Glenn Gistis and Mr. Michael Sullivan, Linchris Capital, gave an overview of the firm. Mr. Gistis explained that Linchris is a vertically integrated hotel operator with a focus on opportunities to build value in secondary and tertiary markets. Additionally, Mr. Gistis expounded on Linchris' track record via case studies.

The Board asked questions.

Mr. David Glickman commented on the extensive experience of the operating partners, the opportunity to diversify within the Plan's Non-Core Real Estate and fulfill its target allocation. Furthermore, Mr. Glickman noted Linchris is well positioned to execute in a varying range of market conditions.

On a motion by Ms. Marcia Reback which was seconded by Ms. Karen Hammond, it was unanimously VOTED: that the Rhode Island Employees Retirement Systems Pooled Trust make a commitment up to \$25 million in Linchris Capital Opportunity Fund II, subject to legal and investment staff review.

IV. Cliffwater Review of Illiquid Asset Classes

Mr. Thomas Lynch, Cliffwater, outlined the performance and allocation status of the Total Plan's illiquid assets. Mr. Lynch explained that the Plan's private equity allocation is well diversified by strategy, vintage year and geography. Mr. Lynch stated that the private equity asset allocation is on pace to meet its target allocation and is performing as expected. Furthermore, Mr. Lynch stated that allocations to opportunistic credit, private credit, and infrastructure are on pace to meet their target allocations.

The Board asked questions.

V. Custody Service Provider Recommendation

Mr. Bob Dollard and Mr. Jim Mahoney, BNY Mellon, proceeded to give an overview of the firm and its custodian relationship with the State of Rhode Island over the previous five years. Mr. Bob Dollard explained BNY Mellon's initiatives to invest in technology across custodial services to improve efficiencies and the customer experience.

The Board asked questions.

Mr. Vincent Izzo noted that, of the three finalists, BNY Mellon received the highest aggregate score from the search committee. Mr. Izzo highlighted the strength of BNY Mellon's private asset fee reporting capabilities.

Mr. Thomas Fay recused himself from participating in the consideration of maintaining BNY Mellon as a custody service provider. On a motion by Ms. Karen Hammond, which was seconded by Ms. Marcia Reback, it was unanimously VOTED: that the Rhode Island Employees Retirement Systems Pooled Trust adopt the recommendation to maintain BNY Mellon as a custody service provider, with a 5-year extension, subject to legal and investment staff review.

VI. 401(a) and 457 Investment Consultant Recommendation

Mr. Alec Stais explained the search process for a 401(a) and 457 investment consultant(s). Mr. Stais shared the search committee's recommendation to engage Capital Cities, citing their management team, investment analysis and references as areas of strength.

On a motion by Ms. Marcia Reback, which was seconded by Ms. Karen Hammond, it was unanimously **VOTED:** to adopt the recommendation to engage Capital Cities as an investment consultant for the 401(a) and 457 plans, with a 3-year term, subject to legal and investment staff review.

VII. Legal Counsel Report

There was no legal counsel report.

VIII.Chief Investment Officer Report

Mr. Alec Stais discussed the Plan's performance across the different asset classes and buckets, highlighting the effects of diversification.

The Board asked questions.

IX. Treasurer's General Comments

Treasurer Magaziner asked if there were any further comments or questions and thanked the Board and Staff.

On a motion by Mr. Thomas Fay and seconded by Ms. Sylvia Maxfield, it was unanimously **VOTED:** to adjourn the meeting at 11:05 AM.

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

March 18, 2019

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 February 28, 2019

Employees' Retirement System of Rhode Island Composite Reporting Investment Valuation February 28, 2019

Asset Class	Sage Market Value
Grand Total	8,180,326,000
CASH EQUIVALENT*	386,843,614
GLOBAL PUBLIC EQUTIY	3,722,831,802
CREDIT	294,937,543
INFLATION-LINKED BDS	199,736,631
PRIVATE EQUITY**	704,768,712
REAL ESTATE**	514,199,356
HEDGE FUNDS**	558,364,614
INFRASTRUCTURE**	294,486,324
US TRADITIONAL FIXED	908,362,981
CPC PROGRAM	595,794,423

Plan Allocations	%	Base Market Value
Grand Total	100.00%	8,180,326,000
STATE EMP RET PLAN	74.33%	6,080,748,887
MUNI EMP RET PLAN	18.99%	1,553,476,413
TEACHER'S SURVIVOR BENEFIT	3.98%	325,921,782
STATE POLICE RET PL	1.72%	140,298,938
JUDICIAL RET PLAN	0.90%	73,970,772
NON-CONTRIB JUD RET	0.06%	5,264,463
NON-CONT ST POL RET	0.01%	644,745

^{*} 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.

Vincent izzo

Investment Accounting Manager

^{**} 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.

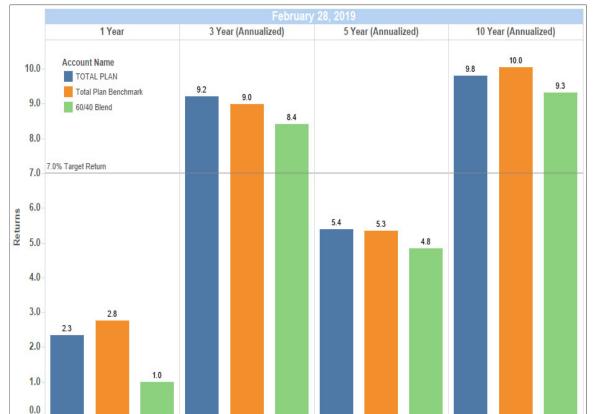
February 2019

The Plan returned 1.31% during the month of February, outperforming the Total Plan benchmark return of 1.16%. The 60/40 benchmark returned 1.58%. The Plan's Total Growth Bucket was one of the primary contributors to the Plan's positive performance, returning 2.13% as global public equity markets continued to experience positive performance. The total portfolio increased by approximately \$66 million as the investment portfolio increased by roughly \$106 million and about \$40 million of transfers were made to meet pension payroll in excess of pension contributions.

Calendar year-to-date the Plan returned 5.50%, outperforming the Total Plan benchmark return of 4.79%. The 60% global equity/40% fixed income benchmark returned 6.83%. A main contributor to the Total Plan's CYTD performance was its Total Public Growth Composite, which returned 8.89%.

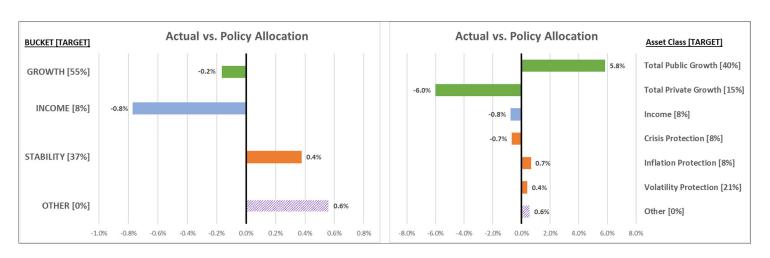
Fiscal year-to-date, the portfolio increased 1.92% net of fees, beating the 60% global equity/40% fixed income benchmark return of 1.78%. A main contributor to the Total Plan's performance was its Total Stability Composite return, which returned 1.33% versus its composite benchmark return of 0.94%. Within the Stability Composite, the Total Volatility Protection allocation returned 2.53% versus its Benchmark return of 1.21%.

Total Plan - February 28, 2019

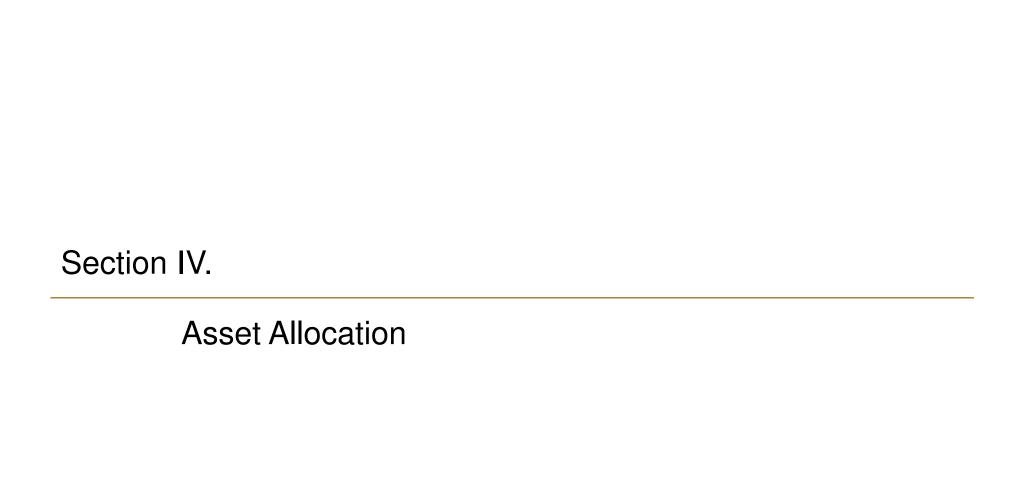


					-	Annualized		
	Feb-2019	YTD	FYTD	1 Year	3 Years	5 Years	ITD	Inception
GROWTH	2.13	8.89	1.96	1.94			8.70	7/1/2017
GROWTH BM	2.06	7.95	2.79	3.45				
Public Growth	2.49	10.71	0.73	-0.59	13.27	6.50	4.69	7/1/2000
Public Growth BM	2.67	10.78	0.79	-0.84	12.87	6.28		
Private Growth	0.31	0.38	9.01	17.12			17.39	7/1/2017
Private Growth BM	0.42	0.53	7.35	14.60				
INCOME	1.23	6.97	2.13	4.81			3.25	7/1/2017
INCOME BM	0.58	4.62	2.97	5.22			4.00	7/1/2017
STABILITY	0.12	0.44	1.33	1.94			2.40	7/1/2017
STABILITY BM	-0.06	0.18	0.94	0.91				
CPC	-0.60	-3.29	-4.56	-6.69			-3.09	7/1/2017
CPC BM	-1.80	-5.19	-1.90	-5.62			-3.53	7/1/2017
Inflation Protection	0.59	1.34	3.57	6.75			6.32	7/1/2017
Inflation Protection BM	0.83	1.84	2.71	5.58			5.32	7/1/2017
Volatility Protection	0.18	1.41	2.53	3.13			3.02	7/1/2017
Volatility Protection BM	0.26	1.63	1.21	1.56				
TOTAL PLAN	1.31	5.50	1.92	2.35	9.21	5.38	4.98	7/1/2000
TOTAL PLAN BM	1.16	4.79	2.23	2.77	8.98	5.34		
60/40	1.58	6.83	1.78	0.99	8.42	4.84		





 $^{{}^{*}}$ Allocation reflects physical exposure; Russell Overlay rebalancing program classified as, "Other"

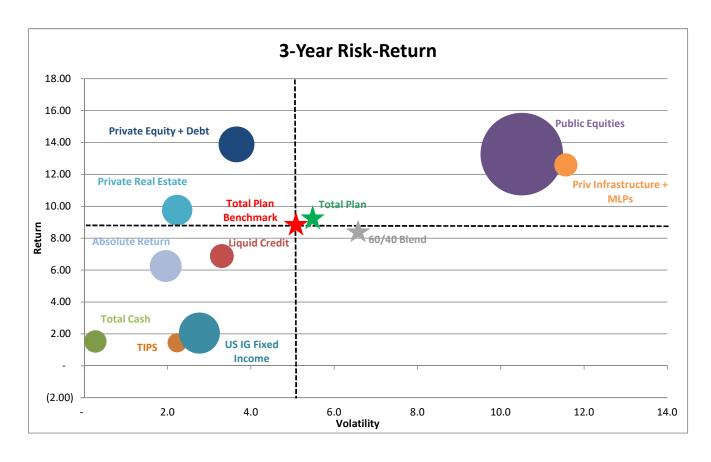


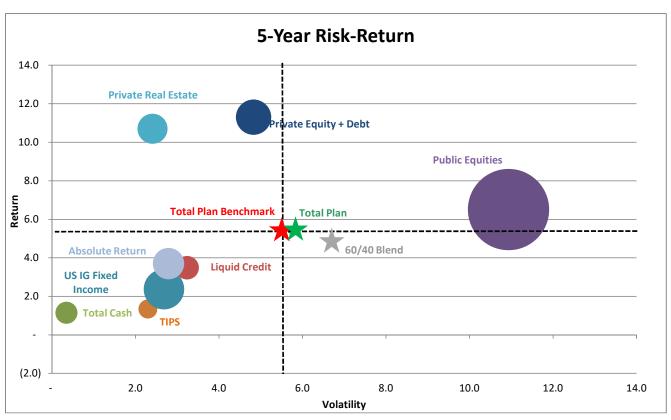
ERSRI Asset Allocation Tracking

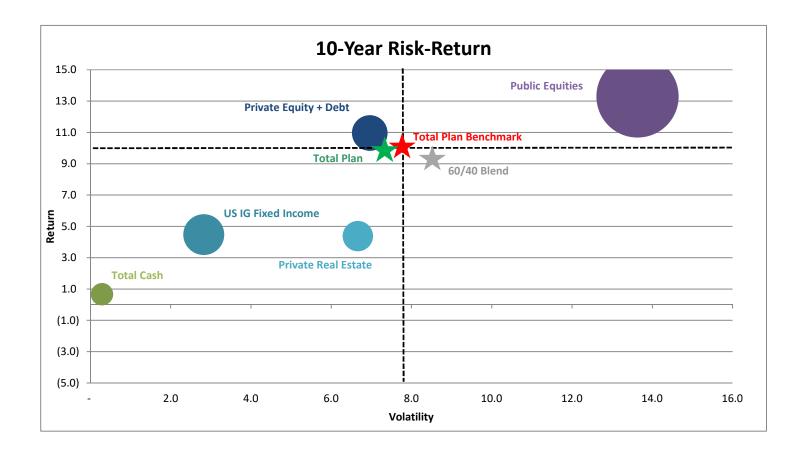
Functional Bucket	Aggregate Asset Class	Aggregate Allocation	Asset Class	Strategic Benchmark	(a) Target Asset	(b) Actual exposure as of	(b) (c)
		Weight		Weight	Allocation	02/28/19	(b) - (a)
	Global	40.0%	US Equity	21.8%	21.8%	25.6%	3.9%
GROWTH	Equity	40.078	International Developed Equity	13.5%	13.5%	14.9%	1.4%
			EM Equity	4.7%	4.7%	5.3%	0.6%
	Private Growth	15.0%	PE	11.0%	11.25%	6.6%	-4.7%
			Non-core RE	2.5%	2.25%	1.9%	-0.4%
			Opp Private Credit HY Infra	1.5% 1.5%	1.5%	0.5% 1.9%	-1.0% 0.9%
			REITS	0.0%	1.0%	0.0%	-1.0%
INCOME	Income	8.0%					
			Liquid Credit	3.5%	2.8%	3.9%	1.1%
			Private Credit	3.0%	3.2%	1.5%	-1.7%
	СРС	8.0%	Treasury Duration	4.0%	4.0%	3.8%	-0.2%
			Systematic Trend	4.0%	4.0%	3.5%	-0.5%
	Inflation	8.0%	Core RE	4.0%	3.6%	4.4%	0.8%
	Protection	3.0%	Private Infra	2.0%	2.4%	1.8%	-0.6% 1.5%
			TIPs Nat' Resources	1.0% 1.0%	1.0% 1.0%	2.5% 0.0%	1.5% -1.0%
STABILITY	Volatility Protection	21.0%	IG Fixed Income	11.5%	11.5%	11.3%	-0.2%
	roccion		Absolute Return	6.5%	6.5%	6.8%	0.3%
			Strategic Cash	3.0%	3.0%	3.3%	0.3%
07:150	Short-term	-	Short-Term Cash	-	-	0.1%	0.1%
OTHER	Tactical	-	Russell Overlay	-	-	0.4%	0.4%
TOTAL	Total	100.0%		100.0%	100.0%	100.0%	0.0%

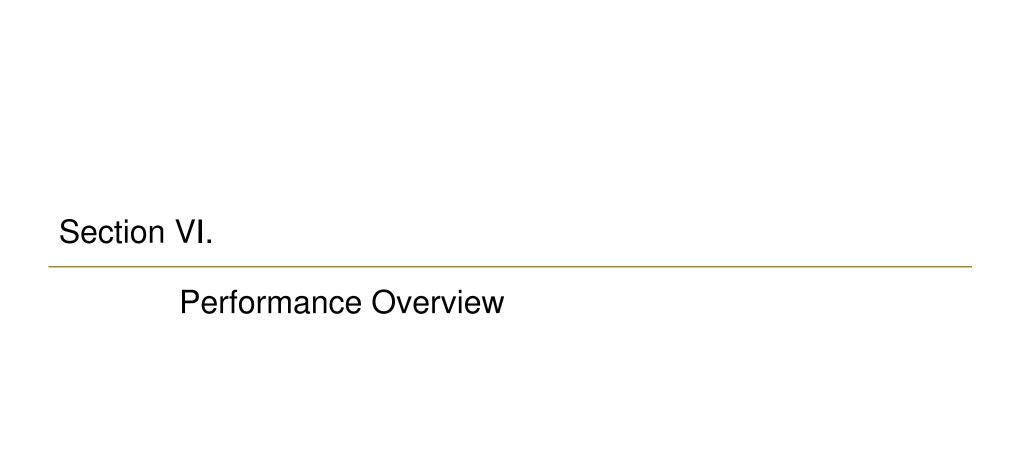


Risk Overview









Report ID: IPM0005

Reporting Currency: USD

TOTAL NET OF FEES

2/28/2019

						_		Annua	alized		
Account Name Benchmark Name	Market Value	% of Total	Month	YTD	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	ITD	Inception Date
US Public Equity Russell 3000 Index	1,332,517,127	16	3.51 3.52	12.38 12.40	3.27 3.19	5.13 5.05	15.55 15.53	10.23 10.15	16.23 16.81	8.13 8.12	8/1/2007 8/1/2007
Non-US Public Equity Total International Equity BM	1,184,828,764	14	1.70 1.95	9.54 9.66	-1.80 -2.23	-6.13 -6.46	11.12 10.72	2.79 2.50		7.79 7.07	5/1/2009 5/1/2009
QVM Tilt MSCI World Net Dividend Index	1,233,194,134	15	2.16 3.01	10.08 11.02	0.83 <i>0</i> .92	-0.25 <i>0.43</i>	12.91 12.64			10.87 10.51	10/1/2015 10/1/2015
Total Public Growth MSCI All Country World Net Index	3,750,540,025	46	2.49 2.67	10.71 <i>10.78</i>	0.73 <i>0.7</i> 9	-0.59 -0.84	13.27 12.87	6.50 6.28	13.30 <i>12.73</i>	4.69	7/1/2000 7/1/2000
Private Equity ILPA All Fds BM 1Q Lag 2	537,560,639	7	0.28 0.28	0.46 0.46	9.82 8. <i>0</i> 8	15.68 <i>16.33</i>	14.99 13.28	11.95 12.66	11.29 18.26	9.64	2/1/1989 2/1/1989
Non Core Real Estate	152,695,352	2	0.52	0.52	7.63	24.85				20.63	7/1/2017
Opportunistic Private Credit ILPA Distressed BM 1Q Lag	44,777,263	1	0.00 <i>0.00</i>	-1.08 <i>-1.08</i>	3.40 2.79	6.11 <i>6.7</i> 9				13.28 <i>7.81</i>	7/1/2017 7/1/2017
Total Private Growth Private Growth Benchmark	735,033,255	9	0.31 <i>0.42</i>	0.38 <i>0.53</i>	9.01 <i>7.35</i>	17.12 <i>14</i> .60				17.39	7/1/2017 7/1/2017
TOTAL GROWTH COMPOSITE Total Growth Composite BM	4,485,573,280	55	2.13 2.06	8.89 7.95	1.96 2.79	1.94 3.45				8.70	7/1/2017 7/1/2017
Harvest Fund Advisor Alerian MLP Index	152,596,474	2	0.84 0.27	16.77 12.94	-1.36 <i>-0.45</i>	6.17 3.57	9.87 7.33			-5.25 -7.05	1/1/2015 1/1/2015
Liquid Credit Liquid Credit BM (50% BoA US HY/50% CS LL)	316,164,028	4	1.81 1.63	5.28 5.13	3.85 3.27	5.18 <i>4.03</i>	6.88 6.47	3.49 4.05		3.57 4.16	5/1/2013 5/1/2013
Private Credit S&P LSTA Lev Loans + 3%	122,490,213	2	0.24 -0.49	0.24 -0.12	2.18 3.68	2.39 6.47				4.49 6.68	7/1/2017 7/1/2017
TOTAL INCOME COMPOSITE Income Aggregate BM	591,250,715	7	1.23 <i>0.58</i>	6.97 <i>4.62</i>	2.13 2.97	4.81 5.22				3.25 4.00	7/1/2017 7/1/2017
CPC Long Duration Barclays US Treasury LT Index	310,009,761	4	-1.18 <i>-1.22</i>	-0.53 -0.56	0.73 0.62	4.13 3.99				-0.58 -0.32	6/1/2017 6/1/2017
CPC Trend Following Credit Suisse Liquid Alt Beta	288,635,188	4	0.03 -2.38	-6.08 -9.78	-10.01 <i>-4.64</i>	-17.14 -14.82				-6.55 -7.43	6/1/2017 6/1/2017
Total Crisis Protection 50/50 CPC Custom BM	598,644,949	7	-0.60 <i>-1.80</i>	-3.29 -5.19	-4.56 -1.90	-6.69 -5.62				-3.09 -3.53	6/1/2017 6/1/2017

Report ID: IPM0005

Reporting Currency: USD

2/28/2019

TOTAL NET OF FEES

						-	Annualized				
Account Name Benchmark Name	Market Value	% of Total	Month	YTD	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	ITD	Inception Date
Priv Listed Infrastructure CPI + 4% 1 Mo Lag	144,135,947	2	0.02 0.52	1.16 <i>0.5</i> 3	5.38 2.69	12.46 <i>5.55</i>	13.72 <i>6.04</i>			8.99	3/1/2015 3/1/2015
Core Real Estate NFI-ODCE BM 2	361,504,004	4	1.13 1.13	1.48 1.48	4.31 5.24	7.15 9.30				7.17 7.45	7/1/2017 7/1/2017
Inflation-Linked Bonds Total Inflation Linked Custom	202,742,064	2	0.03 0.10	1.21 1.22	0.70 <i>0.75</i>	2.11 2.20	1.44 1.57	1.34 1.47		3.37 3.37	11/1/2009 11/1/2009
Total Inflation Protection Inflation Protection Custom BM	708,382,015	9	0.59 <i>0.8</i> 3	1.34 1.84	3.57 2.71	6.75 5.58				6.32 5.32	7/1/2017 7/1/2017
Absolute Return HFRI Fund of Funds Composite Index	558,364,619	7	0.37 0.84	1.99 3.31	2.95 -1.57	4.13 -1.60				6.21 2.11	7/1/2017 7/1/2017
Traditional Fixed Income Bloomberg Barclays U.S. Aggregate Bond Index	926,135,391	11	0.04 -0.06	1.29 1.00	2.58 2.68	2.85 3.17	2.05 1.69	2.37 2.32	4.47 3.71	4.89 4.76	7/1/2000 7/1/2000
Strategic Cash ICE BofAML US Treasury Notes 0-1 Year	266,038,253	3	0.25 0.19	0.62 <i>0.44</i>	1.61 1.57	2.27 2.19				1.74 1.49	2/1/2017 2/1/2017
Total Volatility Protection Total Volitility Protection BM	1,750,543,396	21	0.18 <i>0</i> .26	1.41 1.63	2.53 1.21	3.13 <i>1.56</i>				3.02	7/1/2017 7/1/2017
TOTAL STABILITY COMPOSITE Total Stability Composite BM	3,057,570,359	37	0.12 -0.06	0.44 <i>0.1</i> 9	1.33 <i>0.94</i>	1.94 <i>0.91</i>				2.40	7/1/2017 7/1/2017
Short-Term Cash	10,440,505	0	0.19	0.39	1.37	1.95				1.69	7/1/2017
Russell Overlay Fd	35,152,279	0	0.02	0.14	0.16	0.17	0.06	0.04	0.16	-0.04	9/1/2008
TOTAL PLAN Total Plan Benchmark 60/40 Blend	8,180,325,999	100	1.31 1.16 1.58	5.50 4.79 6.83	1.92 2.23 1.78	2.35 2.77 0.99	9.21 8.98 8.42	5.38 5.34 4.84	9.79 10.05 9.31	4.98	7/1/2000 7/1/2000 7/1/2000
Total Plan ex PE,RE & Priv Inf Total Plan BM ex PE RE	6,817,162,581	83	1.48 1.68	6.49 7.08	0.96 1.01	0.45 0.49	8.64 8.44	4.50 4.38	9.89 9.67	6.19	4/1/1996 4/1/1996



END NOTES

2/28/2019

TOTAL PLAN

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

GROWTH

Total Public Growth

40% MSCI ACWI Net

Total Private Growth

11% ILPA All Funds Index

2.5% ODCE + 2.5%

1.5% ILPA/Cambridge Distressed Securities Index

INCOME

1.5% Alerian MLP Total Return

3.5% Liquid Credit Custom (50% BoA HY/50% CS LL)

3% S&P LSTA Lev Loans + 3%

STABILITY

Crisis Protection Class

4% CS Managed Futures 18% Vol Index

4% Barclays Long Duration US Treasury Index

Inflation Protection

2% CPI + 4%

4% NFI-ODCE Index

1% Barclays 1-10 Year TIPs Index

1% BB Commodity Index

Volatility Protection

11.5% Barclays Agg

6.5% HFRI FOF Composite

3.0% BofA Merrill Lynch US T-Notes 0-1 Yr

Report ID: IPM0005

Reporting Currency: USD

TOTAL NET OF FEES

2/28/2019

				Cumı	ılative					
Account Name Benchmark Name	Market Value	% of Total	Month	1/1/2019 - 1/31/2019	12/1/2018 - 12/31/2018	YTD	2018	2017	2016	Inception Date
US Public Equity Russell 3000 Index	1,332,517,127	16	3.51 3.52	8.58 8.58	-9.26 -9.31	12.38 12.40	-5.17 -5.24	21.14 21.13	12.84 12.74	8/1/2007 8/1/2007
Non-US Public Equity Total International Equity BM	1,184,828,764	14	1.70 1.95	7.71 7.56	-4.24 -4.53	9.54 9.66	-13.85 -14.20	27.76 27.19	5.01 <i>4.50</i>	5/1/2009 5/1/2009
QVM Tilt MSCI World Net Dividend Index	1,233,194,134	15	2.16 3.01	7.75 7.78	-7.50 -7.60	10.08 11.02	-7.96 -8.71	23.36 22.40	7.58 7.51	10/1/2015 10/1/2015
Total Public Growth MSCI All Country World Net Index	3,750,540,025	46	2.49 2.67	8.03 7.90	-7.12 -7.04	10.71 10.78	-9.20 -9.41	24.11 23.97	8.78 7.86	7/1/2000 7/1/2000
Private Equity ILPA All Fds BM 1Q Lag 2	537,560,639	7	0.28 0.28	0.18 <i>0.18</i>	0.88 3.12	0.46 0.46	17.38 15.80	19.69 <i>15</i> .69	9.19 8.01	2/1/1989 2/1/1989
Non Core Real Estate	152,695,352	2	0.52	0.00	0.21	0.52	25.66			7/1/2017
Opportunistic Private Credit ILPA Distressed BM 1Q Lag	44,777,263	1	0.00 <i>0.00</i>	-1.08 -1.08	0.01 1.35	-1.08 <i>-1.08</i>	11.81 <i>7</i> .96			7/1/2017 7/1/2017
Total Private Growth Private Growth Benchmark	735,033,255	9	0.31 <i>0.42</i>	0.07 <i>0.11</i>	0.69 2.77	0.38 <i>0.5</i> 3	18.83 <i>14.06</i>			7/1/2017 7/1/2017
TOTAL GROWTH COMPOSITE Total Growth Composite BM	4,485,573,280	55	2.13 2.06	6.63 5.77	-5.84 <i>-4.</i> 37	8.89 <i>7.95</i>	-5.23 -3.27			7/1/2017 7/1/2017
Harvest Fund Advisor Alerian MLP Index	152,596,474	2	0.84 0.27	15.80 12.64	-10.63 -9.36	16.77 12.94	-13.27 -12.42	-5.26 -6.52	20.64 18.31	1/1/2015 1/1/2015
Liquid Credit Liquid Credit BM (50% BoA US HY/50% CS LL)	316,164,028	4	1.81 1.63	3.41 3.45	-2.31 -2.24	5.28 5.13	0.78 -0.57	3.54 4.60	9.59 9.63	5/1/2013 5/1/2013
Private Credit S&P LSTA Lev Loans + 3%	122,490,213	2	0.24 -0.49	0.00 <i>0.</i> 38	0.40 <i>0.</i> 96	0.24 -0.12	3.71 8.19			7/1/2017 7/1/2017
TOTAL INCOME COMPOSITE Income Aggregate BM	591,250,715	7	1.23 <i>0.5</i> 8	5.67 <i>4.</i> 02	-3.89 <i>-2.38</i>	6.97 <i>4.62</i>	-2.47 0.57			7/1/2017 7/1/2017
CPC Long Duration Barclays US Treasury LT Index	310,009,761	4	-1.18 <i>-1.22</i>	0.66 <i>0.67</i>	5.57 5.47	-0.53 -0.56	-1.89 <i>-1.84</i>			6/1/2017 6/1/2017
CPC Trend Following Credit Suisse Liquid Alt Beta	288,635,188	4	0.03 -2.38	-6.11 -7.58	3.97 10.75	-6.08 -9.78	-15.11 -10.01			6/1/2017 6/1/2017
Total Crisis Protection 50/50 CPC Custom BM	598,644,949	7	-0.60 <i>-1.80</i>	-2.70 -3.45	4.86 8.11	-3.29 <i>-5.1</i> 9	-7.99 <i>-5.45</i>			6/1/2017 6/1/2017

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

TOTAL NET OF FEES

2/28/2019

				Cumu	ılative					
Account Name Benchmark Name	Market Value	% of Total	Month	1/1/2019 - 1/31/2019	12/1/2018 - 12/31/2018	YTD	2018	2017	2016	Inception Date
Priv Listed Infrastructure CPI + 4% 1 Mo Lag	144,135,947	2	0.02 0.52	1.14 0.01	0.14 0.00	1.16 <i>0.53</i>	13.32 <i>6.18</i>	12.45 6.20	13.35 <i>5.69</i>	3/1/2015 3/1/2015
Core Real Estate NFI-ODCE BM 2	361,504,004	4	1.13 1.13	0.35 <i>0</i> .35	0.00 1.87	1.48 1.48	7.22 7.71			7/1/2017 7/1/2017
Inflation-Linked Bonds Total Inflation Linked Custom	202,742,064	2	0.03 0.10	1.18 1.12	0.45 0.41	1.21 1.22	-0.23 -0.25	1.73 1.90	3.91 <i>4.01</i>	11/1/2009 11/1/2009
Total Inflation Protection Inflation Protection Custom BM	708,382,015	9	0.59 <i>0.83</i>	0.75 1.00	0.15 <i>0.12</i>	1.34 1.84	6.30 3.84			7/1/2017 7/1/2017
Absolute Return HFRI Fund of Funds Composite Index	558,364,619	7	0.37 0.84	1.61 2.45	0.09 -1.66	1.99 3.31	4.48 -4.03			7/1/2017 7/1/2017
Traditional Fixed Income Bloomberg Barclays U.S. Aggregate Bond Index	926,135,391	11	0.04 -0.06	1.24 1.06	1.64 1.84	1.29 1.00	-0.50 <i>0.01</i>	3.99 3.54	3.15 2.65	7/1/2000 7/1/2000
Strategic Cash ICE BofAML US Treasury Notes 0-1 Year	266,038,253	3	0.25 0.19	0.37 0.25	0.11 <i>0.24</i>	0.62 <i>0.44</i>	1.88 1.92			2/1/2017 2/1/2017
Total Volatility Protection Total Volitility Protection BM	1,750,543,396	21	0.18 <i>0.26</i>	1.23 1.38	0.92 <i>0.</i> 53	1.41 1.63	1.41 -0.95			7/1/2017 7/1/2017
TOTAL STABILITY COMPOSITE Total Stability Composite BM	3,057,570,359	37	0.12 <i>-0.06</i>	0.32 0.25	1.48 2.08	0.44 <i>0.1</i> 9	0.57 -0.79			7/1/2017 7/1/2017
Short-Term Cash	10,440,505	0	0.19	0.20	0.18	0.39	1.76			7/1/2017
Russell Overlay Fd	35,152,279	0	0.02	0.12	-0.01	0.14	0.06	-0.09	0.06	9/1/2008
TOTAL PLAN Total Plan Benchmark 60/40 Blend	8,180,325,999	100	1.31 1.16 1.58	4.14 3.59 5.16	-2.88 -1.82 -3.49	5.50 4.79 6.83	-2.69 -1.96 -5.52	14.48 14.30 15.41	7.35 6.42 5.92	7/1/2000 7/1/2000 7/1/2000
Total Plan ex PE,RE & Priv Inf Total Plan BM ex PE RE	6,817,162,581	83	1.48 1.68	4.94 5.30	-3.57 -3.99	6.49 7.08	-5.64 -5.82	14.66 14.46	6.97 <i>6.13</i>	4/1/1996 4/1/1996



END NOTES

2/28/2019

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

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

GROWTH

Total Public Growth

40% MSCI ACWI Net

Total Private Growth

11% ILPA All Funds Index

2.5% ODCE + 2.5%

1.5% ILPA/Cambridge Distressed Securities Index

INCOME

1.5% Alerian MLP Total Return

3.5% Liquid Credit Custom (50% BoA HY/50% CS LL)

3% S&P LSTA Lev Loans + 3%

STABILITY

Crisis Protection Class

4% CS Managed Futures 18% Vol Index

4% Barclays Long Duration US Treasury Index

Inflation Protection

2% CPI + 4%

4% NFI-ODCE Index

1% Barclays 1-10 Year TIPs Index

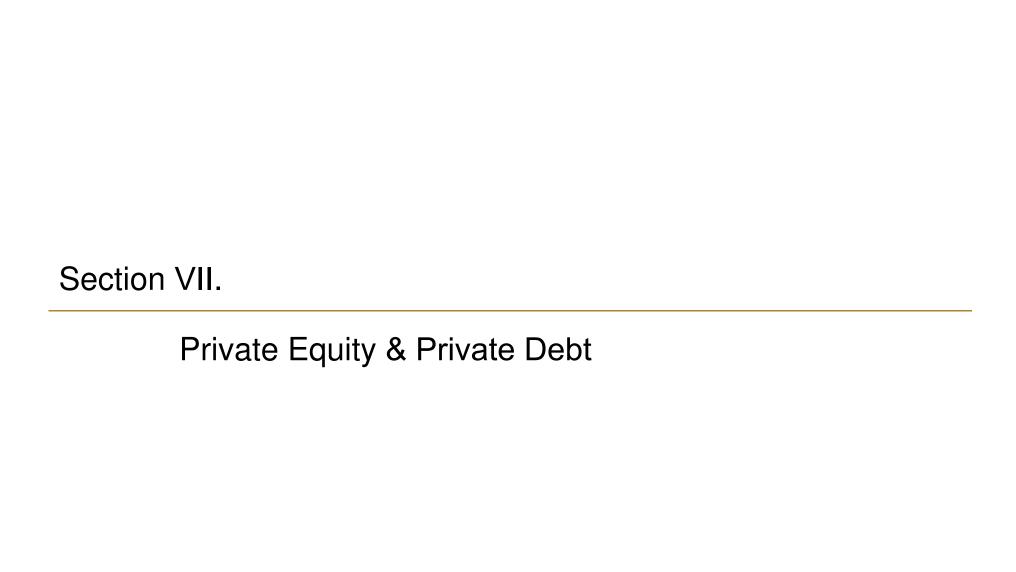
1% BB Commodity Index

Volatility Protection

11.5% Barclays Agg

6.5% HFRI FOF Composite

3.0% BofA Merrill Lynch US T-Notes 0-1 Yr

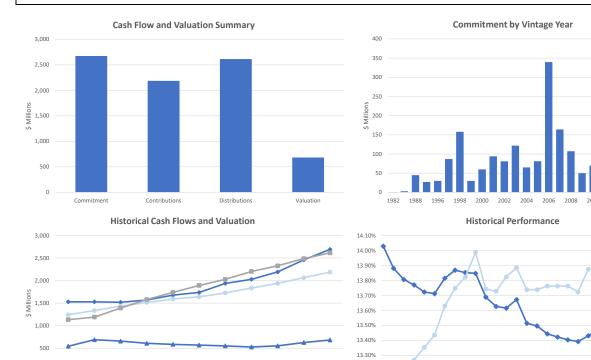


Portfolio Summary

9/30/2018 All Investments

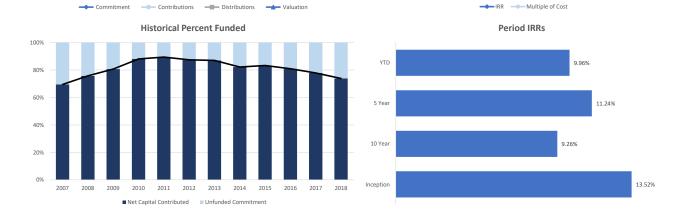
Performance Summary

		Number of					Multiple of		
Asset Class	Investment Type	Investments	Commitment	Contributions	Distributions	Valuation	Cost	IRR	TWR
Private Equity Funds									
	Agriculture Total	1	25,000,000	-	-	-	-	-	
	Buyout Total	87	1,609,858,254	1,310,048,898	1,687,096,642	366,806,381	1.57	13.29%	12.90%
	Direct Lending Total	4	125,000,000	87,157,045	43,666,742	56,284,211	1.15	9.39%	8.27%
	Distressed Debt Total	14	263,000,000	238,106,103	251,558,730	80,715,379	1.40	10.27%	9.98%
	Energy Total	9	198,000,000	156,888,111	194,179,846	38,566,211	1.48	23.69%	7.86%
	Fund of Funds Total	1	45,000,000	45,000,000	106,748,821	-	2.37	19.94%	
	Opportunistic Credit Total	1	50,000,000	24,623,462	-	23,690,620	0.96	-4.41%	-5.09%
	Secondary Total	4	60,000,000	55,009,798	64,537,766	3,000,267	1.23	5.86%	3.15%
	Venture Capital Total	23	298,750,000	270,087,974	266,814,963	113,855,877	1.41	6.30%	4.30%
Total: Private Equity F	unds	144	2,674,608,254	2,186,921,390	2,614,603,512	682,918,946	1.51	13.52%	11.45%



0

2010 2011 2012 2013 2014 2015 2016 2017 2018



Mar-12

Mar-13

Mar-14

Mar-15

Mar-16

Mar-17

1.52

1.51

1.50

1.49

1.47

1.46

1.45

Mar-18

Employees' Retirement System of Rhode Island Private Equity Performance 9/30/2018

Cumulative Cash Flows (\$)

Cumulative Performance*

								1 6110	Jillance
	Vintage	_	Amount Committed		Amount	Amount		Net	Net Multiple
Current Partnerships	Year	Type	(In \$ unless otherwise noted)	Amount Drawn	Distributed	Unfunded	Valuation (\$)	IRR (%)	of Investment
			otherwise noted)						investment
Nautic Partners V	2000	Buyout	20,000,000	20,331,229	40,426,893	636,249	1,557,340	17.12	2.07
CVC European Equity Partners III	2001	Buyout	20,000,000	23,760,732	59,551,716	297,277	1,430,600	41.04	2.57
Parthenon Investors II	2001	Buyout	23,960,000	23,409,381	37,415,960	1,804,074	587,273	12.31	1.62
Nordic Capital Fund V	2003	Buyout	€ 14,615,550	19,373,940	51,083,672	-	335,629	20.21	2.65
TPG Partners IV	2003	Buyout	15,000,000	16,672,684	31,613,879	64,421	705,772	15.51	1.94
Birch Hill Equity Partners III	2005	Buyout	CAD 18,000,000.00	15,783,090	28,335,757	155,709	3,920,361	13.30	2.04
CVC European Equity Partners IV	2005	Buyout	€ 16,500,000	18,834,904	36,829,595	2,614,095	20,578	16.64	1.96
Providence Equity Partners V	2005	Buyout	25,000,000	31,142,133	36,171,706	2,200,670	781,319	3.24	1.19
Centerbridge Capital Partners	2006	Buyout	15,000,000	23,736,956	39,488,411	984,852	4,131,772	19.87	1.84
Fenway Partners Capital Fund III	2006	Buyout	15,000,000	17,230,534	14,495,125	1,011,798	6,477,011	3.53	1.22
Nordic Capital Fund VI	2006	Buyout	€ 15,000,000	18,896,706	32,407,442	-	325,629	8.65	1.73
TPG Partners V	2006	Buyout	20,000,000	20,697,887	25,463,841	390,088	3,190,659	5.05	1.38
MHR Institutional Partners III	2006	Buyout	20,000,000	20,800,000	21,109,097	6,974,396	8,908,971	6.92	1.44
Green Equity V	2007	Buyout	20,000,000	20,422,420	32,692,075	1,701,129	14,465,967	19.03	2.31
Nautic Partners VI	2007	Buyout	20,000,000	24,233,473	49,504,788	522,440	5,985,598	17.56	2.29
Providence Equity Partners VI	2007	Buyout	25,000,000	29,484,941	30,732,045	1,239,714	7,745,816	5.34	1.31
Trilantic Capital Partners IV	2007	Buyout	11,098,351	11,606,535	17,222,868	1,418,621	1,544,146	14.00	1.62
Bain Capital Fund X	2008	Buyout	25,000,000	24,300,000	31,702,360	762,500	10,260,659	10.53	1.73
CVC V	2008	Buyout	€ 20,000,000	25,396,044	44,976,512	391,890	9,638,325	20.05	2.15
Nordic Capital Fund VII	2008		€ 25,000,000 € 15,000,000	17,940,327	26,988,186	1,070,024	1,502,818	8.23	1.59
TPG VI	2008	Buyout				435,583		9.08	1.39
Advent International GPE VII-C, L.P.		Buyout	10,000,000	13,924,603	15,060,114	•	4,236,686		
Providence Equity Partners VII	2012	Buyout	20,000,000	18,800,000	13,985,218	1,200,000	21,994,310	20.05	1.91
Nordic Capital Fund VIII	2012 2013	Buyout Buyout	25,000,000 € 15,000,000	30,475,715 18,019,759	22,642,654 6,101,542	5,095,040 6,273,283	23,763,535 19,712,631	21.71 16.10	1.52 1.43
Riverside Capital Appreciation Fund VI	2013	Buyout	20,000,000	17,516,842	8,384,842	3,184,190	17,072,134	15.03	1.45
	2013	•	30,000,000	32,841,753	6,373,089	1,828,070	32,588,295	9.01	1.43
Carlyle Asia Partners IV	2014	Buyout	€ 15,000,000	17,783,138	4,728,097	2,482,770	14,974,573	6.04	1.19
CVC Capital Partners VI Nautic Partners VII	2014	Buyout	20,000,000			4,722,789		45.12	1.11
	2014	Buyout	20,000,000	16,565,272	20,637,893 12,746,615		11,938,947	27.45	2.42
Riverside Micro-Cap Fund III		Buyout		17,758,317		2,241,683	30,282,659		1.09
Sorenson Capital Partners III	2014	Buyout	30,000,000	24,770,931	7,769	6,946,184	27,107,627	4.29	
Paine & Partners Capital Fund IV	2015	Buyout	30,000,000	21,049,724	6,305,447	4,479,193	19,675,816	11.57	1.23
Baring Asia Private Equity Fund VI	2015	Buyout	15,000,000	12,713,267	2,868,159	15,098,528	13,208,398	16.44	1.26
Centerbridge Capital Partners III	2015	Buyout	25,000,000	13,614,788	4,335,842	9,755,480	13,663,467	13.73	1.32
Advent International GPE VIII	2016	Buyout	20,000,000	12,980,000	-	7,020,000	15,055,177	16.13	1.16
Nautic Partners VIII	2016	Buyout	20,000,000	8,406,893	7,202,847	12,544,678	5,791,032	85.66	1.55
Southvest Partners VII	2016	Buyout	37,500,000	6,016,737	1,266,339	32,063,583	2,229,575	-54.78	0.58
Tenex Capital Partners II	2016	Buyout	25,000,000	14,270,108	803,048	11,353,060	14,734,545	8.03	1.09
CVC Capital Partners VII	2017	Buyout	€ 35,000,000	-	-	-	509,334	N/M	-
RLH IV	2017	Buyout	40,000,000	1,539,630	-	38,459,707	725,108	N/M	0.47
Altaris Constellation Partners IV, L.P.	2018	Buyout	6,000,000	1,848,514	-	4,151,486	1,987,390	N/M	1.08
Altaris IV	2018	Buyout	24,000,000	5,048,912	-	18,951,088	5,370,131	N/M	1.06
WLR Recovery Fund IV	2007	Debt	8,000,000	7,277,318	9,307,061	275,492	649,051	7.77	1.37
Oaktree European Principal Fund III	2011	Debt	20,000,000	17,150,000	12,569,330	5,783,415	15,467,600	11.64	1.63
Centerbridge Special Credit Partners II	2012	Debt	25,000,000	22,500,000	16,952,135	2,500,000	7,918,483	2.63	1.11
Garrison Opportunity Fund IV	2014	Debt	30,000,000	28,373,532	1,304,695	1,571,514	29,743,480	3.89	1.09
CSIP V	2016	Debt	30,000,000	15,331,690	2,910,670	16,207,068	14,109,057	7.37	1.11
Virgo Societas Partnership IV (Offshore), L.P.	2017	Debt	50,000,000	24,623,462	-	25,954,676	23,690,620	N/M	0.96
Davidson Kempner L-T Opps. IV	2018	Debt	50,000,000	13,000,000	-	37,000,000	13,896,022	N/M	1.07
Owl Rock Capital Corporation	2018	Debt	50,000,000	24,124,106	609,106	25,875,894	23,935,177	N/M	1.02
First Reserve Fund XI	2006	Energy	20,000,000	22,125,580	14,833,318	-	1,622,244	-7.05	0.74
Kayne Anderson Energy Fund IV	2007	Energy	15,000,000	16,605,519	17,447,153	-	470,563	2.56	1.08
. 37		37	-,,-		. ,		-,		

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

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

Employees' Retirement System of Rhode Island Private Equity Performance 9/30/2018

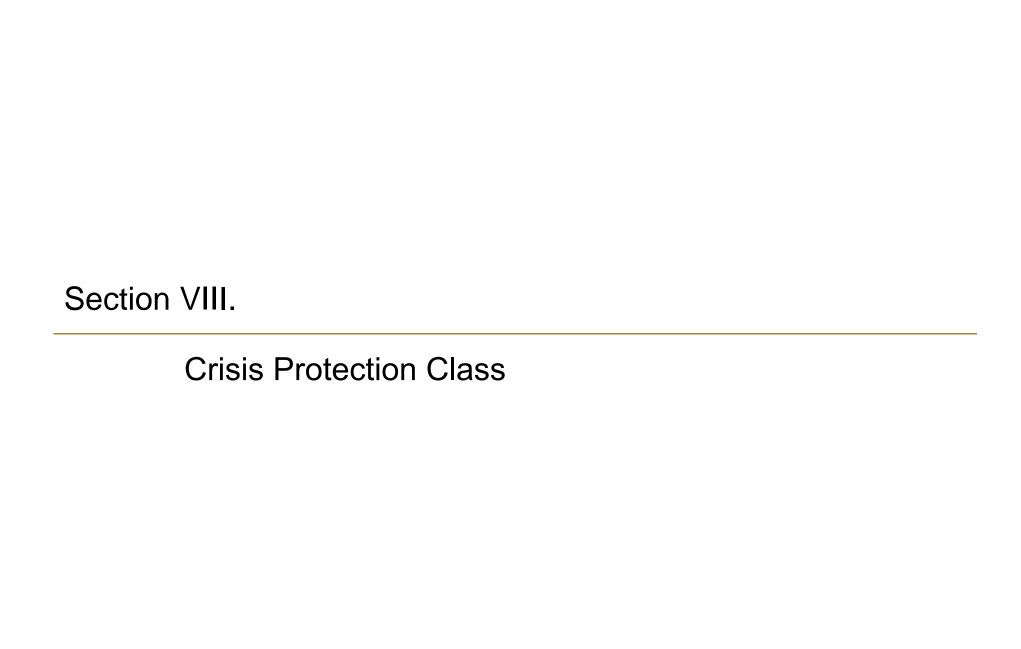
Cumulative Cash Flows (\$)

Cumulative

				Cum	ulative Casil Flows	ς (φ)		Perfe	ormance*
Current Partnerships	Vintage Year	Туре	Amount Committed (In \$ unless otherwise noted)	Amount Drawn	Amount Distributed	Amount Unfunded	Valuation (\$)	Net IRR (%)	Net Multiple of Investment
EnCap Energy Capital Fund IX	2013	Energy	18,000,000	19,743,168	13,678,972	1,466,311	13,707,316	15.82	1.39
EnCap Energy Capital Fund X	2015	Energy	25,000,000	20,016,047	3,808,078	6,546,432	19,085,998	10.40	1.14
EnCap Energy Capital Fund XI	2017	Energy	50,000,000	4,623,011	-	45,376,989	3,610,660	N/M	0.78
Coller V	2006	Secondaries	15,000,000	12,620,912	16,381,596	3,270,000	1,690,469	8.18	1.43
W Capital II	2007	Secondaries	15,000,000	14,896,718	19,748,146	1,596,691	1,176,480	10.51	1.40
Granite Global Ventures II	2004	Venture Capital	15,000,000	14,333,510	22,180,375	675,000	1,678,554	6.50	1.66
Leapfrog Ventures II	2005	Venture Capital	10,000,000	9,640,000	6,811,564	360,000	4,565,232	2.67	1.18
Alta Partners VIII	2006	Venture Capital	15,000,000	15,000,000	26,769,196	-	11,811,978	17.95	2.57
Castile Ventures III	2006	Venture Capital	5,000,000	5,009,730	1,396,371	-	648,674	-16.48	0.41
Focus Ventures III	2006	Venture Capital	15,000,000	15,000,000	6,480,361	-	2,202,699	-8.85	0.58
GGV III	2006	Venture Capital	15,000,000	14,625,748	41,370,739	375,000	1,260,810	18.53	2.91
Point 406 Ventures I	2006	Venture Capital	10,000,000	10,950,534	8,474,403	370,000	11,019,835	9.4	1.78
Point Judith Venture Fund II	2006	Venture Capital	5,000,000	6,226,675	6,431,896	106,571	2,527,910	5.65	1.44
Lighthouse Capital Partners VI	2007	Venture Capital	15,000,000	14,250,000	19,719,297	750,000	507,154	6.79	1.42
Paladin III	2008	Venture Capital	10,000,000	13,117,163	9,101,086	305,813	9,994,480	8.12	1.46
Industry Ventures Partnership Holdings III	2014	Venture Capital	25,000,000	22,941,775	4,032,277	2,875,000	31,248,024	18.61	1.54
Industry Ventures Partnership Holdings III C	2015	Venture Capital	15,000,000	9,750,643	181,258	5,249,357	13,162,213	22.98	1.37
Industry Ventures Partnership Holdings IV	2015	Venture Capital	10,000,000	3,450,000	40,923	6,550,000	4,163,090	14.67	1.22
Other funds in aggregrate**	various	Buyout	100,000,000	104,313,545	87,177,780	23,846,508	36,792,758		
Total			\$ 1,568,070,789	\$ 1,355,932,749	\$ 1,278,557,010	\$ 451,260,581	\$ 719,287,003		

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

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CPC Returns CPC Program, February 28, 2019, %										
Annualized Annualized Std. Annualized Std. Return (Since Dev (February Dev (Since Account Name MTD Return Inception) '19) Inception)										
Total CPC Program	-0.60	-3.09	7.65	8.82						
CPC Trend	0.03	-6.55	9.15	15.71						
CPC Long Duration	-1.18	-0.58	7.55	8.81						

Transitive Risk CPC Program, 02/28/2019, USD											
	SPX +10%	FTSE 100 +10% (No	MSCI EM +10% (No	Gold +10%	Oil +10%	20+ Year Treasury +10% (No	DXY +10%	MSCI All Country -20%			
Account Name	(No Decay) - P&L % MV	Decay) - P&L % MV	Decay) - P&L % MV	(No Decay) - P&L % MV	(No Decay) - P&L % MV	Decay) - P&L % MV	(No Decay) - P&L % MV	(No Decay) - P&L % MV			
Total CPC Program	-0.93%	-0.48%	-0.66%	1.70%	-0.31%	7.72%	2.96%	2.37%			
CPC Trend	-0.32%	0.20%	-0.98%	-0.14%	-0.39%	5.90%	8.42%	1.82%			
CPC Long Duration	-1.49%	-1.12%	-0.36%	3.41%	-0.23%	9.42%	-2.12%	2.88%			

Return Correlation (Since Inception)										
	Total CPC									
	Program	CPC Trend	Duration							
Total CPC Program	1.00	0.86	0.48							
CPC Trend	0.86	1.00	-0.03							
CPC Long Duration	0.48	-0.03	1.00							

Return Correlation (FEB '19)										
	Total CPC		CPC Long							
	Program	CPC Trend	Duration							
Total CPC Program	1.00	0.93	0.91							
CPC Trend	0.93	1.00	0.69							
CPC Long Duration	0.91	0.69	1.00							



Absolute Return



Employees' Retirement System of the State of Rhode Island

Absolute Return Portfolio Portfolio Performance Summary Estimated as of February 28, 2019

						Ret	urns					Sharpe	Incep
Fund	Market Value	Actual %	Feb	QTD	YTD	FYTD	1 Year	3 Year	5 Year	Incep	Std Dev	Ratio	Date
Absolute Return Portfolio													
Capula Global Relative Value Fund Ltd.	75,115,487	13.4%		1.77%	1.77%	4.10%	5.36%	5.61%	6.58%	5.77%	1.79%	2.64	Dec-11
Davidson Kempner Institutional Partners, L.P.	89,080,608	15.9%	0.49%	1.50%	1.50%	1.46%	1.65%	5.77%	4.15%	5.54%	2.02%	2.22	Nov-11
DE Shaw Composite Fund LLC	121,077,807	21.7%		2.86%	2.86%	8.95%	11.18%	10.05%	11.62%	12.82%	4.28%	2.64	Nov-11
Elliott Associates, L.P.	108,935,641	19.5%	-1.10%	0.38%	0.38%	-0.57%	1.20%	7.76%	7.06%	8.47%	3.56%	2.05	Nov-11
Graham Absolute Return Trading Ltd.	61,334,841	11.0%	0.38%	3.67%	3.67%	0.22%	0.61%	2.82%	2.93%	2.86%	5.67%	0.38	Jan-12
Viking Global Equities, LP	64,473,643	11.5%	1.70%	8.02%	8.02%	4.14%	8.30%	9.27%	6.63%	10.07%	7.32%	1.23	Dec-11
Winton Fund Limited	37,802,016	6.8%	0.88%	-1.51%	-1.51%	-3.35%	-1.24%	-0.46%	3.33%	3.24%	8.38%	0.32	Dec-11
Absolute Return Portfolio - Total	557,820,042	99.8%	0.57%	2.34%	2.34%	2.75%	4.41%	6.88%	4.18%	5.94%	3.08%	1.62	Nov-11
HFRI Fund of Funds Composite Index			0.84%	3.31%	3.31%	-1.57%	-1.60%	3.75%	1.81%	3.03%	3.59%	0.61	Nov-11
MSCI AC World Index Free - Net			2.67%	10.78%	10.78%	0.79%	-0.84%	12.87%	6.28%	9.02%	11.27%	0.75	Nov-11
ML 3-month T-Bills			0.18%	0.38%	0.38%	1.43%	2.04%	1.13%	0.70%	0.50%	0.20%	-	Nov-11
25% MSCI ACWI/75% Barclays Aggregate			0.62%	3.41%	3.41%	2.38%	2.35%	4.50%	3.42%	4.06%	3.50%	0.91	Nov-11
Liquidating Portfolio													
Indus Asia Pacific Distribution Holding Company II, 06.30.14 Series													
(liquidating trust)	320,967	0.1%	0.00%	-1.95%	-1.95%	-6.07%	-11.05%	-9.92%	-16.20%	-10.72%	18.43%	-0.56	Jan-12
Luxor Capital Partners, LP - Liquidating SPV	968,730	0.2%	-0.50%	-0.53%	-0.53%	1.44%	5.18%	-	-	10.70%	15.88%	0.61	Jul-16
Liquidating/Redeeming - Total	1,289,697	0.2%	-0.38%	-0.89%	-0.89%	1.82%	4.22%	1.21%	-0.69%	0.67%	5.03%	-0.01	Nov-11
Total Absolute Return Portfolio	559,109,739	100.0%	0.57%	2.34%	2.34%	2.75%	4.41%	6.30%	3.65%	5.31%	2.92%	1.50	Nov-11
HFRI Fund of Funds Composite Index			0.84%	3.31%	3.31%	-1.57%	-1.60%	3.75%	1.81%	3.03%	3.59%	-	Nov-11
Market Indices													
Libor3Month			0.20%	0.43%	0.43%	1.70%	2.49%	1.58%	1.07%	0.84%	0.22%	-	Nov-11
Bloomberg Barclays US Aggregate Bond Index			-0.06%	1.00%	1.00%	2.67%	3.17%	1.69%	2.32%	2.29%	2.75%	0.53	Nov-11
Bloomberg Barclays US High Yield Bond Index			1.66%	6.26%	6.26%	3.88%	4.31%	9.81%	4.54%	6.65%	5.27%	1.09	Nov-11
S&P 500 TR			3.21%	11.48%	11.48%	3.85%	4.69%	15.28%	10.67%	13.88%	10.76%	1.19	Nov-11
MSCI EAFE - Net			2.55%	9.29%	9.29%	-3.12%	-6.04%	9.32%	2.07%	5.91%	12.78%	0.45	Nov-11
MSCI EMF (Emerging Markets Free) - Net			0.22%	9.01%	9.01%	-0.24%	-9.89%	15.04%	4.13%	3.16%	15.59%	0.22	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 them 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 disclosure expert as required by applicable law.



Employees' Retirement System of the State of Rhode Island

Absolute Return Portfolio Fund Level Performance Report Estimated as of February 28, 2019

						Tra	ailing Retu	rns		Calen	dar Year R	eturns		5 Yr		Sharpe Rat	io	Start
Fund	QTD	YTD	Feb	Jan	Dec	1 Year	3 Year	5 Year	2018	2017	2016	2015	2014	Std Dev	3 yr	5 yr	Incep.	Date
Absolute Return																		
Capula Global Relative Value Fund Ltd.	1.77%	1.77%				5.33%	5.61%	6.57%	4.63%	3.79%	8.37%	7.54%	8.14%	1.58%	2.37	3.23	1.83	Oct-05
Davidson Kempner Institutional Partners, L.P.	1.47%	1.47%	0.49%	0.98%	-0.79%	1.40%	5.45%	3.95%	1.81%	6.11%	6.71%	1.51%	4.45%	2.00%	1.96	1.40	1.53	Mar-96
DE Shaw Composite Fund LLC	2.86%	2.86%				10.87%	9.66%	11.09%	11.16%	10.41%	6.12%	13.68%	15.57%	4.28%	1.92	2.23	1.60	Mar-01
Elliott Associates, L.P.	0.38%	0.38%	-1.10%	1.50%	0.20%	0.77%	7.36%	6.63%	2.91%	8.80%	12.98%	2.51%	8.24%	3.57%	1.74	1.51	1.87	Jan-90
Graham Absolute Return Trading Ltd.	3.67%	3.67%	0.38%	3.28%	-2.75%	0.47%	2.76%	4.86%	2.34%	-7.01%	11.78%	1.50%	10.42%	7.92%	0.20	0.50	0.90	Jan-05
Viking Global Equities, LP	8.01%	8.01%	1.70%	6.20%	-3.10%	12.14%	10.77%	7.52%	4.64%	13.01%	-3.92%	8.27%	13.47%	7.95%	1.29	0.82	1.41	Oct-99
Winton Fund Limited	-1.52%	-1.52%	0.88%	-2.38%	-1.50%	-1.28%	-0.50%	3.31%	-0.56%	7.88%	-3.01%	0.95%	13.88%	8.66%	-0.23	0.30	0.64	Oct-97
Liquidating Portfolio																		
Indus Asia Pacific Fund, LP	-1.95%	-1.95%	0.00%	-1.95%	0.67%	-11.05%	-9.92%	-16.19%	-11.10%	9.70%	-26.00%	-33.23%	-15.60%	21.57%	-0.41	-0.75	0.00	Dec-00
Luxor Capital Partners, LP	-0.53%	-0.53%	-0.50%	-0.03%	0.05%	5.18%	20.70%	3.98%	1.19%	54.38%	7.80%	-19.05%	-9.83%	14.54%	1.20	0.27	0.84	Apr-02
Benchmark																		
HFRI Fund of Funds Composite Index	3.31%	3.31%	0.84%	2.45%	-1.66%	-1.60%	3.75%	1.81%	-4.03%	7.77%	0.51%	-0.27%	3.37%	8.96%				Jan-90
HFRI Fund Weighted Composite Index	4.88%	4.88%	1.36%	3.47%	-2.52%	-0.56%	5.52%	2.81%	-4.74%	8.59%	5.44%	-1.12%	2.98%	9.13%				Jan-90
Market Indices																		
3 Month Libor - BOM	0.43%	0.43%	0.20%	0.23%	0.24%	2.49%	1.58%	1.07%	2.36%	1.29%	0.76%	0.33%	0.23%	0.24%				Jan-87
Barclays Aggregate Bond Index	1.00%	1.00%	-0.06%	1.06%	1.84%	3.17%	1.69%	2.32%	0.02%	3.55%	2.66%	0.57%	5.94%	2.76%				Jan-76
Barclays High Yield Credit Bond Index	6.26%	6.26%	1.66%	4.52%	-2.14%	4.31%	9.81%	4.54%	-2.08%	7.50%	17.14%	-4.46%	2.46%	5.42%				Jul-83
S&P 500 (TR)	11.48%	11.48%	3.21%	8.01%	-9.03%	4.68%	15.28%	10.67%	-4.38%	21.83%	11.96%	1.38%	13.69%	11.18%				Jun-88
MSCI EAFE - Net - USD	9.29%	9.29%	2.55%	6.57%	-4.85%	-6.04%	9.32%	2.07%	-13.79%	25.03%	1.00%	-0.81%	-4.90%	11.78%				Dec-69
MSCI EMF (EMERGING MARKETS FREE) - Net - USD	9.01%	9.01%	0.22%	8.77%	-2.66%	-9.89%	15.04%	4.13%	-14.58%	37.28%	11.19%	-14.92%	-2.19%	15.30%				Dec-87

Note: The above is manager composite history.



Real Estate

PORTFOLIO SUMMARY

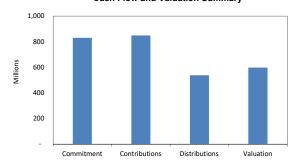
9/30/2018

All Portfolio Investments - Real Estate (1)

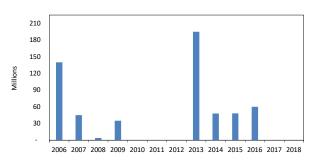
Performance Summary

Asset Class	Investment Type	Number of Investments (4)	Commitment	Contributions (2), (3)	Distributions (3)	Adjusted Valuation	Multiple of Cost	IRR	TWR
Real Estate Funds	Core	8	414,873,657	482,135,475	314,731,684	441,013,097	1.6x	5.5%	5.7%
	Non-Core	21	415,260,817	366,938,494	223,014,123	156,919,683	1.0x	0.8%	3.3%
Total: Real Estate Fund	ls	29	830,134,474	849,073,969	537,745,807	597,932,780	1.3x	4.5%	5.0%
Total:		29	830,134,474	849,073,969	537,745,807	597,932,780	1.3x	4.5%	5.0%

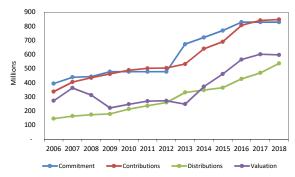
Cash Flow and Valuation Summary



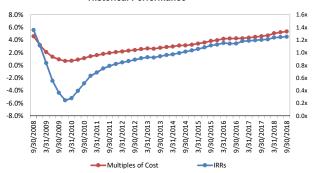
Commitment by Vintage Year



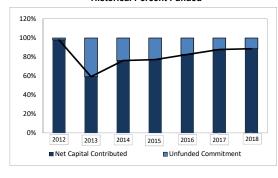
Historical Cash Flows and Valuation



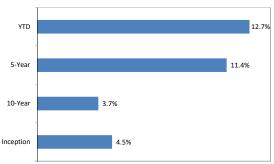
Historical Performance



Historical Percent Funded



Period IRRs (5)



⁽¹⁾ Investment information listed as of March 31, 1989 through September 30, 2018 and includes those investments which have been liquidated.

⁽²⁾ Contributions are based on cash activity and are higher than commitments primarily due to reinvestments and contributions for management fees in some of the core open-end funds.

⁽³⁾ Contributions and Distributions each include activity in the amount of \$33.5 million related to a simultaneous sale and purchase of shares in a core open-end fund.

 $^{^{(4)}\!}$ As of September 30, 2018 there are five core funds and eleven non-core funds.

⁽⁵⁾ The YTD IRR presented is an annualized percentage. The IRR on anunannualized basis for 3Q18 is 9.6%.

Employees' Retirement System of Rhode Island Real Estate Performance 9/30/2018

Cumulative Cash Flows (\$)

Cumulative Performance*

Current Partnerships	Vintage Year/Initial Investment	Туре	Amount Committed (In \$ unless otherwise noted)	Amount Drawn	Amount Distributed	Amount Unfunded	Valuation (\$)	Net IRR (%)	Net Multiple of Investment
AEW Core Property Trust	2010	Core	69,873,660	69,873,660	20,452,705	_	105,522,003	10.9	1.5
Heitman America Real Estate Trust	2014	Core	60,000,000	60,000,000	11,932,637	_	82,112,878	9.9	
JP Morgan Strategic Property Fund	2006	Core	75,000,000	75,000,000	31,120,345	_	110,615,941	6.3	
Morgan Stanley Prime Property Fund	2005	Core	35,000,000	35,000,000	23,660,069	_	64,927,784	7.4	
Prudential (PRISA)	2005	Core	50,000,000	50,000,000	22,846,906	_	78,335,380	5.5	
Magna Hotel Fund III	2008	Value-Add	4,000,000	3,426,573	5,668,115	573,427	126,466	14.4	
IC Berkeley Partners III	2013	Value-Add	18,000,000	16,038,326	22,639,173	1,961,674	2,166,865	20.4	
Exeter Industrial Value Fund III	2014	Value-Add	30,000,000	29,099,454	38,743,396	900,546	15,044,128	29.8	
Waterton Fund XII	2014	Value-Add	35,000,000	34,265,141	8,964,921	734,859	40,486,569	15.2	
Crow Holdings Retail Fund	2015	Value-Add	24,000,000	20,935,313	2,844,478	3,064,687	23,212,209	11.7	1.2
IC Berkeley Partners IV	2016	Value-Add	30,000,000	8,814,545	1,783,071	21,185,455	9,590,157	6.2	1.1
TriCon Capital Fund VII	2005	Opportunistic		14,571,533	4,720,253	428,467	519,667	-16.5	0.3
JP Morgan Alternative Property Fund	2006	Opportunistic	20,000,000	20,000,000	14,750,429	-	216,292	-4.3	0.7
GEM Realty Fund V	2013	Opportunistic	50,000,000	39,874,323	9,922,250	10,125,677	47,538,086	13.0	1.3
Lone Star Real Estate Fund IV	2015	Opportunistic	24,260,817	18,230,068	8,502,582	6,030,749	15,592,770	21.1	1.4
GEM Realty Fund VI	2017	Opportunistic		1,604,599	1,200,000	18,395,401	1,179,969	9.3	1.0
Total			\$ 560,134,477	\$ 496,733,535	\$ 229,751,330	\$ 63,400,942	\$ 597,187,163		

^{*}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.

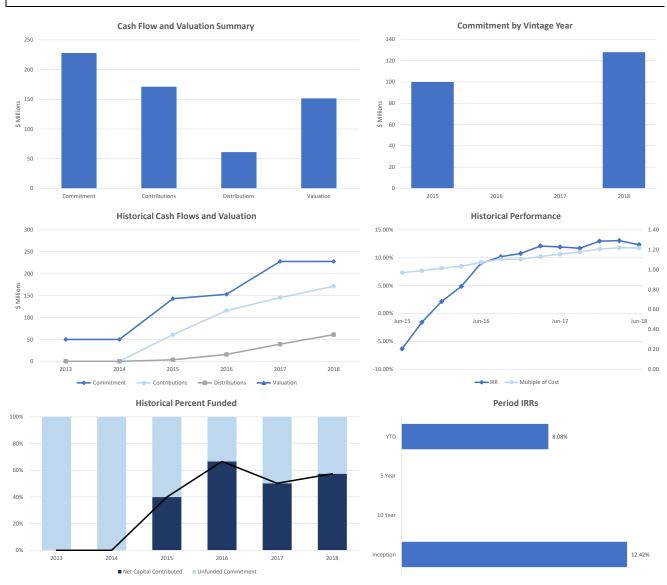


Portfolio Summary

9/30/2018 All Investments

Performance	Summary

Asset						Multiple of	
Class	Investment Type	Commitment	Contributions	Distributions	Valuation	Cost	IRR
Infrastructure	Funds						
IFM G	Global Infrastructure Fund	50,000,000	50,000,000	15,076,637	56,301,278	1.43	11.70%
ISQ G	Global Infrastructure Fund (UST), L.P.	50,000,000	60,226,194	23,926,812	48,688,045	1.21	14.18%
ISQ G	Global Infrastructure Fund II (UST), L.P.	40,000,000	2,648,872		2,358,637	0.89	-24.08%
Stone	epeak Infrastructure Fund II - Master Co- Investment Partners LP	10,000,000	8,478,420	571,642	8,348,673	1.05	5.80%
Stone	epeak Infrastructure Fund II Cayman (G AIV) LP	43,000,000	45,836,795	20,603,553	32,980,349	1.17	14.53%
Stone	epeak Infrastructure Fund III LP	35,000,000	4,024,340	826,040	2,953,106	N/A	N/A
Total: Infrastr	ructure Funds	228,000,000	171,214,621	61,004,684	151,630,088	1.24	12.42%



Employees' Retirement System of Rhode Island Private Infrastructure Performance 9/30/2018

Cumulative Cash Flows (\$)

Cumulative Performance

Current Partnerships	Vintage Year/Initial Investment		Amount Committed (In \$ unless otherwise noted)	Amount Drawn	Amount Distributed	Amount Unfunded	Valuation (\$)	Net IRR (%)	Net Multiple of Investment
IFM Global Infrastructure, L.P.	2015	Core	50,000,000	50,000,000	15,076,637	_	56,301,278	11.7	1.4
ISQ Global Infrastructure Fund, L.P.	2015	Value-Add	50,000,000	60,226,194	23,926,812	14,137,259	48,688,045	14.2	1.2
ISQ Global Infrastructure Fund II, L.P.	2017	Value-Add	40,000,000	2,648,872	-	37,351,128	2,358,637	-24.1	0.9
Stonepeak Infrastructure Fund II, L.P.	2016	Opportunistic	43,000,000	45,836,795	20,603,553	8,324,850	32,980,349	14.5	1.2
Stonepeak Infrastructure Fund II-C	2016	Opportunistic	10,000,000	8,478,420	571,642	1,639,277	8,348,673	5.8	1.1
Stonepeak Infrastrucutre Fund III	2018	Opportunistic	35,000,000	4,024,340	826,040	31,960,874	2,853,106	N/A	N/A
Total			\$ 228,000,000	\$ 171,214,621	\$ 61,004,684	\$ 93,413,388	\$ 151,530,088		

*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.



Cash Flow

CASH FLOW ANALYSIS - INCOME & EXPENSES

Employees Retirement System

FISCAL YEAR 2019	FY 2018-19 TOTAL	Projected June	Projected May	Projected April	Projected March	Actual February	Actual January 2019	Actual December	Actual November	Actual October	Actual September	Actual August	Actual July 2018
MEMBER BENEFITS	834,519,419	69,500,000	69,500,000	69,500,000	69,500,000	69,343,077	69,424,081	69,501,214	69,654,074	69,729,526	69,703,524	69,681,837	69,482,084
ADMINISTRATIVE EXPENSES	9,471,976	1,255,280.98	1,021,300	529,120	1,264,456	801,556	610,285	912,931	777,303	684,123	733,118	483,861	398,643
INVESTMENT EXPENSES	43,691,262	270,376	10,424,015	3,807,683	2,045,442	20,460	18,168	13,124,115	19,955	18,146	13,138,426	0	804,475
TOTAL OUTFLOW	887,682,657	71,025,657	80,945,315	73,836,803	72,809,898	70,165,093	70,052,534	83,538,260	70,451,332	70,431,795	83,575,068	70,165,698	70,685,202
CONTRIBUTIONS	519,088,711	54,595,381	44,734,514	41,272,504	42,480,747	36,090,355	54,923,714	34,863,860	55,191,655	43,359,980	27,337,674	31,357,169	52,881,158
OTHER INCOME*	118,528,449	3,138,460	13,807,256	14,038,691	2,870,790	10,162,489	5,717,704	1,540,773	19,157,026	(2,560,631)	30,034,164	18,350,593	2,271,136
TOTAL INCOME	637,617,160	57,733,841	58,541,770	55,311,195	45,351,537	46,252,844	60,641,418	36,404,633	74,348,681	40,799,349	57,371,838	49,707,762	55,152,294
DIFFERENCE	(250,065,497)	(13,291,816)	(22,403,546)	(18,525,608)	(27,458,361)	(23,912,249)	(9,411,116)	(47,133,628)	3,897,349	(29,632,446)	(26,203,230)	(20,457,936)	(15,532,908)

Municipal Employees Retirement System

	TOTAL	Projected June	Projected May	Projected April	Projected March	Actual February	Actual January 2019	Actual December	Actual November	Actual October	Actual September	Actual August	Actual July 2018
MEMBER BENEFITS	99,179,202	8,200,000	8,200,000	8,200,000	8,200,000	8,415,263	8,384,093	8,351,832	8,338,550	8,310,615	8,246,506	8,185,416	8,146,928
ADMINISTRATIVE EXPENSES	2,265,939	298,439	242,816	125,497	299,070	194,360	147,562	220,523	186,896	164,492	175,891	115,551	94,842
INVESTMENT EXPENSES	10,461,812	64,281	2,478,330	903,107	483,790	4,961	4,393	3,170,198	4,798	4,363	3,152,198	0	191,394
TOTAL OUTFLOW	111,906,953	8,562,720	10,921,146	9,228,603	8,982,860	8,614,584	8,536,047	11,742,553	8,530,245	8,479,470	11,574,595	8,300,967	8,433,164
CONTRIBUTIONS	68,320,035	5,597,269	5,857,272	5,099,829	6,369,814	5,748,136	6,227,640	6,054,796	6,104,213	5,723,536	5,286,222	4,903,739	5,347,569
OTHER INCOME*	28,375,395	746,159	3,282,702	3,329,698	679,002	2,464,179	1,382,494	372,182	4,606,150	(615,683)	7,205,857	4,382,324	540,330
TOTAL INCOME	96,695,430	6,343,428	9,139,974	8,429,527	7,048,816	8,212,315	7,610,134	6,426,978	10,710,363	5,107,853	12,492,079	9,286,063	5,887,899
DIFFERENCE	(15,211,524)	(2,219,292)	(1,781,172)	(799,077)	(1,934,044)	(402,268)	(925,913)	(5,315,576)	2,180,119	(3,371,616)	917,484	985,097	(2,545,265)

CASH FLOW ANALYSIS - INCOME & EXPENSES

State Police

Retirement System	TOTAL	Projected June	Projected May	Projected April	Projected March	Actual February	Actual January	Actual December	Actual November	Actual October	Actual September	Actual August	Actual July
							2019						2018
MEMBER BENEFITS	6,003,030	500,000	500,000	500,000	500,000	508,193	499,263	499,263	499,263	499,263	499,263	499,263	499,263
ADMINISTRATIVE EXPENSES	202,521	26,577	21,565	11,140	26,530	17,553	13,297	19,845	16,748	14,740	15,742	10,327	8,458
INVESTMENT EXPENSES	935,047	5,724	220,101	80,165	42,917	448	396	285,288	430	391	282,118	0	17,069
TOTAL OUTFLOW	7,140,598	532,302	741,665	591,305	569,447	526,194	512,955	804,396	516,440	514,393	797,122	509,589	524,790
CONTRIBUTIONS	5,389,986	527,408	316,594	332,007	290,687	553,816	464,517	381,166	668,195	473,748	511,035	444,510	426,307
OTHER INCOME*	2,588,300	66,448	291,537	295,564	60,234	222,547	124,577	33,493	412,753	(55,171)	644,915	391,653	99,750
TOTAL INCOME	7,978,286	593,856	608,131	627,571	350,921	776,363	589,093	414,658	1,080,947	418,577	1,155,949	836,162	526,057
DIFFERENCE	837,688	61,555	(133,534)	36,266	(218,526)	250,169	76,138	(389,737)	564,507	(95,817)	358,827	326,573	1,267

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Judiciai													
Retirement System	TOTAL	Projected June	Projected May	Projected April	Projected March	Actual February	Actual January 2019	Actual December	Actual November	Actual October	Actual September	Actual August	Actual July 2018
MEMBER BENEFITS	3,451,052	275,000	275,000	275,000	275,000	303,954	304,022	303,781	303,781	288,071	288,071	288,071	271,301
ADMINISTRATIVE EXPENSES	106,859	14,070	11,402	5,885	13,828	9,255	7,016	10,482	8,859	7,797	8,326	5,463	4,476
INVESTMENT EXPENSES	493,936	3,031	116,375	42,351	22,369	236	209	150,694	227	207	149,204	0	9,033
TOTAL OUTFLOW	4,051,847	292,100	402,777	323,236	311,197	313,445	311,247	464,958	312,868	296,075	445,601	293,534	284,810
CONTRIBUTIONS	3,002,420	380,045	236,017	260,088	267,842	221,422	219,459	212,730	310,382	219,155	218,491	240,520	216,269
OTHER INCOME*	1,405,279	35,178	154,145	156,146	31,395	155,323	65,732	17,692	218,340	(29,185)	341,078	207,202	52,233
TOTAL INCOME	4,407,699	415,223	390,162	416,234	299,237	376,745	285,191	230,421	528,722	189,971	559,569	447,722	268,502
DIFFERENCE	355,851	123,122	(12,614)	92,998	(11,960)	63,300	(26,056)	(234,536)	215,854	(106,105)	113,968	154,188	(16,308)

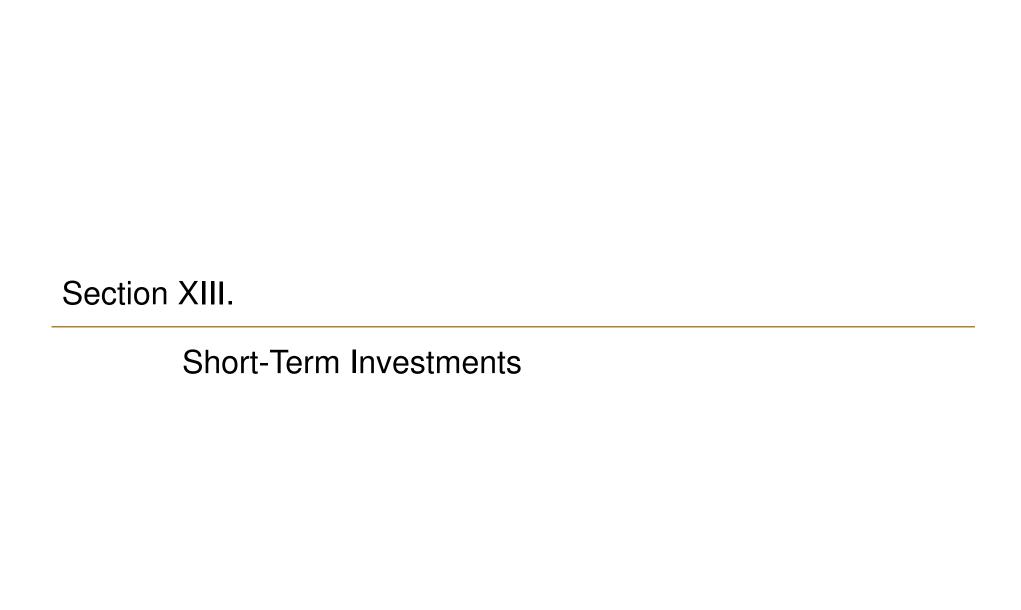
^{*}includes income from Real Estate Investments, Private Equity, and Cash Accounts

FISCAL YEAR 2019 INVESTMENT MANAGER FEES, PROFESSIONAL FEES & OPERATING EXPENSES

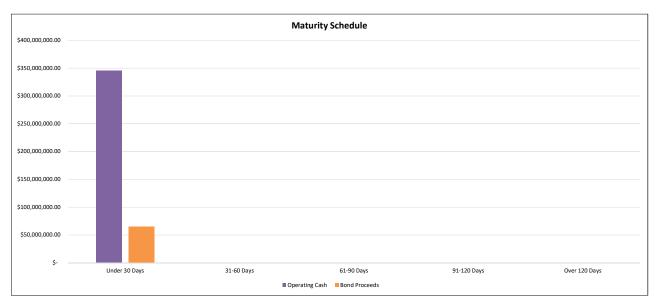
ERSRI Pooled Trust ACCRUAL BASIS

	Actual	Actual	Actual	Actual	Actual	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected
	Jul 18	Aug	Sept	Oct	Nov	Dec	Jan 19	Feb	Mar	Apr	May	June	TOTAL
EQUITIES US													
SSGA Russell 3000			43,255			39,306			37,937			39,443	159,942
Shott Capital/Hamilton Lane			415			433			1,087			539	2,474
SSGA QVM Tilt			191,631			176,942			124,256			123,000	615,829
			235,301			216,681			163,281			169,782	169,216
FIXED INCOME													
Fidelity			154,815			154,702			157,734			156,000	623,251
Mackay Shields			142,952			173,642			170,000			156,000	642,594
Brown Bros.TIPS/GILB			62,949			62,713			63,102			65,000	253,765
			360,716			391,058			390,836			377,000	1,519,610
INT'L EQUITIES													
SSGA MSCI EAFE			57,473			48,673			71,248			62,489	239,883
SSGA MSCI CAD			7,206			4,475			8,206			7,443	27,330
SSGA MSCI Emerg Mkts			108,247			99,109			<u>96,777</u>			104,950	409,083
			172,925			152,257			176,232			174,883	676,296
CREDIT													
WAMCO			108,676			111,879			108,385			108,461	437,401
PIMCO			117,474			122,220			118,394			117,000	475,088
			226,150			234,099			226,779			225,461	912,489
Infrastructure													
Harvest Partners			302,413			268,080			269,214			275,283	1,114,990
Control of Toront Fallson	202.046	240 202	202.4.42	205.000	405 000	200 405	204 244	474 276	200 000	200.000	200.000	200.000	2 202 024
Systematic Trend Followers	202,916	210,203	203,143	205,889	186,893	209,195	201,311	174,376	200,000	200,000	200,000	200,000	2,393,924
Long Duration													
WAMCO			30,519			31,000			31,000			31,000	123,519
Mackay Shields			30,563			32,000			32,000			32,000	126,563
wackay sillelas			61,081		-	63,000			63,000			63,000	250,081
			01,061			03,000			65,000			03,000	250,081
REAL ESTATE	0	0	2,268,181	0	0	3,900,000	0	0	3,900,000	0	0	3,900,000	13,968,181
ALTERNATIVE INVESTMENTS													
Private Infrastructure			1,538,277			2,250,000			2,250,000			2,250,000	8,288,277
Hedge Funds			4,907,979			2,267,546			5,500,000			5,500,000	18,175,524
Private Equity	_	_	5,786,256	_	_	5,000,000	_	_	5,000,000	_	_	5,000,000	20,786,256
	0	0	12,232,512	0	0	9,517,546	0	0	12,750,000	0	0	12,750,000	47,250,058
Other													
Russell Overlay			48,690			49,978			75,000			75,000	248,668
Payden & Rygel	22,355	21,954	19,940	19,222	20,880	21,487	23,186	26,124	23,988	23,600	22,583	23,400	268,719
ruyuen & nyger	22,355	21,954 21,954	68,630	19,222	20,880	71,465	23,186	26,124	98,988	23,600	22,583	98,400	517,387
	22,555	21,954	08,030	19,222	20,660	71,403	23,100	20,124	30,300	23,000	22,363	96,400	317,367
SUB TOTAL-INV MGMT FEES	225,271	232,157	16,131,054	225,111	207,773	15,023,380	224,497	200,500	18,238,329	223,600	222,583	18,233,809	68,772,233
PROFESSIONAL FEES													
Land	0.275	44.000	10.00	42.2	4 475	4.000	4.001	4.000	44.000	40.22=	7.000	45.500	4074
Legal	8,276	11,982	10,063	12,274	4,470	4,919	4,881	4,663	11,832	10,327	7,892	15,569	107,147
BNY Mellon - Custodial	52,464	41,456	52,175	45,409	43,050	47,847	44,254	38,731	41,190	42,000	42,000	42,000	532,575
Cliffwater	33,333	33,333	33,334	33,333	33,333	33,334	33,333	33,333	33,334	33,333	33,333	33,333	400,000
PCA General & Infrastructure	6,250	6,250	6,250	6,250	6,250	6,250	6,250	6,250	25,000	6,250	6,250	25,000	112,500
NEPC	0	0	91,250	0	0	91,250	0	0	91,250	0	0	91,250	365,000
Aberdeen	26,494	26,564	25,723	25,746	24,308	25,677	25,931	27,000	27,000	27,000	27,000	27,000	315,442
PCA Real Estate	10,417	10,417	10,417	10,417	10,417	10,417	10,417	10,417	10,417	10,417	10,417	10,417	125,004
ODED ATING EVENT	137,234	130,001	229,211	133,429	121,827	219,694	125,065	120,393	240,024	129,327	126,892	244,570	1,957,668
OPERATING EXPENSE	1												
Retirement Transfers	319,579	913,890	551,642	720,898	1,057,736	553,937	968,951	901,064	834,367	696,560	650,150	1,361,470	9,530,243
Other Expense	0	0	19,000	0		29,250	6,098	2,005	7,020	0	2,976	25,244	91,593
	319,579	913,890	570,642	720,898	1,057,736	583,187	975,048	903,069	841,387	696,560	653,126	1,386,714	9,621,836
TOTAL:	682,084	1,276,048	16,930,907	1,079,438	1,387,336	15,826,260	1,324,610	1,223,962	19,319,740	1,049,487	1,002,601	19,865,093	80,351,736

Note: Numbers in bold are actual.



Short-Term Investment Maturity Schedule & SIC Compliance Report at February 28, 2019



	SHORT-	TERM INVESTMENT O	PERATING PORTFOLIO	BALANCES			
Vendor	CD	CDARS	Money Mkt	CoD	OSIP		Total (\$)
Guidelines-Total/Vendor	50%/20%	50%/20%	75%/35%	75%/35%	50%/50%		
OSIP	-	-	-	-	188,686,755	\$	188,686,754.53
	0%	0%	0%	0%	55%		54.6%
Bank RI	-	-	10,212,420	-	-	\$	10,212,420.05
	0%	0%	3%	0%	0%		3.0%
Santander Bank	-	-	-	35,617,909	-	\$	35,617,908.52
	0%	0%	0%	10%	0%		10.3%
People's Credit Union Comm Dep.	-	2,698,892	-	-	-	\$	2,698,892.05
	0%	1%	0%	0%	0%		0.78%
Navigant Credit Union Comm Dep	-	6,107,752	-	-	-	\$	6,107,752.09
	0%	2%	0%	0%	0%		1.77%
Fidelity	-	-	-	-	-		-
	0%	0%	0%	0%	0%		0.00%
Bristol County Savings Bk Comm Dep		-	-	4,845,248	-	\$	4,845,248.14
	0%	0%	0%	1%	0%		1.40%
Centreville Bank		5,132,996	-	-	-	\$	5,132,995.64
Community Deposit	-	7,554,638	-	-	-	\$	7,554,638.30
	0%	2%	0%	0%	0%		3.67%
Citizens Bank	-	-	-	12,135,674	-	\$	12,135,674.42
	0%	0%	0%	4%	0%		3.5%
Webster Bank	-		÷	17,910,955	-	\$	17,910,954.56
	0%	0%	0%	5%	0%		5.2%
Customers Bank	-		÷	17,712,081	-	\$	17,712,080.95
	0%	0%	0%	5%	0%		5.1%
Washington Trust	-	21,466,090	-	-	-	\$	21,466,090.46
Community Deposit	-	2,893,383	-	-		\$	2,893,382.95
	0%	6%	0%	0%	0%		7.0%
Freedom National Community Dep.	-	-	-	-	-	\$	-
	0%	0%	0%	0%	0%	_	0.0%
TD Bank	-	-	-	12,820,474	-	\$	12,820,473.68
	0%	0%	0%	4%	0%	_	3.7%
BankNewport Community Deposit	-	-	-	-	-	\$	-
	0%	0%	0%	0%	0%		0.0%
TOTALS	\$ - \$	37,827,372.90 \$	10,212,420.05 \$	101,042,340.27 \$	188,686,754.53	\$	345,795,266.34
(%) PORTFOLIO	0.0%	10.9%	3.0%	29.2%	54.6%		100.0%

		BOND F	PROCEED BALANCE			
Vendor	CD	CDARS	Money Mkt	CoD	OSIP	Total (\$)
Guidelines-Total/Vendor	50%/20%	50%/20%	75%/35%	75%/35%	50%/50%	
OSIP - BOND PROCEEDS	-	-	-	-	65,180,162	\$ 65,180,162.06
	0.0%	0.0%	0.0%	0.0%	15.9%	15.9%
TOTALS WITH BONDS	\$ -	\$ 37,827,372.90	\$ 10,212,420.05	\$ 101,042,340.27	\$ 253,866,916.59	\$ 410,975,428.40

CD	= Certificate of Deposit
CDARS	= Cert.of Dep.Acct Registry Svc
MMKT	= Money Market
CoD	= Collateralized Deposit
OSIP	= Ocean State Investment Pool

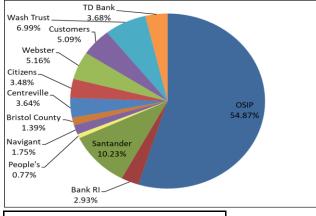
State of Rhode Island Short Term Cash Monthly Performance Performance for February 01, 2019 to February 28, 2019

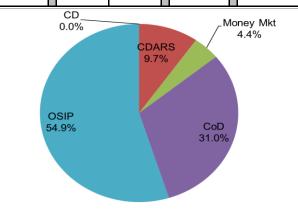
Fund Name	Ве	eginning Balance		Ending Balance	Α	verage Daily Balance		Earnings	Yield(Annual)
GENERAL FUND	\$	213,312,953.46	\$	145,762,007.03	\$	189,328,718.95	\$	332,066.04	2.2864%
H.A.V.A	\$	304.12	\$	304.64	\$	304.62	\$	0.47	2.0113%
GENERAL FUND (HIST PRES)	\$	558,554.41	\$	559,733.60	\$	559,695.70	\$	1,061.15	2.4715%
HISTORIC TAX CREDITS	\$	10,859,880.49	\$	10,882,807.31	\$	10,882,070.46	\$	20,631.73	2.4715%
HIGHWAY FUND	\$	42,332,921.36	\$	34,722,945.74	\$	38,559,714.92	\$	70,463.04	2.3821%
T.D.I. RESERVE (DET)	\$	84,847,694.08	\$	100,127,191.26	\$	104,370,598.96	\$	131,492.31	1.6423%
RICAP GL FUND 21	\$	564,345.52	\$	565,166.49	\$	565,139.98	\$	742.21	1.7120%
BOND CAPITAL FUND	\$	2,891,370.57	\$	99,009.36	\$	1,759,610.45	\$	3,169.52	2.3481%
R.I. CLEAN WATER ACT	\$	3,297,509.14	\$	3,304,098.57	\$	3,303,886.52	\$	5,937.26	2.3426%
STATE LOTTERY FUND	\$	22,707,018.63	\$	28,961,081.18	\$	29,734,280.70	\$	50,413.53	2.2102%
ASSESSED FRINGE BEN ADM	\$	1,512,820.45		1,515,806.20		1,515,710.09		2,691.04	2.3144%
AUTO EQUIPMENT SERVICE	\$	2,206.05		2,209.80		2,209.68		3.39	1.9999%
HEALTH INSURANCE FUND	\$	9,976,503.49		3,592,658.22		5,599,444.23		9,991.95	2.3262%
FLEET REVOLVING LOAN FUND	\$	2,914,719.39		2,919,782.22		2,919,618.23		4,591.66	2.0501%
EMPLOYEES RETIREMENT	\$	37,098.94		65,168.29		18,228,404.18		29,395.03	2.1021%
MUNICIPAL EMPLOYEES RET.	\$	274,585.23		79,394.17		1,782,854.35		3,114.81	2.2775%
RETIREE HEALTH FUND	\$	1,545,719.62		2,547,267.18		1,979,286.83		3,449.74	2.2720%
BOG RETIREE FUND	\$	1,615.28		1,618.02		1,617.93		2.48	1.9981%
RIPTA HEALTH FUND	\$	1,783,705.14		3,488,088.42		2,348,674.00		3,603.64	2.0001%
PERMANENT SCHOOL FUND	\$	1,708,081.96		1,711,872.07		1,711,756.16		3,245.38	2.4715%
TEACHER RETIREE HEALTH FUND	\$	4,000,091.46		4,007,845.06		4,007,595.37		6,991.28	2.2741%
RI ST POL RETIREE HEALTH	\$	228,493.64		728,881.77		407,430.87		625.13	2.0001%
RI LEG RETIREE HEALTH	\$	847.83		849.27		849.22		1.30	1.9955%
RI JUDICIAL RETIREE HEALTH	\$	41,411.89		41,482.23		41,479.96		63.64	2.0000%
UNIVERSITY COLLEGE	\$	18,553.25		1,821,052.27		1,049,552.70		1,987.93	2.4691%
INDUS. BLDG. & MTG. INS.	\$	748,207.21		749,786.79	ڔ	1,043,332.70	\$	1,967.93	2.4031/0
INDUS. BLDG. & WITG. INS.	ş	740,207.21	۶	743,760.73			Ş	-	
Operating Funds Totals	\$	406,167,212.61	\$	348,258,107.16	\$	420,660,505.06	\$	685,735.66	2.125%
BOND CCDL 2006 SERIES C	\$	492,149.70	\$	492,149.70	\$	492,116.38	\$	933.02	2.4715%
GO BND-NTAX 2007 SERIES A	\$	124,237.53	\$	124,237.53	\$	124,229.12	\$	235.53	2.4715%
CCDL10B BOND CAPITAL COMPONENT	\$	950,000.00	\$	950,000.00	\$	949,935.68	\$	1,801.02	2.4715%
CCDL10C	\$	165,319.80	\$	165,668.81	\$	165,657.59	\$	314.08	2.4715%
CCDL2011A	\$	3,756,935.81	\$	3,587,085.81	\$	3,665,696.53	\$	6,949.79	2.4714%
CCDL2012B	\$	6,092,902.03	\$	5,100,000.00	\$	5,560,613.73	\$	10,541.87	2.4713%
GO CCDL 2013A	\$	2,700,000.00	\$	2,590,915.50	\$	2,641,383.02	\$	5,007.81	2.4714%
GO CCDL 2014A	\$	94,193.10	\$	94,193.10	\$	94,186.72	\$	178.57	2.4715%
GO CCDL 2014B	\$	40,587.00	\$	40,587.00	\$	40,584.25	\$	76.95	2.4716%
GO CCDL 2016A	\$	4,653,358.06		4,310,881.12		4,469,585.64		8,473.76	2.4714%
GO CCDL 2016B	\$	2,973,762.35		3,228,848.20		3,110,204.88		5,896.98	2.4716%
GO CCDL 2017	\$	3,915,026.51		1,320,652.58		2,525,012.44		4,785.02	2.4703%
CCDL99A 1999A	, \$	206,569.39		206,569.39		206,555.40		391.62	2.4715%
CLEAN WATER 2007 SERIES A	, \$	198,130.34		198,130.34		198,116.92		375.62	2.4715%
CCDL2011A CLEAN WATER COMPONENT	, \$	1,236,000.00		1,236,000.00		1,235,916.31		2,343.22	2.4715%
GO CCDL 2018A	, \$	28,586,724.00		15,617,914.20		21,637,682.59		41,012.49	2.4708%
GO CCDL 2018B	\$	25,374,109.49		23,515,696.48		24,376,880.54		46,215.45	2.4714%
Bond Proceeds Fund Totals	\$	81,560,005.11	\$	62,779,529.76	\$	71,494,357.74	\$	135,532.80	2.471%
TANS PROCEEDS	\$	-	\$	-	\$	-	\$	-	
Grand Totals	\$	487,727,217.72	Ś	411,037,636.92	Ś	492,154,862.80	Ś	821,268.46	2.175%

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

Issuer Credit Rating February 28, 2019

	_		Issuer Ratings	S-T De	ebt Rating	L-T Deb	t Rating	Credit Outlook	Rating
Issuer	Type of Instrument*	M/E % Portfolio	Moody's	Moody's	<u>S&P</u>	Moody's	<u>S&P</u>	S&P	<u>Veribanc</u>
Bank of America	-	0.0%	Baa1	P-2	A-2	А3	Α-	Stable	GREEN/*
Bank RI	3,4	2.9%	N/R	N/R	N/R	N/R	N/R	N/R	GREEN/***
Bristol County Sav. Bank	4	1.4%	N/R	N/R	N/R	N/R	N/R	N/R	GREEN/***
Centreville Bank	4	3.6%	N/R	N/R	N/R	N/R	N/R	N/R	GREEN/***/BB
Citizens Bank	4	3.5%	Baa1	P-2	A-2	A1	BBB+	Stable	GREEN/*
Customers Bank	4	5.1%	N/R	N/R	N/R	N/R	N/R	N/R	GREEN/*
Home Loan Inv. Bank	-	0.0%	N/R	N/R	N/R	N/R	N/R	N/R	GREEN/***
Navigant Credit Union	4	1.8%	N/R	N/R	N/R	N/R	N/R	N/R	GREEN/***
Ocean State Inv. Pool	6	54.9%	N/R	N/R	N/R	N/R	N/R	N/R	N/R
People's Credit Union	4	0.8%	N/R	N/R	N/R	N/R	N/R	N/R	GREEN/***
Santander Bank	4	10.2%	A3	P-2	A-2	A3	A-	Stable	GREEN/*
TD Bank	4	3.7%	Aa2	P-1	A-1+	Aa2	AA-	Stable	GREEN/***
Washington Trust	4,7	7.0%	N/R	N/R	N/R	N/R	N/R	N/R	GREEN/***
Webster Bank	4	5.2%	Baa1	P-1	A-2	A1	BBB+	Stable	GREEN/***
TD	Bank					CD_		·	
Wash Trust 3.6	58%					0.0%			ney Mkt
6.99% Customers									4.4%
5.09%							CDA	RS	
Webster_							9.7	%	





CD	= Certificate of Deposit	1*
CDAR	S = Cert.of Dep.Acct Registry Svc	2*
MMKT	= Money Market	3*
CoD	= Collateralized Deposit	4*
OSIP	= Ocean State Investment Pool	5*

Moody's Short-Term Debt Ratings:

- P-1 Prime-1 have a superior ability for repayment of sr. S-T debt
- P-2 Prime-1 have a strong ability for repayment of sr. S-T debt
- P-3 Prime-1 have acceptable ability for repayment of sr. S-T debt

NP - Not Prime

Moody's Issuer Rating Symbols:

- Aaa Offer exceptional financial security (high-grade)
- Aa Offer excellent financial security (high-grade)
- A Offer good financial security
- Baa Offer adequate financial security
- Ba Offer questionable financial security
- B Offer poor financial security
- Caa Offer very poor financial security
- Ca Offer extremely poor financial security
- 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
- B 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 category
- 3 Lower end of letter rating category

Ratings Definitions

S&P Short -Term Credit Ratings:

- A-1 Highest rated, strong capacity to meet obligations
- A-2 Somewhat more susceptibleto adverse effects of changes infinancial conditions; satisfactory
- A-3 Exhibits adequate protection parameters
- B Significant speculative characteristics, faces major ongoing uncertainties
- C Vulnerable to non-payment
- D Payment default
- Modifiers: + or - show relative standing within the category.

S&P Outlook Definitions:

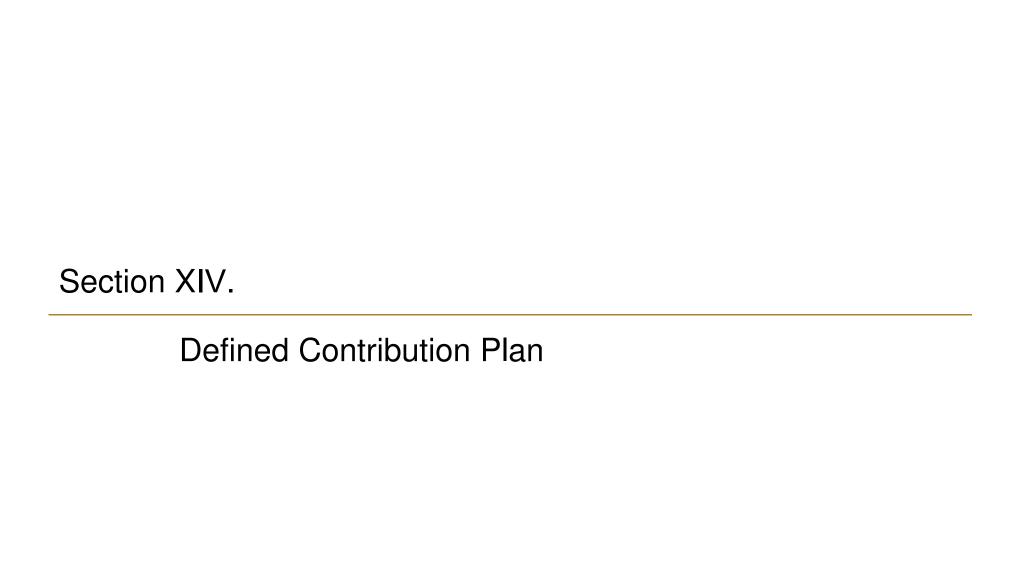
- Positive A rating may be raised
- Negative A rating may be lowered
- Stable A rating is not likely to change
- Developing May be raised or lowered
- NM Not meaningful

S&P Long-Term Debt Ratings:

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

VERIBANC Ratings:

- GREEN The institution's equity exceeds a modest percentage of its assets and had positive
- net income during the most recent reporting period. YELLOW The institution's equity is at a minimal percentage of its assets or it incurred a net loss
 - during the most recent reporting period.
- RFD The institution's equity is less than a minimal percentage of its assets or it incurred a
 - significant net loss during the most recent reporting period (or both).
 - Blue Ribbon Bank
- Modifiers: ***-Very Strong, **-Strong, *-Moderate, No Stars-Poor



TIAA		201	9 401	(a)	Pe	rforr	mance	e Sur	nma	ry								
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)
		Mgr	AUM	Net	%-ile	Rev	Recent F	Returns			Annualized [*]	Total Retu	urns as of	f 12/31/18				Incep
As of 2/28/2019	Ticker	Tenure	\$M	ER	ER	Share	1 Mo	YTD	1 Yr	%-ile	3 Yr	%-ile	5 Yr	%-ile	10 Yr	%-ile	SI	Date
TIAA Stable Value	Current	crediting ra	nte = 2.20				0.17	0.35	2.05		1.98		1.95				1.92	3/31/2012
FIXED INCOME																		
Intermediate-Term Bond							()		(5.5.)									
Vanguard Total Bond Market Index I	VBTIX	5.92	203,989	0.04	3	0.00	(0.05)	0.96	(0.01)	30	2.04	53	2.47	38	3.45	76	4.97	9/18/1995
BBgBarc US Agg Float Adj TR USD							(0.05)	1.03	(0.08)		2.09		2.50					
Intermediate-Term Bond Median				0.67			0.09	1.44	(0.59)		2.09		2.30		4.47			
Intermediate-Term Bond Number of Funds				1061	1061				1018	1018	952	952	909	909	803	803		
Inflation-Protected Bond																		
PIMCO Real Return Instl	PRRIX	11.08	65,631	0.88	67	0.00	(0.12)	1.66	(1.97)	68	2.28	16	1.48	28	4.35	4	5.53	1/29/1997
BBgBarc US Treasury US TIPS TR USD							(0.01)	1.33	(1.26)		2.11		1.69		3.64			
Inflation-Protected Bond Median				0.66			(0.03)	1.38	(1.62)		1.73		1.06		3.01			
Inflation-Protected Bond Number of Funds				232	232				224	224	218	218	206	206	149	149		
Large Cap Blend - Index																		
Vanguard Institutional Index I	VINIX	18.08	200,004	0.04	2	0.00	3.21	11.48	(4.42)	27	9.22	15	8.46	10	13.11	19	9.39	7/31/1990
S&P 500 TR USD							3.21	11.48	(4.38)		9.26		8.49		13.12			
Vanguard FTSE Social Index Inv	VFTSX	3.08	4,351	0.18	6	0.00	3.29	11.63	(3.45)	17	9.73	8	9.12	4	14.36	5	4.13	5/31/2000
Spliced Social Index*****							3.31	11.65	(3.32)		9.90		9.33		14.61			
Russell 3000 TR USD							3.52	12.40	(5.24)		8.97		7.91		13.18			
Large Blend Median				0.88			3.19	11.46	(6.02)		7.88		6.93		12.07			
Large Blend Number of Funds					1347				1319	1319	1241	1240	1177	1177	1042	1035		
Mid-Cap Blend																		
Vanguard Mid Cap Index Institutional	VMCIX	20.67	86,953	0.04	2	0.00	4.21	15.25	(9.24)	32	6.39	50	6.22	14	13.89	10	9.11	5/21/1998
Spliced Mid Cap Index*							4.24	15.26	(9.22)		6.40		6.24		13.91			
CRSP US Mid Cap TR USD							4.24	15.26	(9.22)		6.40		6.24		13.74			
Mid-Cap Blend Median				1.00			4.10	14.84	(11.56)		4.89		4.01		12.14			
Mid-Cap Blend Number of Funds				437	437		4.10	14.04	433	433	394	394	371	371	318	318		
Small Blend				437	437				433	400	374	374	3/1	3/1	310	310		
Vanguard Small Cap Index I	VSCIX	2.75	77.891	0.04	2	0.00	4.82	17.26	(9.32)	20	7.64	23	5.26	13	13.60	8	8.23	7/7/1997
Spliced Small Cap Index**	v JCIA	2.13	11,071	0.04		0.00	4.83	17.26	(9.33)	20	7.62	23	5.24	13	13.53	U	U.ZJ	11111771
CRSP US Small Cap TR USD									(9.33)		7.62 7.62				14.07			
CRSP US SMall Cap TR USD Small Blend Median				1 12			4.83	17.26	. ,		7.62 5.84		5.24 3.48					
				1.13	740		4.79	16.16	(12.53)	742		712		(40	11.68	E 4.4		
Small Blend Number of Funds				748	748				743	743	713	713	649	649	544	544		

TIAA 2019 401(a) Performance Summary																		
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)
		Mgr	AUM	Net	%-ile	Rev	Recent F	Returns			Annualized ¹	Total Ret	urns as of	f 12/31/18	3			Incep
As of 2/28/2019	Ticker	Tenure	\$M	ER	ER	Share	1 Mo	YTD	1 Yr	%-ile	3 Yr	%-ile	5 Yr	%-ile	10 Yr	%-ile	SI	Date
Foreign Large Blend																		
Schwab International Index	SWISX	1.75	4,353	0.06	3	0.00	2.36	9.07	(13.33)	27	3.15	42	0.50	39	6.08	44	3.81	5/19/1997
MSCI EAFE NR USD							2.55	9.29	(13.79)		2.87		0.53		6.32			
Foreign Large Blend Median				0.99			2.29	9.53	(15.20)		2.44		(0.07)		5.90			
Foreign Large Blend Number of Funds Diversified Emerging Mkts				728	728				705	705	674	674	604	604	516	516		
Vanguard Emerging Mkts Stock ldx Adm	VEMAX	10.42	75,602	0.14	1	0.00	0.64	9.23	(14.58)	34	7.84	40	1.32	34	7.47	51	150	6/23/2006
Spliced Emerging Markets Index***	VLIVIAA	10.42	75,002	0.14		0.00	1.29	9.30	(14.76)	34	7.68	40	1.35	34	7.68	31	4.37	0/23/2000
FTSE EMs AC China A Inclusion NR USD							1.29	9.31	(14.80)		7.18		1.78		8.29			
FTSE Emerging NR USD							0.51	8.81	(13.35)		9.00		2.06		8.23			
MSCI EM NR USD							0.22	9.00	(14.58)		9.25		1.65		8.02			
Diversified Emerging Mkts Median				1.29			0.30	9.01	(16.62)		6.96		0.91		7.65			
Diversified Emerging Mkts Number of Funds				828	828		0.00	7.01	789	789	738	738	608	608	341	340		
Lifecycle																		
Vanguard Target Retire Inc Trust I				0.07			0.85	3.98	(1.99)		3.86		3.43		6.01		4.58	6/22/2007
Vanguard Target Retirement Income Composite							0.91	4.06	(1.98)		3.92		3.51		6.05			
Target-Date Retirement Median				0.68			0.95	4.44	(3.40)		3.38		2.59		5.71			
Target-Date Retirement Number of Funds				201	201				192	192	179	179	156	156	127	127		
Vanguard Target Retire 2015 Trust I				0.07			1.12	4.92	(2.94)		4.79		4.10		7.93		4.51	6/28/2007
Vanguard Target Retirement 2015 Composite							1.17	5.01	(2.88)		4.87		4.21		7.95			
Target-Date 2015 Median				0.65			1.31	5.61	(3.92)		4.46		3.51		7.86			
Target-Date 2015 Number of Funds				157	157				144	144	129	129	107	107	70	70		
Vanguard Target Retire 2020 Trust I				0.07			1.46	6.30	(4.18)		5.40		4.54		8.62		4.68	6/22/2007
Vanguard Target Retirement 2020 Composite							1.53	6.37	(4.13)		5.48		4.65		8.75			
Target-Date 2020 Median				0.71			1.32	5.81	(4.51)		4.53		3.44		7.93			
Target-Date 2020 Number of Funds				267	267				254	254	228	228	203	203	150	150		
Vanguard Target Retire 2025 Trust I				0.07			1.74	7.26	(5.06)		5.81		4.76		9.16		4.66	6/28/2007
Vanguard Target Retirement 2025 Composite							1.79	7.34	(5.01)		5.89		4.87		9.28			
Target-Date 2025 Median				0.68			1.60	6.96	(5.40)		5.07		3.78		8.60			
Target-Date 2025 Number of Funds				245	245				230	230	208	208	183	183	105	105		
Vanguard Target Retire 2030 Trust I				0.07			1.96	8.03	(5.77)		6.15		4.92		9.67		4.66	6/28/2007
Vanguard Target Retirement 2030 Composite				0.75			2.01	8.11	(5.74)		6.24		5.04		9.81			
Target-Date 2030 Median				0.73	05.4		1.88	8.03	(6.50)	6.15	5.37	0.10	3.98	100	8.98			
Target-Date 2030 Number of Funds				256	256				243	243	218	218	193	193	140	140		

C TIAA		201	9 40	1(a)	Pe	rforr	manc	e Sur	nma	ry								
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)
		Mgr	AUM	Net	%-ile	Rev	Recent F	Returns			Annualized 1	Total Re	turns as o	f 12/31/18	3			Incep
As of 2/28/2019	Ticker	Tenure	\$M	ER	ER	Share	1 Mo	YTD	1 Yr	%-ile	3 Yr	%-ile	5 Yr	%-ile	10 Yr	%-ile	SI	Date
Vanguard Target Retire 2035 Trust I				0.07			2.14	8.81	(6.52)		6.49		5.08		10.14		4.78	6/28/2007
Vanguard Target Retirement 2035 Composite							2.22	8.89	(6.48)		6.58		5.21		10.29			
Target-Date 2035 Median				0.70			2.16	8.86	(7.28)		5.82		4.22		9.44			
Target-Date 2035 Number of Funds				240	240				225	225	203	203	178	178	100	100		
Vanguard Target Retire 2040 Trust I				0.07			2.35	9.58	(7.27)		6.82		5.21		10.36		4.99	6/28/2007
Vanguard Target Retirement 2040 Composite							2.44	9.67	(7.23)		6.91		5.36		10.53			
Target-Date 2040 Median				0.75			2.37	9.58	(7.98)		5.83		4.30		9.57			
Target-Date 2040 Number of Funds				256	256				243	243	218	218	193	193	140	140		
Vanguard Target Retire 2045 Trust I				0.07			2.50	10.17	(7.86)		6.85		5.22		10.38		4.96	6/28/2007
Vanguard Target Retirement 2045 Composite							2.60	10.26	(7.77)		6.95		5.39		10.54			
Target-Date 2045 Median				0.72			2.50	10.14	(8.27)		6.17		4.36		9.88			
Target-Date 2045 Number of Funds				240	240				225	225	203	203	178	178	99	99		
Vanguard Target Retire 2050 Trust I				0.07			2.51	10.15	(7.82)		6.86		5.21		10.40		5.02	6/28/2007
Vanguard Target Retirement 2050 Composite							2.60	10.26	(7.77)		6.95		5.39		10.54			
Target-Date 2050 Median				0.76			2.51	10.31	(8.62)		6.08		4.33		9.83			
Target-Date 2050 Number of Funds				256	256				243	243	218	218	193	193	115	115		
Vanguard Target Retire 2055 Trust I				0.07			2.52	10.16	(7.83)		6.86		5.19				8.49	10/5/2010
Vanguard Target Retirement 2055 Composite							2.60	10.26	(7.77)		6.95		5.39					
Target-Date 2055 Median				0.73			2.54	10.41	(8.59)		6.23		4.43					
Target-Date 2055 Number of Funds				240	240				225	225	201	201	150	150				
Vanguard Target Retirement 2060 Trust I				0.07			2.51	10.14	(7.81)		6.87		5.20				7.95	3/1/2012
Vanguard Target Retirement 2060 Composite							2.60	10.26	(7.77)		6.95		5.39					
Target-Date 2060+ Median				0.72			2.59	10.61	(8.70)		6.33		4.02					
Target-Date 2060+ Number of Funds				225	225				206	206	109	109	9	9				
Vanguard Target Retirement 2065 Trust I				0.07			2.51	10.16	(7.69)								2.47	7/7/2017
Vanguard Target Retirement 2060 Composite							2.60	10.26	(7.77)									
Target-Date 2060+ Median				0.72			2.59	10.61	(8.70)									
Target-Date 2060+ Number of Funds				225	225				206	206								

Source: Morningstar & TIAA-CREF

'Morningstar Analyst Assigned Benchmark"

Data for 1-month and YTD return as of 2/28/2019. All other data as of 12/31/2018.

VA = Variable Annuity

Since Incep. = Since Inception Date

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

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

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

^{*** =} Spliced Emerging Markets Index reflects performance of the Select Emerging Markets Index through August 23, 2006; the MSCI Emerging Markets Index through January 9, 2013; FTSE Emerging Transition Index through June 27, 2013; FTSE Emerging Index through November 1, 2015; FTSE Emerging Markets All Cap China A Transition Index through September 18, 2016; and FTSE Emerging Markets All Cap China A Inclusion Index thereafter.

ETIAA			201	9 401	1(a)	Pe	rforr	nanc	e Su	mma	ıry								
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)
			Mgr	AUM	Net	%-ile	Rev	Recent I	Returns			Annualized	Total Re	turns as c	f 12/31/1	8			Incep
As of 2/28/2019		Ticker	Tenure	\$M	ER	ER	Share	1 Mo	YTD	1 Yr	%-ile	3 Yr	%-ile	5 Yr	%-ile	10 Yr	%-ile	SI	Date

^{**** =} 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.

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

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

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.

***** Calvert Social Index through December 16, 2005; FTSE4Good US Select Index thereafter

[&]quot;Since Inception" performance is calculated from this date.

State of Rhode Island

Market Value as of 2/28/2019 Plan Balance Summary

401(a)/414(h)(2) - 405868 STATE OF RHODE ISLAND DEFINED CONTRIBUTION RETIREMENT PLAN

Ticker	Investment Name	Asset Class Description	Current Account Balance Amount
PRRIX	PIMCO Real Return Inst Class	Fixed Income	\$6,098,936.35
SWISX	Schwab International Index Fd	Equities	\$7,005,513.87
TSVX#	TIAA STABLE VALUE	Guaranteed	\$13,652,426.79
VBTIX	Vanguard Ttl Bd Mkt Idx Inst	Fixed Income	\$6,767,307.05
VEMAX	Vanguard Emr Mkts Stk Idx Adm	Equities	\$5,311,747.92
VFTSX	Vanguard FTSE Social Index Inv	Equities	\$2,806,472.06
VINIX	Vanguard Inst Idx Inst	Equities	\$28,828,518.27
VMCIX	Vanguard Mid-Cap Idx Inst	Equities	\$11,196,642.56
VSCIX	Vanguard Small-Cap Idx Inst	Equities	\$11,611,613.50
VT15#	Vanguard Tgt Rtmt 2015 Tr I	Multi-Asset	\$39,304,470.83
VT20#	Vanguard Tgt Rtmt 2020 Tr I	Multi-Asset	\$98,634,679.95
VT25#	Vanguard Tgt Rtmt 2025 Tr I	Multi-Asset	\$124,694,707.03
VT30#	Vanguard Tgt Rtmt 2030 Tr I	Multi-Asset	\$133,393,868.40
VT35#	Vanguard Tgt Rtmt 2035 Tr I	Multi-Asset	\$146,946,756.99
VT40#	Vanguard Tgt Rtmt 2040 Tr I	Multi-Asset	\$118,779,393.90
VT45#	Vanguard Tgt Rtmt 2045 Tr I	Multi-Asset	\$89,573,638.24
VT50#	Vanguard Tgt Rtmt 2050 Tr I	Multi-Asset	\$53,448,585.72
VT55#	Vanguard Tgt Rtmt 2055 Tr I	Multi-Asset	\$21,849,801.39
VT60#	Vanguard Tgt Rtmt 2060 Tr I	Multi-Asset	\$3,515,262.96
VT65#	Vanguard Target Rtmt 2065 Tr I	Multi-Asset	\$216,953.58
VTIN#	Vanguard Tgt Rtmt Income Tr I	Multi-Asset	\$11,009,401.83
			\$934,646,699.19

State of Rhode Island

Market Value as of 2/28/2019 Plan Balance Summary

401(a) - Rhode Island FICA 406403 Alternative RET Income Security Program

Ticker	Investment Name	Asset Class Description	Current Account Balance Amount
TSVX#	TIAA STABLE VALUE	Guaranteed	\$2,912.88
VT15#	Vanguard Tgt Rtmt 2015 Tr I	Multi-Asset	\$12,588.32
VT20#	Vanguard Tgt Rtmt 2020 Tr I	Multi-Asset	\$1,364,492.52
VT25#	Vanguard Tgt Rtmt 2025 Tr I	Multi-Asset	\$156,905.89
VT30#	Vanguard Tgt Rtmt 2030 Tr I	Multi-Asset	\$175,256.05
VT35#	Vanguard Tgt Rtmt 2035 Tr I	Multi-Asset	\$99,686.43
VT40#	Vanguard Tgt Rtmt 2040 Tr I	Multi-Asset	\$75,988.54
VT45#	Vanguard Tgt Rtmt 2045 Tr I	Multi-Asset	\$104,578.01
VT50#	Vanguard Tgt Rtmt 2050 Tr I	Multi-Asset	\$110,318.07
VT55#	Vanguard Tgt Rtmt 2055 Tr I	Multi-Asset	\$226,356.88
VT60#	Vanguard Tgt Rtmt 2060 Tr I	Multi-Asset	\$568,862.45
VT65#	Vanguard Target Rtmt 2065 Tr I	Multi-Asset	\$70,088.08
VTIN#	Vanguard Tgt Rtmt Income Tr I	Multi-Asset	\$13,028.63
			\$2,981,062.75



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

The performance data quoted represents past performance and is no guarantee of future results. Your returns and the principal value of your investments will fluctuate so that your shares or accumulation units, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than the performance quoted below. For performance current to the most recent month-end, visit the TIAACREF Website at www.tiaa-cref.org, or call 877 518-9161.

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The risks associated with foreign investments are often magnified in emerging markets where there is greater potential for political, currency, and economic volatility.

Funds that invest in fixed-income securities are not guaranteed and are subject to interest-rate, inflation and credit risks.

Funds that invest in foreign securities are subject to special risks, including currency fluctuation and political and economic instability.

Real estate securities are subject to various risks, including fluctuations in property values, higher expenses or lower income than expected, and potential environmental problems and liability.



Any guarantees under annuities issued by TIAA are subject to TIAA's claims-paying ability. TIAA Stable Value is guaranteed insurance contract and not an investment for Federal Securities Law purposes.

Target Date Funds share the risks associated with the types of securities held by each of the underlying funds in which they invest. In addition to the fees and expenses associated with the Target Date Funds, there is exposure to the fees and expenses associated with the underlying mutual funds as well.

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

Investment, insurance and annuity products are not FDIC insured, are not bank guaranteed, are not deposits, are not insured by any federal government agency, are not a condition to any banking service or activity, and may lose value.

You should consider the investment objectives, risks, charges and expenses carefully before investing. Please call 877 518-9161 or log on to tiaacref.org for product and fund prospectuses that contains this and other information. Please read the prospectuses carefully before investing.

Morningstar is an independent service that rates mutual funds and variable annuities, based on risk-adjusted returns. Although Morningstar data is gathered from reliable sources, neither Morningstar nor TIAA-CREF can guarantee its completeness and accuracy. Morningstar does not rate money market accounts, and the other TIAA-CREF mutual fund accounts are too new to be rated. Past performance does not guarantee future results. Accumulation net asset values and returns will vary.

For each fund/account with at least a three-year history, Morningstar calculates a Morningstar Rating™ based on a Morningstar Risk-Adjusted Return measure that accounts for variation in a fund's/account's monthly performance (including the effects of sales charges, loads, and redemption fees), placing more emphasis on downward variations and rewarding consistent performance. Where applicable, Morningstar's performance rankings are based on linked performance that considers the differences in expense ratios, while actual performance data shown does not reflect such differences. The top 10 percent of funds/accounts in a category receive five stars, the next 22.5 percent receive four stars, and the next 35 percent receive three stars, the next 22.5 percent receive two stars and the bottom 10 percent receive one star. (Each share class is counted as a fraction of one fund/account within this scale and rated separately, which may cause slight variations in the distribution percentages.) Morningstar proprietary ratings on U.S.-domiciled funds/accounts reflect historical risk-adjusted performance, are subject to change every month. They are derived from a weighted average of the performance figures associated with its three-, five- and ten-year (if applicable) Morningstar Rating metrics. Please note, Morningstar now rates group variable annuities within the open-end mutual fund universe.



Prospectus Gross Expense Ratio

The percentage of fund assets used to pay for operating expenses and management fees, including 12b-1 fees, administrative fees, and all other asset-based costs incurred by the fund, except brokerage costs. Fund expenses are reflected in the fund's NAV. Sales charges are not included in the expense ratio.

- --The expense ratio for fund of funds is the aggregate expense ratio as defined as the sum of the wrap or sponsor fees plus the estimated weighted average of the underlying fund fees.
- --Often referred to as the Annual Operating Expense, the Prospectus Gross Expense Ratio is collected annually from a fund's prospectus.

Prospectus Net Expense Ratio

The percentage of fund assets, net of reimbursements, used to pay for operating expenses and management fees, including 12b-1 fees, administrative fees, and all other asset-based costs incurred by the fund, except brokerage costs. Fund expenses are reflected in the fund's NAV. Sales charges are not included in the expense ratio.

- --The expense ratio for fund of funds is the aggregate expense ratio as defined as the sum of the wrap or sponsor fees plus the estimated weighted average of the underlying fund fees.
- --Net reimbursements, the Prospectus Net Expense Ratio is collected annually from a fund's prospectus.
- --TIAA-CREF, unless noted, does not charge additional fees for record keeping a fund. 12b-1, revenue share and admin fees are all included in the Prospectus fees.
- -- Prospectus Net Expense Ratio % ile rank is the percentile rank for the fund. The better the expense ratio (lower) the lower the ranking out of 100.

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

By communicating the information contained in this material, TIAA is not providing impartial investment advice or giving advice in a fiduciary capacity regarding any investment by, or other transaction of, the plan(s). TIAA is acting solely in a sales capacity with respect to an arms-length sale, purchase, loan, exchange or other transaction related to the investment of securities or other investment property.

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457 Plans

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(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)
		Mgr	AUM	Net	%-ile	Rev	Recent I	Returns		A	Annualized 1	Total Retu	ırns as of	12/31/18				Incep
As of 02/28/2019	Ticker	Tenure	\$M	ER	ER	Share	1 Mo	YTD	1 Yr	%-ile	3 Yr	%-ile	5 Yr	%-ile	10 Yr	%-ile	SI	Date
TIAA Traditional RCP	Current cred	iting rate = 3.5	50				0.26	0.54	3.37		3.44		3.49		3.49		3.71	
FIXED INCOME																		
Intermediate-Term Bond																		
PIMCO Total Return Instl	PTTRX	4.33	65,631	0.55	39	0.00	0.07	1.27	(0.26)	39	2.47	32	2.56	31	4.71	36	7.08	5/11/1987
BBgBarc US Agg Bond TR US	SD.						(0.06)	1.00	0.01		2.06		2.52		3.48			
Vanguard Total Bond Market Index I	VBTIX	5.92	203,989	0.04	3	0.00	(0.05)	0.96	-0.01	30	2.04	53	2.47	38	3.45	76	4.97	9/18/1995
BBgBarc US Agg Float Adj TR US	SD						(0.05)	1.03	(0.08)		2.09		2.50					
Intermediate-Term Bond Media	an			0.67			0.09	1.44	(0.59)		2.09		2.30		4.47			
Intermediate-Term Bond Number of Fun	ds			1061	1061				1018	1018	952	952	909	909	803	803		
Inflation-Protected Bond																		
American Century Inflation-Adjs Bond R6	AIADX	17.17	2,561	0.22	9	0.00	(0.09)	1.36	(2.27)	81	1.82	50	1.18	41	3.09	52	(0.43)	7/28/2017
BBgBarc US Treasury US TIPS TR US	SD .						(0.01)	1.33	(1.26)		2.11		1.69		3.64			
Inflation-Protected Bond Media	an			0.66			(0.03)	1.38	(1.62)		1.73		1.06		3.01			
Inflation-Protected Bond Number of Fun	ds			232	232				224	224	218	218	206	206	149	149		
Large Cap Blend - Index																		
Vanguard Institutional Index I	VINIX	18.08	200,004	0.04	2	0.00	3.21	11.48	(4.42)	27	9.22	15	8.46	10	13.11	19	9.39	7/31/1990
S&P 500 TR US	SD .						3.21	11.48	(4.38)		9.26		8.49		13.12			
Vanguard FTSE Social Index Inv	VFTSX	3.08	4,351	0.18	6	0.00	3.29	11.63	(3.45)	17	9.73	8	9.12	4	14.36	5	4.13	5/31/2000
Spliced Social Index***	**						3.31	11.65	(3.32)		9.90		9.33		14.61			
Russell 3000 TR US	SD .						3.52	12.40	(5.24)		8.97		7.91		13.18			
Large Blend Medi	an			0.88			3.19	11.46	(6.02)		7.88		6.93		12.07			
Large Blend Number of Fun	ds			1347	1347				1319	1319	1241	1240	1177	1177	1042	1035		
Mid-Cap Blend	VAACIV	20.47	0/ 052	0.04	0	0.00	4.01	15.05	(0.04)	20	(20	F0	(22	14	12.00	10	0.11	E /01 /1000
Vanguard Mid Cap Index Institutional	VMCIX	20.67	86,953	0.04	2	0.00	4.21	15.25	(9.24)	32	6.39	50	6.22	14	13.89	10	9.11	5/21/1998
Spliced Mid Cap Inde							4.24	15.26	(9.22)		6.40		6.24		13.91		7.04	4/4/0044
CRSP US Mid Cap TR US				4.00			4.24	15.26	(9.22)		6.40		6.24		13.74		7.84	4/1/2011
Mid-Cap Blend Medi				1.00			4.10	14.84	(11.56)		4.89		4.01		12.14			
Mid-Cap Blend Number of Fun	ds			437	437				433	433	394	394	371	371	318	318		
Small Blend	VCCIV	2.75	77.001	0.04	_	0.00	4.00	17.07	(0.20)	00	7/4	00	F 2/	40	10.70	0	0.00	7/7/4007
Vanguard Small Cap Index I	VSCIX	2.75	77,891	0.04	2	0.00	4.82	17.26	(9.32)	20	7.64	23	5.26	13	13.60	8	8.23	7/7/1997
Spliced Small Cap Index							4.83	17.26	(9.33)		7.62		5.24		13.53			
CRSP US Small Cap TR US							4.83	17.26	(9.33)		7.62		5.24		14.07			
Small Blend Medi				1.13	7.0		4.79	16.16	(12.53)		5.84		3.48		11.68	.		
Small Blend Number of Fun	IS .			748	748				743	743	713	713	649	649	544	544		

		2	019 4	57(b)) Pe	rforn	nanc	e Su	ımm	ary								
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)
		Mgr	AUM	Net	%-ile	Rev	Recent	Returns			Annualized T	otal Retu	irns as of	12/31/18				Incep
As of 02/28/2019	Ticker	Tenure	\$M	ER	ER	Share	1 Mo	YTD	1 Yr	%-ile	3 Yr	%-ile	5 Yr	%-ile	10 Yr	%-ile	SI	Date
Foreign Large Blend	Ticker	renare	ΨΙΝΙ	LIX	LIX	Share	1 IVIO	TID		70 IIC	3 11	70 HC	3 11	70 HC	10 11	70 HC	Ji	Dute
Schwab International Index	SWISX	1.75	4,353	0.06	3	0.00	2.36	9.07	(13.33)	27	3.15	42	0.50	39	6.08	44	3.81	5/19/1997
MSCI EAFE NR USD	SWISK	1.75	4,555	0.00	J	0.00	2.55	9.29	(13.79)	21	2.87	42	0.53	37	6.32	77	3.01	3/17/1777
Foreign Large Blend Median				0.99			2.29	9.53	(15.77)		2.44		(0.07)		5.90			
Foreign Large Blend Number of Funds				728	728		2.27	7.00	705	705	674	674	604	604	516	516		
Foreign Large Growth				720	720				700	700	0,1	07.1	007	001	0.70	010		
American Funds Europacific Growth R6	RERGX	27.08	138,711	0.49	3	0.00	2.53	10.91	(14.91)	58	4.08	33	1.86	36	7.69	42	7.72	5/1/2009
MSCI ACWI Ex USA NR USD							1.95	9.66	(14.20)		4.48		0.68		6.57			
Foreign Large Growth Median				1.06			2.53	10.91	(14.84)		3.08		1.15		7.38			
Foreign Large Growth Number of Funds				448	448				443	443	406	406	382	382	322	312		
Lifecycle																		
Vanguard Target Retire Inc Trust I				0.07			0.85	3.98	(1.99)		3.86		3.43		6.01		4.58	6/22/2007
Vanguard Target Retirement Income Composite							0.91	4.06	(1.98)		3.92		3.51		6.05			
Target-Date Retirement Median				0.68			0.95	4.44	(3.40)		3.38		2.59		5.71			
Target-Date Retirement Number of Funds				201	201				192	192	179	179	156	156	127	127		
Vanguard Target Retire 2015 Trust I				0.07			1.12	4.92	(2.94)		4.79		4.10		7.93		4.51	6/28/2007
Vanguard Target Retirement 2015 Composite							1.17	5.01	(2.88)		4.87		4.21		7.95			
Target-Date 2015 Median				0.65			1.31	5.61	(3.92)		4.46		3.51		7.86			
Target-Date 2015 Number of Funds				157	157				144	144	129	129	107	107	70	70		
Vanguard Target Retire 2020 Trust I				0.07			1.46	6.30	(4.18)		5.40		4.54		8.62		4.68	6/22/2007
Vanguard Target Retirement 2020 Composite							1.53	6.37	(4.13)		5.48		4.65		8.75			
Target-Date 2020 Median				0.71			1.32	5.81	(4.51)		4.53		3.44		7.93			
Target-Date 2020 Number of Funds				267	267				254	254	228	228	203	203	150	150		
Vanguard Target Retire 2025 Trust I				0.07			1.74	7.26	(5.06)		5.81		4.76		9.16		4.66	6/28/2007
Vanguard Target Retirement 2025 Composite							1.79	7.34	(5.01)		5.89		4.87		9.28			
Target-Date 2025 Median				0.68			1.60	6.96	(5.40)		5.07		3.78		8.60			
Target-Date 2025 Number of Funds				245	245				230	230	208	208	183	183	105	105		
Vanguard Target Retire 2030 Trust I				0.07			1.96	8.03	(5.77)		6.15		4.92		9.67		4.66	6/28/2007
Vanguard Target Retirement 2030 Composite							2.01	8.11	(5.74)		6.24		5.04		9.81			
Target-Date 2030 Median				0.73			1.88	8.03	(6.50)		5.37		3.98		8.98			
Target-Date 2030 Number of Funds				256	256				243	243	218	218	193	193	140	140		
Vanguard Target Retire 2035 Trust I				0.07			2.14	8.81	(6.52)		6.49		5.08		10.14		4.78	6/28/2007
Vanguard Target Retirement 2035 Composite							2.22	8.89	(6.48)		6.58		5.21		10.29			
Target-Date 2035 Median				0.70			2.16	8.86	(7.28)		5.82		4.22		9.44			
Target-Date 2035 Number of Funds				240	240				225	225	203	203	178	178	100	100		
Vanguard Target Retire 2040 Trust I				0.07			2.35	9.58	(7.27)		6.82		5.21		10.36		4.99	6/28/2007
Vanguard Target Retirement 2040 Composite							2.44	9.67	(7.23)		6.91		5.36		10.53			
Target-Date 2040 Median				0.75	25.		2.37	9.58	(7.98)		5.83		4.30		9.57			
Target-Date 2040 Number of Funds				256	256				243	243	218	218	193	193	140	140		

2019 457(b) Performance Summary																		
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)
		Mgr	AUM	Net	%-ile	Rev	Recent	Returns			Annualized ¹	Total Ret	irns as of	12/31/18				Incep
As of 02/28/2019	Ticker	Tenure	\$M	ER	ER	Share	1 Mo	YTD	1 Yr	%-ile	3 Yr	%-ile	5 Yr	%-ile	10 Yr	%-ile	SI	Date
Vanguard Target Retire 2045 Trust I	Hoto	Teriare	Ų.	0.07	LIX	Onure	2.50	10.17	(7.86)	70 110	6.85	70 110	5.22	70 110	10.38	70 110	4.96	6/28/2007
Vanguard Target Retirement 2045 Composite				0.07			2.60	10.26	(7.77)		6.95		5.39		10.54		1.70	GIZGIZGGI
Target-Date 2045 Median				0.72			2.50	10.14	(8.27)		6.17		4.36		9.88			
Target-Date 2045 Number of Funds				240	240		2.00		225	225	203	203	178	178	99	99		
Vanguard Target Retire 2050 Trust I				0.07			2.51	10.15	(7.82)		6.86		5.21		10.40		5.02	6/28/2007
Vanquard Target Retirement 2050 Composite							2.60	10.26	(7.77)		6.95		5.39		10.54			
Target-Date 2050 Median				0.76			2.51	10.31	(8.62)		6.08		4.33		9.83			
Target-Date 2050 Number of Funds				256	256				243	243	218	218	193	193	115	115		
Vanguard Target Retire 2055 Trust I				0.07			2.52	10.16	(7.83)		6.86		5.19				8.49	10/5/2010
Vanguard Target Retirement 2055 Composite							2.60	10.26	(7.77)		6.95		5.39					
Target-Date 2055 Median				0.73			2.54	10.41	(8.59)		6.23		4.43					
Target-Date 2055 Number of Funds				240	240				225	225	201	201	150	150				
Vanguard Target Retirement 2060 Trust I				0.07			2.51	10.14	(7.81)		6.87		5.20				7.95	3/1/2012
Vanguard Target Retirement 2060 Composite							2.60	10.26	(7.77)		6.95		5.39					
Target-Date 2060+ Median				0.72			2.59	10.61	(8.70)		6.33		4.02					
Target-Date 2060+ Number of Funds				225	225				206	206	109	109	9	9				
Vanguard Target Retirement 2065 Trust I				0.07			2.51	10.16	(7.69)								2.47	7/7/2017
Vanguard Target Retirement 2060 Composite							2.60	10.26	(7.77)									
Target-Date 2060+ Median				0.72			2.59	10.61	(8.70)									
Target-Date 2060+ Number of Funds				225	225				206	206								

Source: Morningstar & TIAA-CREF

"Morningstar Analyst Assigned Benchmark"

Data for 1-month and YTD return as of 2/28/2019. All other data as of 12/31/2018.

VA = Variable Annuity

Since Incep. = Since Inception Date

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

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

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

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

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

^{*** =} Spliced Emerging Markets Index reflects performance of the Select Emerging Markets Index through August 23, 2006; the MSCI Emerging Markets Index through January 9, 2013; FTSE Emerging Transition Index through June 27, 2013; FTSE Emerging Index through November 1, 2015; FTSE Emerging Markets All Cap China A Transition Index through September 18, 2016; and FTSE Emerging Markets All Cap China A Inclusion Index thereafter.

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

[&]quot;Since Inception" performance is calculated from this date.

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.

^{*****} Calvert Social Index through December 16, 2005; FTSE4Good US Select Index thereafter

State of Rhode Island

Market Value as of 2/28/2019 Plan Balance Summary

457(b) - Plan 407359 State of Rhode Island 457(b) Deferred Compensation Plan

Ticker	Investment Name	Asset Class Description	Current Account Balance Amount
AIADX	American Century Inf Adj Bd R6	Fixed Income	\$559,571.70
PTTRX	PIMCO Total Return Instl	Fixed Income	\$526,748.80
RERGX	American EuroPac Growth R6	Equities	\$1,552,197.37
SWISX	Schwab International Index Fd	Equities	\$273,430.21
TIAA#	TIAA Traditional Benefit Responsive 2	Guaranteed	\$6,473,479.49
VBTIX	Vanguard Ttl Bd Mkt Idx Inst	Fixed Income	\$199,615.78
VFTSX	Vanguard FTSE Social Index Inv	Equities	\$532,052.77
VINIX	Vanguard Inst Idx Inst	Equities	\$9,759,443.58
VLC1#	VALIC Fixed-Interest Opt 3%	Guaranteed	\$6,344,184.55
VLC2#	VALIC Fixed-Interest Opt 1.5%	Guaranteed	\$37,647.99
VMCIX	Vanguard Mid-Cap Idx Inst	Equities	\$5,108,028.71
VSCIX	Vanguard Small-Cap Idx Inst	Equities	\$3,179,822.17
VT15#	Vanguard Tgt Rtmt 2015 Tr I	Multi-Asset	\$18,708.82
VT20#	Vanguard Tgt Rtmt 2020 Tr I	Multi-Asset	\$617,614.28
VT25#	Vanguard Tgt Rtmt 2025 Tr I	Multi-Asset	\$111,019.34
VT30#	Vanguard Tgt Rtmt 2030 Tr I	Multi-Asset	\$611,136.80
VT35#	Vanguard Tgt Rtmt 2035 Tr I	Multi-Asset	\$249,033.49
VT40#	Vanguard Tgt Rtmt 2040 Tr I	Multi-Asset	\$36,433.20
VT45#	Vanguard Tgt Rtmt 2045 Tr I	Multi-Asset	\$82,459.23
VT50#	Vanguard Tgt Rtmt 2050 Tr I	Multi-Asset	\$81,452.75
VT55#	Vanguard Tgt Rtmt 2055 Tr I	Multi-Asset	\$9,788.71
VT60#	Vanguard Tgt Rtmt 2060 Tr I	Multi-Asset	\$5,352.99
VT65#	Vanguard Target Rtmt 2065 Tr I	Multi-Asset	\$1,339.13
VTIN#	Vanguard Tgt Rtmt Income Tr I	Multi-Asset	\$56,796.56
			\$36,427,358.42



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

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Real estate securities are subject to various risks, including fluctuations in property values, higher expenses or lower income than expected, and potential environmental problems and liability.



Any guarantees under annuities issued by TIAA are subject to TIAA's claims-paying ability. TIAA Stable Value is guaranteed insurance contract and not an investment for Federal Securities Law purposes.

Target Date Funds share the risks associated with the types of securities held by each of the underlying funds in which they invest. In addition to the fees and expenses associated with the Target Date Funds, there is exposure to the fees and expenses associated with the underlying mutual funds as well.

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

Investment, insurance and annuity products are not FDIC insured, are not bank guaranteed, are not deposits, are not insured by any federal government agency, are not a condition to any banking service or activity, and may lose value.

You should consider the investment objectives, risks, charges and expenses carefully before investing. Please call 877 518-9161 or log on to tiaacref.org for product and fund prospectuses that contains this and other information. Please read the prospectuses carefully before investing.

Morningstar is an independent service that rates mutual funds and variable annuities, based on risk-adjusted returns. Although Morningstar data is gathered from reliable sources, neither Morningstar nor TIAA-CREF can guarantee its completeness and accuracy. Morningstar does not rate money market accounts, and the other TIAA-CREF mutual fund accounts are too new to be rated. Past performance does not guarantee future results. Accumulation net asset values and returns will vary.

For each fund/account with at least a three-year history, Morningstar calculates a Morningstar Rating™ based on a Morningstar Risk-Adjusted Return measure that accounts for variation in a fund's/account's monthly performance (including the effects of sales charges, loads, and redemption fees), placing more emphasis on downward variations and rewarding consistent performance. Where applicable, Morningstar's performance rankings are based on linked performance that considers the differences in expense ratios, while actual performance data shown does not reflect such differences. The top 10 percent of funds/accounts in a category receive five stars, the next 22.5 percent receive four stars, and the next 35 percent receive three stars, the next 22.5 percent receive two stars and the bottom 10 percent receive one star. (Each share class is counted as a fraction of one fund/account within this scale and rated separately, which may cause slight variations in the distribution percentages.) Morningstar proprietary ratings on U.S.-domiciled funds/accounts reflect historical risk-adjusted performance, are subject to change every month. They are derived from a weighted average of the performance figures associated with its three-, five- and ten-year (if applicable) Morningstar Rating metrics. Please note, Morningstar now rates group variable annuities within the open-end mutual fund universe.



Prospectus Gross Expense Ratio

The percentage of fund assets used to pay for operating expenses and management fees, including 12b-1 fees, administrative fees, and all other asset-based costs incurred by the fund, except brokerage costs. Fund expenses are reflected in the fund's NAV. Sales charges are not included in the expense ratio.

- --The expense ratio for fund of funds is the aggregate expense ratio as defined as the sum of the wrap or sponsor fees plus the estimated weighted average of the underlying fund fees.
- --Often referred to as the Annual Operating Expense, the Prospectus Gross Expense Ratio is collected annually from a fund's prospectus.

Prospectus Net Expense Ratio

The percentage of fund assets, net of reimbursements, used to pay for operating expenses and management fees, including 12b-1 fees, administrative fees, and all other asset-based costs incurred by the fund, except brokerage costs. Fund expenses are reflected in the fund's NAV. Sales charges are not included in the expense ratio.

- --The expense ratio for fund of funds is the aggregate expense ratio as defined as the sum of the wrap or sponsor fees plus the estimated weighted average of the underlying fund fees.
- --Net reimbursements, the Prospectus Net Expense Ratio is collected annually from a fund's prospectus.
- --TIAA-CREF, unless noted, does not charge additional fees for record keeping a fund. 12b-1, revenue share and admin fees are all included in the Prospectus fees.
- -- Prospectus Net Expense Ratio % ile rank is the percentile rank for the fund. The better the expense ratio (lower) the lower the ranking out of 100.

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

By communicating the information contained in this material, TIAA is not providing impartial investment advice or giving advice in a fiduciary capacity regarding any investment by, or other transaction of, the plan(s). TIAA is acting solely in a sales capacity with respect to an arms-length sale, purchase, loan, exchange or other transaction related to the investment of securities or other investment property.

237048

Monthly Plan Performance Update

STATE OF RHODE ISLAND - STATE OF RI (35835)

Performance data shown represents past performance and is no guarantee of future results. Investment return and principal value will fluctuate, so you may have a gain or loss when shares are sold. Current performance may be higher or lower than that quoted. Visit your Fidelity website for the most recent month-end performance.

	Cum	ılative T	otal Retu	ırns	Ave	erage An	nual Tot	al Returi	ns
Name	As of	1 mo	3 mo	YTD	As of	1 yr	3 yr	5 yr	10 yr
DOW JONES INDUSTRIAL AVERAGE	02/28/2019	4.03	2.03	11.62	12/31/2018	-3.48	12.94	9.70	13.16
BLOOMBERG BARCLAYS U.S. AGGREGATE BOND INDEX	02/28/2019	-0.06	2.86	1.00	12/31/2018	0.01	2.06	2.52	3.48
NASDAQ COMPOSITE INDEX	02/28/2019	3.60	3.05	13.74	12/31/2018	-2.84	11.10	10.97	16.76
RUSSELL 2000 INDEX	02/28/2019	5.20	3.13	17.03	12/31/2018	-11.01	7.36	4.41	11.97
S&P 500 INDEX	02/28/2019	3.21	1.42	11.48	12/31/2018	-4.38	9.26	8.49	13.12

Cum	ılative T	otal Retu	ırns	Ave	erage An	nual Tot	al Retur	ns		Fe	es	
As of	1 mo	3 mo	YTD	As of	1 yr	3 yr	5 yr	10 yr	Life	Short Term Trading	Expense Ratio	Inception Date
S												
02/28/2019	3.21	1.42	11.48	12/31/2018	-4.40	9.25	8.48	13.11	9.88		0.01% on 04/28/2018	02/17/1988
02/28/2019	2.39	3.33	12.16	12/31/2018	-2.07	10.28	9.40	14.02	12.29		0.73% on 03/01/2019	05/17/1967
02/28/2019	3.77	1.09	13.34	12/31/2018	-9.15	7.80	5.96	14.66	7.98		0.67% on 06/29/2018	06/22/1995
02/28/2019	3.39	1.82	10.02	12/31/2018	-7.45	4.89	5.80	11.08	7.67		0.43% on 02/28/2018	12/31/2001
02/28/2019	3.29	1.76	11.63	12/31/2018	-3.45	9.73	9.12	14.36	4.13		0.18% on 12/03/2018	05/31/2000
02/28/2019	2.30	1.82	10.91	12/31/2018	-10.68	5.51	4.73	12.97	12.99		0.53% on 09/29/2018	12/27/1989
02/28/2019	4.31	4.15	15.57	12/31/2018	-9.05	7.05	6.25		11.61		0.03% on 08/01/2018	09/08/2011
02/28/2019	5.16	3.13	17.00	12/31/2018	-10.88	7.58	4.63		11.18		0.03% on 08/01/2018	09/08/2011
02/28/2019	2.48	3.75	9.13	12/31/2018	-13.52	3.19	0.65	6.17	4.32		0.04% on 04/28/2018	11/05/1997
02/28/2019	2.41	4.81	9.49	12/31/2018	-17.96	0.36	-1.96	5.84	9.74		0.89% on 03/01/2018	12/29/1987
	As of S 02/28/2019 02/28/2019 02/28/2019 02/28/2019 02/28/2019 02/28/2019 02/28/2019	As of 1 mo S 02/28/2019 3.21 02/28/2019 2.39 02/28/2019 3.77 02/28/2019 3.39 02/28/2019 3.29 02/28/2019 2.30 02/28/2019 4.31 02/28/2019 5.16	As of 1 mo 3 mo S 02/28/2019 3.21 1.42 02/28/2019 2.39 3.33 02/28/2019 3.77 1.09 02/28/2019 3.39 1.82 02/28/2019 3.29 1.76 02/28/2019 2.30 1.82 02/28/2019 4.31 4.15 02/28/2019 5.16 3.13	S 02/28/2019 3.21 1.42 11.48 02/28/2019 2.39 3.33 12.16 02/28/2019 3.77 1.09 13.34 02/28/2019 3.39 1.82 10.02 02/28/2019 3.29 1.76 11.63 02/28/2019 2.30 1.82 10.91 02/28/2019 4.31 4.15 15.57 02/28/2019 5.16 3.13 17.00 02/28/2019 2.48 3.75 9.13	As of 1 mo 3 mo YTD As of S 02/28/2019 3.21 1.42 11.48 12/31/2018 02/28/2019 2.39 3.33 12.16 12/31/2018 02/28/2019 3.77 1.09 13.34 12/31/2018 02/28/2019 3.39 1.82 10.02 12/31/2018 02/28/2019 3.29 1.76 11.63 12/31/2018 02/28/2019 2.30 1.82 10.91 12/31/2018 02/28/2019 4.31 4.15 15.57 12/31/2018 02/28/2019 5.16 3.13 17.00 12/31/2018 02/28/2019 2.48 3.75 9.13 12/31/2018	As of 1 mo 3 mo YTD As of 1 yr S 02/28/2019 3.21 1.42 11.48 12/31/2018 -4.40 02/28/2019 2.39 3.33 12.16 12/31/2018 -2.07 02/28/2019 3.77 1.09 13.34 12/31/2018 -9.15 02/28/2019 3.39 1.82 10.02 12/31/2018 -7.45 02/28/2019 3.29 1.76 11.63 12/31/2018 -3.45 02/28/2019 2.30 1.82 10.91 12/31/2018 -10.68 02/28/2019 4.31 4.15 15.57 12/31/2018 -9.05 02/28/2019 5.16 3.13 17.00 12/31/2018 -10.88 02/28/2019 2.48 3.75 9.13 12/31/2018 -13.52	As of 1 mo 3 mo YTD As of 1 yr 3 yr S 02/28/2019 3.21 1.42 11.48 12/31/2018 -4.40 9.25 02/28/2019 2.39 3.33 12.16 12/31/2018 -2.07 10.28 02/28/2019 3.77 1.09 13.34 12/31/2018 -9.15 7.80 02/28/2019 3.39 1.82 10.02 12/31/2018 -7.45 4.89 02/28/2019 3.29 1.76 11.63 12/31/2018 -3.45 9.73 02/28/2019 2.30 1.82 10.91 12/31/2018 -10.68 5.51 02/28/2019 4.31 4.15 15.57 12/31/2018 -9.05 7.05 02/28/2019 5.16 3.13 17.00 12/31/2018 -10.88 7.58 02/28/2019 2.48 3.75 9.13 12/31/2018 -13.52 3.19	As of 1 mo 3 mo YTD As of 1 yr 3 yr 5 yr S 02/28/2019 3.21 1.42 11.48 12/31/2018 -4.40 9.25 8.48 02/28/2019 2.39 3.33 12.16 12/31/2018 -2.07 10.28 9.40 02/28/2019 3.77 1.09 13.34 12/31/2018 -9.15 7.80 5.96 02/28/2019 3.39 1.82 10.02 12/31/2018 -7.45 4.89 5.80 02/28/2019 3.29 1.76 11.63 12/31/2018 -3.45 9.73 9.12 02/28/2019 2.30 1.82 10.91 12/31/2018 -10.68 5.51 4.73 02/28/2019 4.31 4.15 15.57 12/31/2018 -9.05 7.05 6.25 02/28/2019 5.16 3.13 17.00 12/31/2018 -10.88 7.58 4.63 02/28/2019 2.48 3.75 9.13 12/31/2018	As of 1 mo 3 mo YTD As of 1 yr 3 yr 5 yr 10 yr S 02/28/2019 3.21 1.42 11.48 12/31/2018 -4.40 9.25 8.48 13.11 02/28/2019 2.39 3.33 12.16 12/31/2018 -2.07 10.28 9.40 14.02 02/28/2019 3.77 1.09 13.34 12/31/2018 -9.15 7.80 5.96 14.66 02/28/2019 3.39 1.82 10.02 12/31/2018 -7.45 4.89 5.80 11.08 02/28/2019 3.29 1.76 11.63 12/31/2018 -3.45 9.73 9.12 14.36 02/28/2019 2.30 1.82 10.91 12/31/2018 -10.68 5.51 4.73 12.97 02/28/2019 4.31 4.15 15.57 12/31/2018 -9.05 7.05 6.25 02/28/2019 5.16 3.13 17.00 12/31/2018 -10.88	As of 1 mo 3 mo YTD As of 1 yr 3 yr 5 yr 10 yr Life 8 02/28/2019 3.21 1.42 11.48 12/31/2018 -4.40 9.25 8.48 13.11 9.88 02/28/2019 2.39 3.33 12.16 12/31/2018 -2.07 10.28 9.40 14.02 12.29 02/28/2019 3.77 1.09 13.34 12/31/2018 -9.15 7.80 5.96 14.66 7.98 02/28/2019 3.39 1.82 10.02 12/31/2018 -7.45 4.89 5.80 11.08 7.67 02/28/2019 3.29 1.76 11.63 12/31/2018 -3.45 9.73 9.12 14.36 4.13 02/28/2019 2.30 1.82 10.91 12/31/2018 -10.68 5.51 4.73 12.97 12.99 02/28/2019 4.31 4.15 15.57 12/31/2018 -9.05 7.05 6.25 11.61 02/28/2019 5.16 3.13 17.00 12/31/2018 -10.88 7.58 4.63 11.18 02/28/2019 2.48 3.75 9.13 12/31/2018 -13.52 3.19 0.65 6.17 4.32	As of 1 mo 3 mo YTD As of 1 yr 3 yr 5 yr 10 yr Life Short Term Trading 8 02/28/2019 3.21 1.42 11.48 12/31/2018 -4.40 9.25 8.48 13.11 9.88 02/28/2019 2.39 3.33 12.16 12/31/2018 -2.07 10.28 9.40 14.02 12.29 02/28/2019 3.77 1.09 13.34 12/31/2018 -9.15 7.80 5.96 14.66 7.98 02/28/2019 3.39 1.82 10.02 12/31/2018 -7.45 4.89 5.80 11.08 7.67 02/28/2019 3.29 1.76 11.63 12/31/2018 -3.45 9.73 9.12 14.36 4.13 02/28/2019 2.30 1.82 10.91 12/31/2018 -3.45 9.73 9.12 14.36 4.13 02/28/2019 4.31 4.15 15.57 12/31/2018 -9.05 7.05 6.25 11.61 02/28/2019 5.16 3.13 17.00 12/31/2018 -10.88 7.58 4.63 11.18 02/28/2019 2.48 3.75 9.13 12/31/2018 -13.52 3.19 0.65 6.17 4.32	As of 1 mo 3 mo YTD As of 1 yr 3 yr 5 yr 10 yr Life Short Term Expense Ratio

	Cum	ulative T	otal Retu	ırns	Ave	erage An	nual Tot	al Retur	ns		Fe	es	
Investment Name	As of	1 mo	3 mo	YTD	As of	1 yr	3 yr	5 yr	10 yr	Life	Short Term Trading	Expense Ratio	Inception Date
Blended Investm	ents*												
Others													
FID FREEDOM 2005 K	02/28/2019	0.76	2.58	3.71	12/31/2018	-2.46	4.50	3.51	6.68	4.56		0.43% on 05/30/2018	11/06/2003
FID FREEDOM 2010 K	02/28/2019	1.00	2.80	4.78	12/31/2018	-3.52	4.93	3.85	7.49	6.15		0.46% on 05/30/2018	10/17/1996
FID FREEDOM 2015 K	02/28/2019	1.22	2.84	5.67	12/31/2018	-4.38	5.37	4.16	7.82	5.39		0.50% on 05/30/2018	11/06/2003
FID FREEDOM 2020 K	02/28/2019	1.43	3.00	6.48	12/31/2018	-5.16	5.58	4.34	8.43	6.39		0.54% on 05/30/2018	10/17/1996
FID FREEDOM 2025 K	02/28/2019	1.64	3.08	7.15	12/31/2018	-5.81	5.76	4.52	9.01	5.86		0.57% on 05/30/2018	11/06/2003
FID FREEDOM 2030 K	02/28/2019	1.98	3.16	8.37	12/31/2018	-6.92	6.45	4.94	9.42	6.47		0.61% on 05/30/2018	10/17/1996
FID FREEDOM 2035 K	02/28/2019	2.37	3.20	9.78	12/31/2018	-8.29	6.72	5.11	9.77	6.15		0.64% on 05/30/2018	11/06/2003
FID FREEDOM 2040 K	02/28/2019	2.57	3.18	10.40	12/31/2018	-8.89	6.59	5.03	9.81	3.52		0.65% on 05/30/2018	09/06/2000
FID FREEDOM 2045 K	02/28/2019	2.54	3.09	10.34	12/31/2018	-8.90	6.57	5.03	9.88	5.07		0.65% on 05/30/2018	06/01/2006
FID FREEDOM 2050 K	02/28/2019	2.52	3.20	10.37	12/31/2018	-8.85	6.60	5.03	9.92	4.92		0.65% on 05/30/2018	06/01/2006
FID FREEDOM 2055 K	02/28/2019	2.53	3.14	10.39	12/31/2018	-8.86	6.58	5.03		6.61		0.65% on 05/30/2018	06/01/2011
FID FREEDOM 2060 K	02/28/2019	2.56	3.21	10.34	12/31/2018	-8.83	6.56			5.07		0.65% on 05/30/2018	08/05/2014
FID FREEDOM INC K	02/28/2019	0.47	2.43	2.85	12/31/2018	-1.74	3.77	2.95	5.07	4.59		0.42% on 05/30/2018	10/17/1996
Bond Investment	ts												
Stable Value													
TRP STABLE VALUE A	02/28/2019	0.17	0.53	0.35	12/31/2018	2.09	1.91	1.93	2.54	4.79		0.30% on 12/31/2015	09/12/1988
Income													
FID US BOND IDX	02/28/2019	-0.13	2.79	0.91	12/31/2018	0.03	2.00	2.51	3.48	5.81		0.03% on 11/29/2018	03/08/1990
PIM TOTAL RT INST	02/28/2019	0.07	2.45	1.27	12/31/2018	-0.26	2.47	2.56	4.71	7.08		0.55% on 08/24/2018	05/11/1987
Other Investmen	its												
Others													
BROKERAGELINK													

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

Total returns are historical and include change in share value and reinvestment of dividends and capital gains, if any. Cumulative total returns are reported as of the period indicated. Life of Fund figures are reported as of the inception date to the period indicated.

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

For any Government or U.S. Treasury Money Market funds listed: You could lose money by investing in a money market fund. Although the fund seeks to preserve the value of your investment at \$1.00 per share, it cannot guarantee it will do so. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to money market funds and you should not expect that the sponsor will provide financial support to the fund at any time. Fidelity's government and U.S. Treasury money market funds will not impose a fee upon the sale of your shares, nor temporarily suspend your ability to sell shares if the fund's weekly liquid assets fall below 30% of its total assets because of market conditions or other factors.

For any Retail (Non Government or U.S. Treasury) Money Market Funds listed: You could lose money by investing in a money market fund. Although the fund seeks to preserve the value of your investment at \$1.00 per share, it cannot guarantee it will do so. The Fund may impose a fee upon the sale of your shares or may temporarily suspend your ability to sell shares if the Fund's liquidity falls below required minimums because of market conditions or other factors. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to money market funds and you should not expect that the sponsor will provide financial support to the fund at any time.

For any Institutional Money Market Funds listed: You could lose money by investing in a money market fund. Because the share price of the fund will fluctuate, when you sell your shares they may be worth more or less than what you originally paid for them. The Fund may impose a fee upon the sale of your shares or may temporarily suspend your ability to sell shares if the Fund's liquidity falls below required minimums because of market conditions or other factors. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to money market funds and you should not expect that the sponsor will provide financial support to the fund at any time.

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

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

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

Before investing, consider the funds' investment objectives, risks, charges, and expenses. Contact Fidelity for a prospectus or, if available, a summary prospectus containing this information. Read it carefully.

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STATE OF RHODE ISLAND

Balance by Fund

Data As Of: 2/28/2018

	TATE OF RI	338	EID I ADOE CAD OTO OU					
25025 07		330	FID LARGE CAP STOCK	FLCSX	DOMESTIC EQUITY	346	\$8,479,109.68	5.59%
33833 81	TATE OF RI	2080	FID CONTRAFUND K	FCNKX	DOMESTIC EQUITY	713	\$35,393,804.76	23.32%
35835 ST	TATE OF RI	2095	FID LOW PRICED STK K	FLPKX	DOMESTIC EQUITY	407	\$9,922,561.67	6.54%
35835 ST	TATE OF RI	2326	FID US BOND IDX	FXNAX	BOND	141	\$1,451,610.86	0.96%
35835 ST	TATE OF RI	2328	FID 500 INDEX	FXAIX	DOMESTIC EQUITY	403	\$11,981,322.90	7.90%
35835 ST	TATE OF RI	2352	FID MID CAP IDX	FSMDX	DOMESTIC EQUITY	184	\$1,941,631.38	1.28%
35835 ST	TATE OF RI	2358	FID SM CAP IDX	FSSNX	DOMESTIC EQUITY	223	\$1,837,556.14	1.21%
35835 ST	TATE OF RI	2363	FID INTL INDEX	FSPSX	INTERNATIONAL EQUITY	182	\$2,498,853.76	1.65%
35835 ST	TATE OF RI	3019	FID FREEDOM INC K	FNSHX	LIFECYCLE	48	\$1,610,444.46	1.06%
35835 ST	TATE OF RI	3020	FID FREEDOM 2005 K	FSNJX	LIFECYCLE	10	\$351,671.32	0.23%
35835 ST	TATE OF RI	3021	FID FREEDOM 2010 K	FSNKX	LIFECYCLE	73	\$3,543,260.66	2.33%
35835 ST	TATE OF RI	3022	FID FREEDOM 2015 K	FSNLX	LIFECYCLE	50	\$1,972,445.67	1.30%
35835 ST	TATE OF RI	3023	FID FREEDOM 2020 K	FSNOX	LIFECYCLE	242	\$15,532,884.37	10.24%
35835 ST	TATE OF RI	3024	FID FREEDOM 2025 K	FSNPX	LIFECYCLE	102	\$3,681,942.07	2.43%
35835 ST	TATE OF RI	3025	FID FREEDOM 2030 K	FSNQX	LIFECYCLE	263	\$12,718,348.28	8.38%
35835 ST	TATE OF RI	3026	FID FREEDOM 2035 K	FSNUX	LIFECYCLE	70	\$2,941,733.56	1.94%
35835 ST	TATE OF RI	3027	FID FREEDOM 2040 K	FSNVX	LIFECYCLE	56	\$1,392,229.23	0.92%
35835 ST	TATE OF RI	3028	FID FREEDOM 2045 K	FSNZX	LIFECYCLE	57	\$1,067,325.83	0.70%
35835 ST	TATE OF RI	3029	FID FREEDOM 2050 K	FNSBX	LIFECYCLE	45	\$309,526.83	0.20%
35835 ST	TATE OF RI	3030	FID FREEDOM 2055 K	FNSDX	LIFECYCLE	40	\$621,773.17	0.41%
35835 ST	TATE OF RI	3031	FID FREEDOM 2060 K	FNSFX	LIFECYCLE	18	\$65,955.61	0.04%
35835 ST	TATE OF RI		BROKERAGELINK		OTHER	113	\$12,511,325.31	8.24%
35835 ST	TATE OF RI	OF1P	PIM TOTAL RT INST	PTTRX	BOND	275	\$6,977,751.11	4.60%
35835 ST	TATE OF RI	OFHL	HARBOR INTL INST	HAINX	INTERNATIONAL EQUITY	304	\$3,861,312.87	2.54%
35835 ST	TATE OF RI	OGMU	TRP STABLE VALUE A		STABLE VALUE	329	\$6,570,829.90	4.33%
35835 ST	TATE OF RI	OK26	INVESCO DIVRS DIV R6	LCEFX	DOMESTIC EQUITY	170	\$2,286,367.01	1.51%
35835 ST	TATE OF RI	OQPN	VANG FTSE SOCIAL IDX	VFTSX	DOMESTIC EQUITY	87	\$233,777.07	0.15%

\$151,757,355.50

PERFORMANCE UPDATE

Voya Retirement Insurance and Annuity Company

STATE OF RHODE ISLAND VK0450

Average Annual Total Returns as of: 02/28/2019 (shown in percentages)

Variable annuities and mutual funds offered through a retirement plan are intended as long-term investments designed for retirement purposes. Money distributed from a 403(b) plan, 401(a)/(k) plan, or a 457 plan will be taxed as ordinary income in the year the money is distributed. Early withdrawals from a 403(b) plan and a 401(a)/(k) plan, if taken prior to age 59 1/2, will be subject to the IRS 10% premature distribution penalty tax, unless an exception applies. This IRS premature distribution penalty tax does not apply to 457 plans. Account values fluctuate with market conditions, and when surrendered the principal may be worth more or less than the original amount invested.

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

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

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

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

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

Investment Ontions	Fund Benchmark		/lo BM	3-N	Mo BM	YT	D BM	1- Fund	Yr BM	3-'	Yr BM	5-'	Yr BM		-Yr BM	Incent	Fund Inception		Net Fund
Investment Options Stability of Principal	ID (BM)	Fund	DIVI	Fund	DIVI	Fund	DIVI	runa	DIVI	Fund	DIVI	Fund	DIVI	Fund	DIVI	Incept	Date	Exp %*	Exp %"
Stability of Principal Voya Fixed Account - 457/401 II A (22)(23) Bonds	MFR	0.13	0.16	0.43	0.51	0.28	0.34	1.75	1.52	1.84	1.90	1.94	1.14	2.32	0.59				
High Yield Bond PGIM High Yield Fund - Class Z Inflation-Protected Bond	BCUSH1IC	1.45	1.67	3.93	3.97	6.00	6.27	4.54	4.15	9.54	9.81	4.87	4.51	10.63	11.32		03/01/1996	0.55	0.55



	Fund Benchmark	1-1	Mo.	3-N	40	ΥT	.D	1-1	/r	3_	Yr	5	Yr	10	-Yr		Fund Inception	Gross Fund	Net Fund
Investment Options	ID (BM)	Fund	BM	Fund	BM	Fund	_	Fund	BM	Fund	BM	Fund		Fund	BM	Incept	Date		Exp %*
PIMCO VIT Real Return Portfolio - Administrative Class	LBUSTIPS	-0.08	-0.01	1.96	1.89	1.70	1.33	1.24	1.91	2.20	1.69	1.14	1.47	4.33	3.81	-	09/30/1999	1.04	1.04
Intermediate-Term Bond																			
Voya Intermediate Bond Portfolio - Class I (1)	LEHM	0.10	-0.06	3.04	2.86	1.61	1.00	2.76	3.17	3.00	1.69	2.99	2.32	5.82	3.71		05/23/1973	0.55	0.55
Voya U.S. Bond Index Portfolio - Class I (2)	LEHM	-0.11	-0.06	2.66	2.86	0.87	1.00	2.78	3.17	1.35	1.69	1.95	2.32	3.33	3.71		03/07/2008	0.41	0.40
Asset Allocation																			
Lifecycle																			
Voya Solution 2020 Portfolio - Initial Class (3)(4)	SPT2020	1.18	1.51	2.64	2.54	5.69	6.21	1.59	2.18	7.79	8.16	5.12	5.09			8.38	10/03/2011	0.91	0.72
Voya Solution 2025 Portfolio - Initial Class (4)(5)	SPT2025	1.50	1.78	2.76	2.60	6.96	7.17	1.02	1.99	9.00	9.14	5.29	5.50	11.17	10.80		04/29/2005	0.85	0.78
Voya Solution 2030 Portfolio - Initial Class (4)(6)	SPT2030	1.79	2.07	2.95	2.64	8.32	8.23	0.52	1.78	10.08	10.01	6.07	5.91			10.19	10/03/2011	0.97	0.79
Voya Solution 2035 Portfolio - Initial Class (4)(7)	SP2035	2.06	2.33	2.85	2.65	9.27	9.17	-0.12	1.51	10.84	10.84	5.99	6.29	12.30	12.27		04/29/2005	0.90	0.83
Voya Solution 2040 Portfolio - Initial Class (4)(8)	SPT2040	2.22	2.48	2.87	2.66	9.89	9.75	-0.46	1.37	11.36	11.42	6.52	6.55	40.00	40.05	11.33	10/03/2011	1.05	0.83
Voya Solution 2045 Portfolio - Initial Class (4)(9)	SP2045 SPT2050	2.33 2.34	2.56 2.61	2.69 2.78	2.66 2.65	10.34 10.51	10.05 10.26	-1.32 -1.40	1.21 1.15	11.30 11.35	11.82 12.18	6.08 6.49	6.71 6.87	12.96	13.05	11.41	04/29/2005 10/03/2011	0.93 1.12	0.86 0.86
Voya Solution 2050 Portfolio - Initial Class (4)(10) Voya Solution 2055 Portfolio - Initial Class (4)(11)	SPT2050 SPT2055	2.34	2.62	2.76	2.65	10.51	10.20	-1.40	1.15	11.41	12.10	6.49	6.95			8.69	03/08/2011	0.94	0.86
Voya Solution 2000 Portfolio - Initial Class (4)(11)	SPT2055 SPT2060	2.43	2.65	2.72	2.62	10.47	10.23	-1.43 -1.44	1.13	11.41	12.40	0.17	0.55			6.30	02/09/2015	1.29	0.87
Voya Solution Income Portfolio - Initial Class (4)(13)	SPTREIN	0.86	0.99	2.55	2.36	4.38	4.29	1.96	2.22	5.75	5.21	3.95	3.65	7.56	6.58	0.00	04/29/2005	0.81	0.68
Balanced																			
Allocation50% to 70% Equity																			
VY® T. Rowe Price Capital Appreciation Portfolio - Inst	SPXLBGC	2.48	1.90	4.73	2.27	9.75	7.28	9.69	3.78	12.32	9.69	9.83	7.32	15.04	11.55		01/24/1989	0.64	0.64
Large Cap Value																			
Large Blend																			
Voya Growth and Income Portfolio - Class I (14)	SPXRE	2.88	3.21	0.86	1.42	9.27	11.48	4.01	4.68	13.72	15.28	8.21	10.67	14.87	16.67		12/31/1979	0.63	0.58
Voya U.S. Stock Index Portfolio - Institutional Class	SPXRE	3.20	3.21	1.36	1.42	11.44	11.48	4.42	4.68	14.98	15.28	10.37	10.67	16.38	16.67		05/03/2004	0.27	0.27
Large Value																			
BlackRock Equity Dividend Fund - Institutional Shares (15)	RS1000V	2.50	3.20	0.20	0.55	9.63	11.23	1.90	3.16	13.37	12.80	8.74	8.09	14.08	15.39		11/29/1988	0.73	0.73
Large Cap Growth																			
Large Growth																			
Voya Large Cap Growth Portfolio - Institutional Class (16)	RS1000G	3.36	3.58	2.83	3.18	12.37	12.89	7.26	6.62	17.15	17.99	12.12	12.63	17.92	18.19		05/03/2004	0.67	0.67
Small/Mid/Specialty																			
Mid-Cap Blend																			
Voya Russell™ Mid Cap Index Portfolio - Class I (17)	RSMID	4.25	4.30	4.03	4.09	15.43	15.55	5.27	5.63	14.03	14.46	8.13	8.56	17.40	17.81		03/04/2008	0.44	0.40
Mid-Cap Growth																			
Principal MidCap Fund - Class R-5	RSMID	5.73	4.30	5.49	4.09	15.47	15.55	8.96	5.63	16.55	14.46	10.65	8.56	18.42	17.81		12/06/2000	0.85	0.85
Small Blend																			

See Performance Introduction Page for Important Information

	Fund Benchmark	1-N	l lo	3-1	Мо	Υ٦	ſD	1-	Yr	3-	Yr	5-`	۲r	10-	-Yr		Fund Inception	Gross Fund	
Investment Options	ID (BM)	Fund	BM	Fund	ВМ	Fund	BM	Fund	BM	Fund	BM	Fund	BM	Fund	BM	Incept	Date	Exp %*	Exp %*
Voya Russell™ Small Cap Index Portfolio - Class I (18)	RS2000	5.19	5.20	3.12	3.13	17.10	17.03	5.38	5.58	16.35	16.67	7.19	7.36	16.40	16.60		03/04/2008	0.46	0.45
Voya Small Company Portfolio - Class I (19)	RS2000	4.84	5.20	2.16	3.13	16.95	17.03	-0.17	5.58	13.79	16.67	7.35	7.36	15.95	16.60		12/27/1996	0.89	0.89
Global / International																			
Foreign Large Blend																			
Voya International Index Portfolio - Class I (20)	MSEAFANET	2.29	2.55	3.47	3.98	9.09	9.29	-5.72	-6.04	9.15	9.32	1.79	2.07	9.41	9.56		03/04/2008	0.53	0.45
Foreign Large Growth																			
American Funds EuroPacific Growth Fund - Class R-4	MSCIXUS	2.49	1.95	5.13	4.69	10.86	9.66	-7.64	-6.47	10.70	10.72	3.32	2.50	10.12	9.63		04/16/1984	0.83	0.83
World Large Stock																			
VY® Oppenheimer Global Portfolio - Initial Class (21)	MSCIACN	3.74	2.67	5.89	2.98	14.78	10.78	-2.80	-0.84	15.66	12.87	7.37	6.28	14.87	12.73		05/01/2002	0.75	0.75

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

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

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

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

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

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

PERFORMANCE UPDATE

Voya Retirement Insurance and Annuity Company

STATE OF RHODE ISLAND VK0450

Average Annual Total Returns as of: 12/31/2018 (shown in percentages)

Variable annuities and mutual funds offered through a retirement plan are intended as long-term investments designed for retirement purposes. Money distributed from a 403(b) plan, 401(a)/(k) plan, or a 457 plan will be taxed as ordinary income in the year the money is distributed. Early withdrawals from a 403(b) plan and a 401(a)/(k) plan, if taken prior to age 59 1/2, will be subject to the IRS 10% premature distribution penalty tax, unless an exception applies. This IRS premature distribution penalty tax does not apply to 457 plans. Account values fluctuate with market conditions, and when surrendered the principal may be worth more or less than the original amount invested.

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

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

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

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

	Fund Benchmark	1-N	Ло	3-1	Мо	ΥT	D.	1-	Yr	3-	Yr	5-`	Yr	10-	-Yr		Fund Inception	Gross Fund	
Investment Options	ID (BM)	Fund	BM	Fund	BM	Fund	BM	Fund	BM	Fund	BM	Fund	BM	Fund	BM	Incept	Date	Exp %*	Exp %*
Stability of Principal																			
Stability of Principal																			
Voya Fixed Account - 457/401 II A (22)(23)	MFR	0.15	0.17	0.44	0.47	1.75	1.34	1.75	1.34	1.86	1.79	1.96	1.07	2.35	0.57				
Bonds																			
High Yield Bond																			
PGIM High Yield Fund - Class Z	BCUSH1IC	-1.95	-2.16	-4.17	-4.61	-1.30	-2.21	-1.30	-2.21	7.06	7.21	4.21	3.80	10.40	11.14		03/01/1996	0.55	0.55
Inflation-Protected Bond																			
PIMCO VIT Real Return Portfolio - Administrative Class	LBUSTIPS	0.25	0.55	-1.13	-0.42	-2.20	-1.26	-2.20	-1.26	2.17	2.11	1.36	1.69	4.21	3.64		09/30/1999	1.04	1.04
Intermediate-Term Bond																			

	Fund Benchmark	1-1	Mo	3-	Мо	Y	ΓD	1-	Yr	3-	Yr	5-`	٧r	10.	-Yr		Fund Inception	Gross Fund	Net Fund
Investment Options	ID (BM)	Fund	BM	Fund	ВМ	Fund	_	Fund		Fund		Fund	BM	Fund		Incept	Date		Exp %*
Voya Intermediate Bond Portfolio - Class I (1)	LEHM	1.41	1.84	0.98	1.64	-0.54	0.01	-0.54	0.01	2.91	2.06	3.18	2.52	5.35	3.48		05/23/1973	0.55	0.55
Voya U.S. Bond Index Portfolio - Class I (2)	LEHM	1.78	1.84	1.58	1.64	-0.32	0.01	-0.32	0.01	1.72	2.06	2.21	2.52	3.12	3.48		03/07/2008	0.41	0.40
Asset Allocation																			
Lifecycle																			
Voya Solution 2020 Portfolio - Initial Class (3)(4)	SPT2020	-2.88	-3.45	-5.53	-6.49	-4.02	-4.16	-4.02	-4.16	4.67	5.05	4.35	4.10			7.74	10/03/2011	0.91	0.72
Voya Solution 2025 Portfolio - Initial Class (4)(5)	SPT2025	-3.92	-4.27	-7.31	-7.81	-5.48	-5.02	-5.48	-5.02	5.07	5.46	4.22	4.31	8.59	8.46		04/29/2005	0.85	0.78
Voya Solution 2030 Portfolio - Initial Class (4)(6)	SPT2030	-4.96	-5.17	-9.10	-9.26	-6.98	-5.99	-6.98	-5.99	5.32	5.77	4.69	4.50			9.21	10/03/2011	0.97	0.79
Voya Solution 2035 Portfolio - Initial Class (4)(7)	SP2035	-5.88	-5.97	-10.52	-10.55	-8.09	-6.88	-8.09	-6.88	5.46	6.08	4.37	4.69	9.31	9.38		04/29/2005	0.90	0.83
Voya Solution 2040 Portfolio - Initial Class (4)(8)	SPT2040	-6.39	-6.46	-11.37	-11.33	-8.95	-7.41	-8.95	-7.41	5.61	6.33	4.79	4.82			10.15	10/03/2011	1.05	0.83
Voya Solution 2045 Portfolio - Initial Class (4)(9)	SP2045	-6.94	-6.71	-12.34	-11.75	-10.08	-7.74	-10.08	-7.74	5.23	6.51	4.26	4.91	9.69	9.88		04/29/2005	0.93	0.86
Voya Solution 2050 Portfolio - Initial Class (4)(10)	SPT2050	-6.99	-6.90	-12.51	-12.05	-10.37	-7.94	-10.37	-7.94	5.29	6.68	4.63	5.01			10.15	10/03/2011	1.12	0.86
Voya Solution 2055 Portfolio - Initial Class (4)(11)	SPT2055	-6.94	-6.93	-12.43	-12.10	-10.29	-7.97	-10.29	-7.97	5.29	6.82	4.32	5.07			7.63	03/08/2010	0.94	0.86
Voya Solution 2060 Portfolio - Initial Class (4)(12)	SPT2060	-7.02	-7.03	-12.47	-12.22	-10.35	-7.95	-10.35	-7.95	5.33	6.95					3.87	02/09/2015	1.29	0.87
Voya Solution Income Portfolio - Initial Class (4)(13)	SPTREIN	-1.76	-1.85	-3.70	-3.92	-2.80	-2.54	-2.80	-2.54	3.75	3.57	3.48	3.06	6.18	5.31		04/29/2005	0.81	0.68
Balanced																			
Allocation50% to 70% Equity																			
VY® T. Rowe Price Capital Appreciation Portfolio - Inst	SPXLBGC	-4.58	-4.67	-6.31	-7.63	0.74	-3.02	0.74	-3.02	7.98	6.37	8.35	6.13	12.71	9.36		01/24/1989	0.64	0.64
Large Cap Value																			
Large Blend																			
Voya Growth and Income Portfolio - Class I (14)	SPXRE	-7.70	-9.03	-11.73	-13.52	-4.45	-4.38	-4.45	-4.38	8.07	9.26	6.61	8.49	11.94	13.12		12/31/1979	0.63	0.58
Voya U.S. Stock Index Portfolio - Institutional Class	SPXRE	-9.04	-9.03	-13.55	-13.52	-4.62	-4.38	-4.62	-4.38	8.96	9.26	8.19	8.49	12.82	13.12		05/03/2004	0.27	0.27
Large Value																			
BlackRock Equity Dividend Fund - Institutional Shares	RS1000V	-8.60	-9.60	-12.23	-11.72	-7.17	-8.27	-7.17	-8.27	8.00	6.95	6.59	5.95	10.93	11.18		11/29/1988	0.73	0.73
(15)	K31000V	-0.00	-9.00	-12.23	-11.72	-1.17	-0.27	-1.11	-0.27	0.00	0.93	0.59	5.95	10.93	11.10		11/29/1900	0.73	0.73
Large Cap Growth	Ī																		
Large Growth																			
Voya Large Cap Growth Portfolio - Institutional Class (16)	RS1000G	-8.49	-8.60	-14.48	-15.89	-1.48	-1.51	-1.48	-1.51	9.94	11.15	9.94	10.40	15.33	15.29		05/03/2004	0.67	0.67
Small/Mid/Specialty		0.10	0.00							0.0.		0.0		.0.00	.0.20		00/00/200	0.0.	0.0.
•																			
Mid-Cap Blend																			
Voya Russell™ Mid Cap Index Portfolio - Class I (17)	RSMID	-9.87	-9.92	-15.40	-15.37	-9.31	-9.06	-9.31	-9.06	6.66	7.04	5.85	6.26	13.65	14.03		03/04/2008	0.44	0.40
Mid-Cap Growth																			
Principal MidCap Fund - Class R-5	RSMID	-8.65	-9.92	-13.32	-15.37	-6.83	-9.06	-6.83	-9.06	8.66	7.04	7.89	6.26	15.14	14.03		12/06/2000	0.85	0.85
Small Blend																			
Voya Russell™ Small Cap Index Portfolio - Class I (18)	RS2000	-11.94	-11.88	-20.27	-20.20	-11.27	-11.01	-11.27	-11.01	7.08	7.36	4.22	4.41	11.78	11.97		03/04/2008	0.46	0.45
, , ,	RS2000 RS2000	-11.94 -12.65	-11.88	-20.2 <i>1</i> -18.98	-20.20	-11.2 <i>1</i> -15.84	-11.01	-11.2 <i>1</i> -15.84	-11.01	7.08 5.25	7.36	4.22 4.27	4.41	11.78	11.97		12/27/1996	0.46	0.45
Voya Small Company Portfolio - Class I (19)	r\32000 ■	-12.05	-11.00	-10.98	-20.20	-10.04	-11.01	-10.04	-11.01	5.25	1.30	4.21	4.41	11.04	11.97		12/2//1990	0.09	0.09
Global / International																			

	Fund Benchmark	1-N	Ио	3-	Мо	Y	TD	1.	·Yr	3-	Yr	5-`	Yr	10-	-Yr		Fund Inception	Gross Fund	Net Fund
Investment Options	ID (BM)	Fund	BM	Fund	BM	Fund	BM	Fund	BM	Fund	BM	Fund	BM	Fund	BM	Incept	Date	Exp %*	Exp %*
Foreign Large Blend																			
Voya International Index Portfolio - Class I (20)	MSEAFANET	-5.15	-4.85	-12.51	-12.54	-13.73	-13.79	-13.73	-13.79	2.80	2.87	0.25	0.53	5.88	6.32		03/04/2008	0.53	0.45
Foreign Large Growth																			
American Funds EuroPacific Growth Fund - Class R-4	MSCIXUS	-5.16	-4.53	-12.67	-11.46	-15.22	-14.20	-15.22	-14.20	3.72	4.48	1.50	0.67	7.33	6.57		04/16/1984	0.83	0.83
World Large Stock																			
VY® Oppenheimer Global Portfolio - Initial Class (21)	MSCIACN	-7.75	-7.04	-15.95	-12.75	-13.19	-9.42	-13.19	-9.42	5.89	6.60	4.82	4.26	11.30	9.46		05/01/2002	0.75	0.75
The risks of investing in small company stocks may include relatively low trading volumes, a greater degree of change in earnings and greater short-term volatility.																			

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

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

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

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

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

PERFORMANCE UPDATE

Voya Retirement Insurance and Annuity Company

STATE OF RHODE ISLAND VK0450

Separate Account D

Average Annual Total Returns as of: 12/31/2018 (shown in percentages)

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

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

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

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

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

Investment Options	1-Mo	3-Mo	YTD	1-Yr	3-Yr	5-Yr	10-Yr	Incept	Fund Inception Date	
Stability of Principal										
Stability of Principal Voya Fixed Account - 457/401 II A (22)(23) This fund is not part of the product's separate account.	0.15	0.44	1.75	1.75	1.86	1.96	2.35			
Bonds										
High Yield Bond										
PGIM High Yield Fund - Class Z	-1.96	-4.20	-1.44	-1.44	6.88	4.04	10.22		03/01/1996	
Inflation-Protected Bond										
PIMCO VIT Real Return Portfolio - Administrative Class	0.24	-1.17	-2.36	-2.36	2.01	1.20	4.04		09/30/1999	
Intermediate-Term Bond										

	See Penormance into	_							Fund Inception
Investment Options	1-Mo	3-Mo	YTD	1-Yr	3-Yr	5-Yr	10-Yr	Incept	Date
Voya Intermediate Bond Portfolio - Class I (1)	1.40	0.94	-0.69	-0.69	2.76	3.03	5.19		05/23/1973
Voya U.S. Bond Index Portfolio - Class I (2)	1.76	1.54	-0.48	-0.48	1.57	2.05	2.97		03/07/2008
Asset Allocation									
Lifecycle									
Voya Solution 2020 Portfolio - Initial Class (3)(4)	-2.89	-5.57	-4.17	-4.17	4.51	4.19		7.58	10/03/2011
Voya Solution 2025 Portfolio - Initial Class (4)(5)	-3.93	-7.34	-5.62	-5.62	4.91	4.07	8.42		04/29/2005
Voya Solution 2030 Portfolio - Initial Class (4)(6)	-4.97	-9.14	-7.12	-7.12	5.16	4.53		9.05	10/03/2011
Voya Solution 2035 Portfolio - Initial Class (4)(7)	-5.89	-10.55	-8.23	-8.23	5.30	4.22	9.14		04/29/2005
Voya Solution 2040 Portfolio - Initial Class (4)(8)	-6.40	-11.40	-9.09	-9.09	5.46	4.64		9.99	10/03/2011
Voya Solution 2045 Portfolio - Initial Class (4)(9)	-6.95	-12.37	-10.21	-10.21	5.07	4.10	9.52		04/29/2005
Voya Solution 2050 Portfolio - Initial Class (4)(10)	-7.00	-12.54	-10.51	-10.51	5.13	4.48		9.99	10/03/2011
Voya Solution 2055 Portfolio - Initial Class (4)(11)	-6.95	-12.47	-10.42	-10.42	5.14	4.17		7.47	03/08/2010
Voya Solution 2060 Portfolio - Initial Class (4)(12)	-7.03	-12.50	-10.49	-10.49	5.18			3.72	02/09/2015
Voya Solution Income Portfolio - Initial Class (4)(13)	-1.77	-3.74	-2.95	-2.95	3.59	3.32	6.02		04/29/2005
Balanced									
Allocation50% to 70% Equity									
VY® T. Rowe Price Capital Appreciation Portfolio - Inst	-4.59	-6.34	0.59	0.59	7.82	8.19	12.54		01/24/1989
Large Cap Value									
Large Blend									
Voya Growth and Income Portfolio - Class I (14)	-7.71	-11.76	-4.60	-4.60	7.91	6.45	11.77		12/31/1979
Voya U.S. Stock Index Portfolio - Institutional Class	-9.06	-13.58	-4.77	-4.77	8.79	8.03	12.65		05/03/2004
Large Value									
BlackRock Equity Dividend Fund - Institutional Shares (15)	-8.61	-12.26	-7.31	-7.31	7.83	6.43	10.76		11/29/1988
Large Cap Growth									
Large Growth									
Voya Large Cap Growth Portfolio - Institutional Class (16)	-8.50	-14.51	-1.63	-1.63	9.78	9.78	15.16		05/03/2004
Small/Mid/Specialty									
Mid-Cap Blend									
Voya Russell™ Mid Cap Index Portfolio - Class I (17)	-9.89	-15.44	-9.44	-9.44	6.50	5.69	13.48		03/04/2008
Mid-Cap Growth									
Principal MidCap Fund - Class R-5	-8.66	-13.35	-6.97	-6.97	8.50	7.73	14.96		12/06/2000
Small Blend	5.55					• • • •			
Voya Russell™ Small Cap Index Portfolio - Class I (18)	-11.95	-20.30	-11.41	-11.41	6.92	4.07	11.61		03/04/2008
Voya Small Company Portfolio - Class I (19)	-12.66	-20.30 -19.01	-11.41 -15.97	-11.41 -15.97	5.09	4.07	11.47		12/27/1996
	-12.00	-13.01	-13.37	-13.31	3.03	4.11	11.47		12/21/1330
Global / International									

Foreign Large Blend

Fund

Investment Options	1- M o	3-Mo	YTD	1-Yr	3-Yr	5-Yr	10-Yr	Incept	Inception Date	
Voya International Index Portfolio - Class I (20)	-5.16	-12.55	-13.86	-13.86	2.64	0.10	5.73		03/04/2008	
Foreign Large Growth American Funds EuroPacific Growth Fund - Class R-4	-5.18	-12.70	-15.35	-15.35	3.56	1.35	7.17		04/16/1984	
World Large Stock VY® Oppenheimer Global Portfolio - Initial Class (21)	-7.76	-15.99	-13.33	-13.33	5.73	4.66	11.13		05/01/2002	

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

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

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

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

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

Additional Notes

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

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

- (1)Voya Intermediate Bond Portfolio Class I: The adviser is contractually obligated to limit expenses to 0.53% through May 1, 2019. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses, extraordinary expenses, and Acquired Fund Fees and Expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.
- (2)Voya U.S. Bond Index Portfolio Class I: The adviser is contractually obligated to limit expenses to 0.40% through May 1, 2019. The limitation does not extend to interest, taxes, interest-related costs, leverage expenses, extraordinary expenses, and Acquired Fund Fees and Expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.
- (3)Voya Solution 2020 Portfolio Initial Class: The adviser is contractually obligated to limit expenses to 0.72% through May 1, 2019. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses and extraordinary expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.
- (4)There is no guarantee that any investment option will achieve its stated objective. Principal value fluctuates and there is no guarantee of value at any time, including the target date. The "target date" is the approximate date when you plan to start withdrawing your money. When your target date is reached, you may have more or less than the original amount invested. For each target date Portfolio, until the day prior to its Target Date, the Portfolio will seek to provide total returns consistent with an asset allocation targeted for an investor who is retiring in approximately each Portfolio's designation Target Year. Prior to choosing a Target Date Portfolio, investors are strongly encouraged to review and understand the Portfolio's objectives and its composition of stocks and bonds, and how the asset allocation will change over time as the target date nears. No two investors are alike and one should not assume that just because they intend to retire in the year corresponding to the Target Date that that specific Portfolio is appropriate and suitable to their risk tolerance. It is recommended that an investor consider carefully the possibility of capital loss in each of the target date Portfolios, the likelihood and magnitude of which will be dependent upon the Portfolio's asset allocation. On the Target Date, the portfolio will seek to provide a combination of total return and stability of principal.

Additional Notes

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

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

- (5)Voya Solution 2025 Portfolio Initial Class: The adviser is contractually obligated to limit expenses to 0.78% through May 1, 2019. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses and extraordinary expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.
- (6)Voya Solution 2030 Portfolio Initial Class: The adviser is contractually obligated to limit expenses to 0.79% through May 1, 2019. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses and extraordinary expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.
- (7)Voya Solution 2035 Portfolio Initial Class: The adviser is contractually obligated to limit expenses to 0.83% through May 1, 2019. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses and extraordinary expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.
- (8)Voya Solution 2040 Portfolio Initial Class: The adviser is contractually obligated to limit expenses to 1.08% through May 1, 2019. The limitation does not extend to interest, taxes, brokerage investment-related costs, leverage expenses and extraordinary expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.
- (9) Voya Solution 2045 Portfolio Initial Class: The adviser is contractually obligated to limit expenses to 0.86% through May 1, 2019. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses and extraordinary expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.
- (10)Voya Solution 2050 Portfolio Initial Class: The adviser is contractually obligated to limit expenses to 0.86% through May 1, 2019. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses and extraordinary expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.
- (11)Voya Solution 2055 Portfolio Initial Class: The adviser is contractually obligated to limit expenses to 0.86% through May 1, 2019. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses and extraordinary expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.
- (12)Voya Solution 2060 Portfolio Initial Class: The adviser is contractually obligated to limit expenses to 0.87% through May 1, 2019. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses and extraordinary expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.
- (13)Voya Solution Income Portfolio Initial Class: The adviser is contractually obligated to limit expenses to 0.68% through May 1, 2019. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses and extraordinary expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.
- (14)Voya Growth and Income Portfolio Class I: The adviser is contractually obligated to limit expenses to 0.70% through May 1, 2019. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses, extraordinary expenses and Acquired Fund Fees and Expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. The adviser is contractually obligated to waive 0.045% of the management fee through May 1, 2019. Termination or modification of these obligations requires approval by the Portfolio's board.

Additional Notes

(15)BlackRock Equity Dividend Fund - Institutional Shares: As described in the "Management of the Fund" section of the Fund's prospectus beginning on page 39, BlackRock has contractually agreed to waive the management fee with respect to any portion of the Fund's assets estimated to be attributable to investments in other equity and fixed-income mutual funds and exchange-traded funds managed by BlackRock or its affiliates that have a contractual management fee, through November 30, 2018. The contractual agreement may be terminated upon 90 days' notice by a majority of the non-interested trustees of the Fund or by a vote of a majority of the outstanding voting securities of the Fund. The Total Annual Fund Operating Expenses do not correlate to the ratio of expenses to average net assets given in the Fund's most recent annual report which does not include Acquired Fund Fees and Expenses.

(16)Voya Large Cap Growth Portfolio - Institutional Class: The adviser is contractually obligated to limit expenses to 0.67% through May 1, 2019. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses, extraordinary expenses, and Acquired Fund Fees and Expenses. Termination or modification of this obligation requires approval by the Portfolio's board.

(17)Voya Russell (TM) Mid Cap Index Portfolio - Class I: The adviser is contractually obligated to limit expenses to 0.40% through May 1, 2019. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses, extraordinary expenses, and Acquired Fund Fees and Expenses. Termination or modification of this obligation requires approval by the Portfolio's board.

(18)Voya Russell (TM) Small Cap Index Portfolio - Class I: The adviser is contractually obligated to limit expenses to 0.45% through May 1, 2019. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses, extraordinary expenses, and Acquired Fund Fees and Expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.

(19)Voya Small Company Portfolio - Class I: The adviser is contractually obligated to limit expenses to 0.93% through May 1, 2019. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses, extraordinary expenses, and Acquired Fund Fees and Expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.

(20)Voya International Index Portfolio - Class I: The adviser is contractually obligated to limit expenses to 0.50% through May 1, 2019. In addition, the adviser is contractually obligated to further limit expenses to 0.45% through May 1, 2019. These limitations do not extend to interest, taxes, investment-related costs, leverage expenses, extraordinary expenses, and Acquired Fund Fees and Expenses. These limitations are subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of these obligations requires approval by the Portfolio's board.

(21)VY Oppenheimer Global Portfolio - Initial Class: The adviser is contractually obligated to limit expenses to 0.80% through May 1, 2019. The limitation does not extend to interest, taxes, investment-related costs, leverage expenses, extraordinary expenses, and Acquired Fund Fees and Expenses. This limitation is subject to possible recoupment by the adviser within 36 months of the waiver or reimbursement. Termination or modification of this obligation requires approval by the Portfolio's board.

(22)The current rate for the Voya Fixed Account - 457/401 II A MC 901, Fund 4573 is 1.75%, expressed as an annual effective yield. The current rate may change and be higher or lower than the previously identified rate but is guaranteed not to be less than 1.00%. VRIAC will not apply a decrease to the current rate following a rate change initiated solely by us prior to the last day of the three-month period measured from the first day of the month in which such change was effective. Note: The current rate for an initial investment in the fixed account previously identified may be in effect for less than a full three-month period.

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

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

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

Benchmark ID	Benchmark Description
BCUSH1IC	Barclays US HY 1% Issuer Cap TR USD
LBUSTIPS	Barclays Capital U.S. Treasury U.S. TIPS Index measures the performance of rulesbased, market value-weighted inflation-protected securities issued by the U.S. Treasury. It is a subset of the Global Inflation-Linked Index (Series-L).

	See Performance Introduction Page for Important Information
Benchmark ID	Benchmark Description
LEHM	Barclays Capital U.S. Aggregate Bond Index measures the performance of investment grade, U.S. dollar-denominated, fixed-rate taxable bond market, including Treasuries, government-related and corporate securities, MBS (agency fixed-rate and hybrid ARM passthroughs), ABS, and CMBS. It rolls up into other Barclays flagship indices, such as the multi-currency Global Aggregate Index and the U.S. Universal Index, which includes high yield and emerging markets debt.
MFR	MFR Money Market Index is comprised of returns which are based upon historical average 30-day compound yields on a universe of taxable money market funds. The data for the universe, which includes approximately 980 funds, is compiled by iMoneynet, Inc. Goal of ING Fixed Account - 457/401 is to outperform the MFR by 150 - 200 basis points over 3 - 5 year time periods.
MSCIACN	MSCI ACWI (All Country World Index) measures the performance of the large and mid-cap segment of the particular regions equity securities, including developed and emerging market. It is free float-adjusted market-capitalization weighted.
MSCIXUS	MSCI ACWI (All Country World Index) ex USA Index measures the performance of the large and mid-cap segment of the particular regions, excluding USA equity securities, including developed and emerging market. It is free float-adjusted market-capitalization weighted.
MSEAFANET	MSCI EAFE Index measures the performance of the large and mid-cap segment of developed markets, excluding the U.S. & Canada equity securities. It is free float-adjusted market-capitalization weighted.
RS1000G	Russell 1000 Growth Index measures the performance of the large-cap growth segment of the U.S. equity securities. It includes the Russell 1000 index companies with higher price-to-book ratios and higher forecasted growth values. It is market-capitalization weighted.
RS1000V	Russell 1000 Value Index measures the performance of the large-cap value segment of the U.S. equity securities. It includes the Russell 1000 index companies with lower price-to-book ratios and lower expected growth values. It is market-capitalization weighted.
RS2000	Russell 2000 Index measures the performance of the small-cap segment of the U.S. equity universe. It is a subset of the Russell 3000 and includes approximately 2000 of the smallest securities based on a combination of their market cap and current index membership.
RSMID	Russell Mid-Cap Index measures the performance of the mid-cap segment of the U.S. equity universe. It is a subset of Russell 1000 index and includes approximately 800 of the smallest securities based on a combination of their market cap and current index membership. The index represents approximately 31% of the total market capitalization of the Russell 1000 companies.
SP2035	S&P Target Date 2035 Index measures the performance of a portfolio of multi-asset including equities, fixed income and commodities. The index has target retirement date of 2035, and belongs to S&P Target Date Index Series which comprises eleven indexes with different target retirement date. Each index in this series is determined once a year through survey of large fund management companies that offer target date products.
SP2045	S&P Target Date 2045 Index measures the performance of a portfolio of multi-asset including equities, fixed income and commodities. The index has target retirement date of 2045, and belongs to S&P Target Date Index Series which comprises eleven indexes with different target retirement date. Each index in this series is determined once a year through survey of large fund management companies that offer target date products.
SPT2020	S&P Target Date 2020 Index measures the performance of a portfolio of multi-asset including equities, fixed income and commodities. The index has target retirement date of 2020, and belongs to S&P Target Date Index Series which comprises eleven indexes with different target retirement date. Each index in this series is determined once a year through survey of large fund management companies that offer target date products.
SPT2025	S&P Target Date 2025 Index measures the performance of a portfolio of multi-asset including equities, fixed income and commodities. The index has target retirement date of 2025, and belongs to S&P Target Date Index Series which comprises eleven indexes with different target retirement date. Each index in this series is determined once a year through survey of large fund management companies that offer target date products.
SPT2030	S&P Target Date 2030 Index measures the performance of a portfolio of multi-asset including equities, fixed income and commodities. The index has target retirement date of 2030, and belongs to S&P Target Date Index Series which comprises eleven indexes with different target retirement date. Each index in this series is determined once a year through survey of large fund management companies that offer target date products.
SPT2040	S&P Target Date 2040 Index measures the performance of a portfolio of multi-asset including equities, fixed income and commodities. The index has target retirement date of 2040, and belongs to S&P Target Date Index Series which comprises eleven indexes with different target retirement date. Each index in this series is determined once a year through survey of large fund management

Benchmark ID	Benchmark Description
	companies that offer target date products.
SPT2050	S&P Target Date 2050 Index measures the performance of a portfolio of multi-asset including equities, fixed income and commodities. The index has target retirement date of 2050, and belongs to S&P Target Date Index Series which comprises eleven indexes with different target retirement date. Each index in this series is determined once a year through survey of large fund management companies that offer target date products.
SPT2055	S&P Target Date 2055+ Index measures the performance of a portfolio of multi-asset including equities, fixed income and commodities. The index has target retirement date of 2055, and belongs to S&P Target Date Index Series which comprises eleven indexes with different target retirement date. Each index in this series is determined once a year through survey of large fund management companies that offer target date products.
SPT2060	S&P Target Date 2060+ TR USD - description is not available.
SPTREIN	S&P Target Date Retirement Income Index measures the performance of a portfolio of multi-asset including equities, fixed income and commodities. The index belongs to S&P Target Date Index Series which comprises eleven indexes with different target retirement date. Each index in this series is determined once a year through survey of large fund management companies that offer target date products.
SPXLBGC	S&P 500 60% / Barclays Capital Corp/Gov Bond Index 40% consists of a mix of 60% of an unmanaged stock index (The Standard & Poor's 500) and 40% of an unmanaged bond index (Barclays Capital Gov't Corp. Bond Index).
SPXRE	S&P 500 Index measures the performance of 500 widely held stocks in U.S. equity market. Standard and Poor's chooses member companies for the index based on market size, liquidity and industry group representation. Included are the stocks of industrial, financial, utility, and transportation companies. Since mid 1989, this composition has been more flexible and the number of issues in each sector has varied. The index is market capitalization-weighted.

Creation Date: Wednesday, March 20, 2019

Fund Name	Fund Number	Asset Class	Balance	YTD Contributions	Percent
American Funds EuroPacific R4	573	Global / International	\$5,841,556.93	\$67,176.69	3.18%
BlackRock Equity Dividend Fund Inst	8518	Large Cap Value	\$3,930,469.00	\$39,054.83	2.14%
PGIM High Yield Fund Z	2482	Bonds	\$530,543.24	\$7,840.51	0.29%
PIMCO VIT Real Return Portfolio Adm	833	Bonds	\$376,881.59	\$7,186.34	0.20%
Principal MidCap Fund R5	3412	Small/Mid/Specialty	\$10,411,322.78	\$67,777.09	5.66%
Voya Fixed Account - 457/401	43	Stability of Principal	\$72,410,273.14	\$0.00	39.36%
Voya Fixed Account 457401 II A	4573	Stability of Principal	\$6,353,383.88	\$488,418.83	3.45%
Voya Growth and Income Port I	1	Other (Unknown)	\$26,046,241.22	\$149,846.34	14.16%
Voya Intermediate Bond Port I	4	Bonds	\$7,142,167.10	\$116,917.60	3.88%
Voya International Index Port I	1551	Global / International	\$384,546.53	\$6,374.82	0.21%
Voya Large Cap Growth Port Inst	742	Large Cap Growth	\$11,463,484.72	\$121,586.60	6.23%
Voya Long-Term GAA (4560)	4560	Stability of Principal	\$25,602.73	\$0.00	0.01%
Voya Russell Mid Cap Index Port I	1560	Small/Mid/Specialty	\$1,328,532.71	\$25,283.77	0.72%
Voya Russell Sm Cp Index Port I	1563	Small/Mid/Specialty	\$1,381,760.09	\$25,131.79	0.75%
Voya Small Company Portfolio I	42	Small/Mid/Specialty	\$7,747,830.67	\$59,865.10	4.21%
Voya Solution 2025 Portfolio I	790	Asset Allocation	\$835,577.85	\$20,360.98	0.45%
Voya Solution 2030 Port I	6753	Asset Allocation	\$142.07	\$139.50	0.00%
Voya Solution 2035 Portfolio I	761	Asset Allocation	\$936,384.82	\$29,670.70	0.51%
Voya Solution 2040 Port I	6756	Asset Allocation	\$122.20	\$120.00	0.00%
Voya Solution 2045 Portfolio I	764	Asset Allocation	\$878,901.65	\$27,309.72	0.48%
Voya Solution 2050 Port I	6759	Asset Allocation	\$1,578.63	\$70.00	0.01%
Voya Solution 2055 Portfolio I	1166	Asset Allocation	\$448,300.67	\$20,845.12	0.24%
Voya Solution 2060 Port I	3290	Asset Allocation	\$266.29	\$262.00	0.01%
Voya Solution Income Prt I	767	Asset Allocation	\$386,984.43	\$9,210.06	0.21%
Voya U.S. Bond Index Portfolio I	1554	Bonds	\$623,774.88	\$8,793.50	0.34%
Voya U.S. Stock Index Port Inst	829	Large Cap Value	\$8,844,008.13	\$77,373.02	4.81%
VY Oppenhmr Global Port I	432	Global / International	\$7,085,014.47	\$67,619.88	3.85%
VY TRowePrice Captl Apprec Pt Inst	1257	Balanced	\$8,530,490.18	\$68,262.40	4.64%
	-	TOTAL	\$183,946,142.60	\$1,512,497.19	



OPEB Trust



Report ID: IPM0005

Reporting Currency: USD

TOTAL NET OF FEES

2/28/2019

Account Name Benchmark Name	Market Value	% of Total	Month	YTD	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	ITD	Inception Date
Mackay Shields OPEB Bloomberg Barclays U.S. Aggregate Bond Index	105,635,894.5	34.9	0.01 -0.06	1.14 1.00	2.55 2.68	2.73 3.17	1.58 1.69	2.19 2.32		1.73 1.82	5/1/2013 5/1/2013
SSGA S&P 500 INDX S&P 500 - Total Return Index	197,332,294.7	65.1	3.21 3.21	11.40 <i>11.4</i> 8	3.74 3.84	4.55 <i>4.6</i> 8	15.23 15.28	10.65 <i>10.67</i>		12.44 <i>11.88</i>	5/1/2011 5/1/2011
Total OPEB OPEB Custom Blend 1	302,968,189.1	100.0	2.08 2.07	7.63 7.76	3.46 3.72	4.07 4.46	10.36 <i>10.51</i>	7.74 7.84		8.67 8.06	5/1/2011 5/1/2011



Report ID: IPM0005

Reporting Currency: USD

END NOTES

2/28/2019

1 RI7GX0903OPE

OPEB Custom Blend

35% Barclays Aggregate and 65% S&P 500



Report ID: IPM0005

Reporting Currency: USD

TOTAL NET OF FEES

2/28/2019

			Cumulative									
Account Name Benchmark Name		Market Value	% of Total	YTD	Month	1/1/2019 - 1/31/2019	12/1/2018 - 12/31/2018	2018	2017	2016	Inception Date	
Mackay Shields OPEB Bloomberg Barclays U.S. Aggrega Bond Index	ate	105,635,894.5	34.9	1.14 1.00	0.01 -0.06	1.14 1.06	1.76 1.84	-0.54 <i>0.01</i>	3.78 3.54	2.28 2.65	5/1/2013 5/1/2013	
SSGA S&P 500 INDX S&P 500 - Total Return Index		197,332,294.7	65.1	11.40 <i>11.4</i> 8	3.21 3.21	7.94 8.01	-9.04 -9.03	-4.42 -4.38	21.80 21.83	11.99 <i>11.96</i>	5/1/2011 5/1/2011	
Total OPEB OPEB Custom Blend	1 2	302,968,189.1	100.0	7.63 7.76	2.08 2.07	5.44 5.58	-5.27 -5.23	-2.85 -2.58	15.32 <i>15.14</i>	8.69 8.77	5/1/2011 5/1/2011	



Report ID: IPM0005

Reporting Currency: USD

END NOTES

2/28/2019

1 RI7G10000000 Total OPEB YTD - Calendar Year to Date

Month - Current Month

Cumulative Months - Prior Month and Second Prior Month

2013, 2012, 2011 - Calendar Year

Prior Month and Second Prior Month

2013, 2012, 2011 - Calendar Year

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