## STATE OF RHODE ISLAND INVESTMENT COMMISSION MEETING

DATA AT November 30<sup>th</sup>, 2019

## MEMBERS OF THE STATE INVESTMENT COMMISSION

## Honorable Seth Magaziner, Chair

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

Ms. Karen Hammond

## Section I.

Staff Summary



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

Seth Magaziner

General Treasurer December 17, 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 November 30, 2019

# Employees' Retirement System of Rhode Island Composite Reporting Investment Valuation November 30, 2019

Asset Class	Base Market Value
Grand Total	8,628,443,396
CASH EQUIVALENT*	455,665,625
GLOBAL PUBLIC EQUTIY	3,930,736,235
CREDIT	271,071,565
INFLATION-LINKED BDS	121,811,561
REIT _ US FOCUSED	85,311,198
PRIVATE EQUITY**	868,156,582
REAL ESTATE**	520,952,605
HEDGE FUNDS**	515,913,116
INFRASTRUCTURE**	258,393,667
US TRADITIONAL FIXED	941,772,276
CPC PROGRAM	658,658,966

Plan Allocations	%	Base Market Value
Grand Total	100.00%	8,628,443,396
STATE EMP RET PLAN	73.77%	6,364,929,844
MUNI EMP RET PLAN	19.20%	1,656,922,504
TEACHER'S SURVIVOR BENEFIT	4.01%	346,014,934
STATE POLICE RET PL	1.77%	152,646,818
JUDICIAL RET PLAN	0.93%	80,023,893
NON-CONTRIB JUD RET	0.01%	954,312
NON-CONT ST POL RET	0.31%	26.951.092

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

Vincent Izzo
Investment Accounting Manager

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

#### November 2019

The Plan returned 1.24% during the month of November, outperforming the Total Plan benchmark, which returned 0.97%. The 60% global equity/40% fixed income benchmark returned of 1.44%. The Plan's Total Public Growth bucket was the primary contributor to the Plan's positive absolute performance, returning 2.51% as equities markets continued their bull run. On a relative basis, the portfolio's outperformance compared to the Total Plan benchmark was driven by the Total Stability Bucket, which returned 0.21% compared to the Total Stability Composite benchmark, which returned a loss of 0.13%. The total portfolio increased by approximately \$72.3 million, as about \$32.3 million of net transfers were made to meet pension payroll in excess of pension contributions.

Calendar year-to-date the Plan returned 14.47% net of fees, outperforming the Total Plan benchmark return of 12.71%. The 60% global equity/40% fixed income benchmark returned 16.97%. A main contributor to the Total Plan's CYTD performance was its Total Public Growth bucket, which returned 21.55% driven primarily by a rally in US equities markets over the period. On a relative basis, the portfolio's outperformance compared to the Total Plan benchmark was driven by the Total Stability Bucket, which returned 8.66% compared to the Total Stability Composite benchmark, which returned 6.06% over the period.

Fiscal year-to-date, the Plan returned 3.79% net of fees, outperforming the Total Plan benchmark of 3.09%. The 60% global equity/40% fixed income benchmark returned 4.19%. The Plan's Total Public Growth Bucket has been a primary contributor to the Total Plan's FYTD performance, which returned 5.09%. On a relative basis, the portfolio's outperformance compared to the Total Plan benchmark was driven by the Total Stability Bucket, which returned 2.63% compared to the Total Stability Composite benchmark, which returned 1.22% over the period.

#### .Total Plan - November 30, 2019



7/1/2017

7/1/2000

7/1/2017

7/1/2017

7/1/2017

7/1/2017

7/1/2017

7/1/2017

7/1/2017

7/1/2017

7/1/2017

7/1/2000

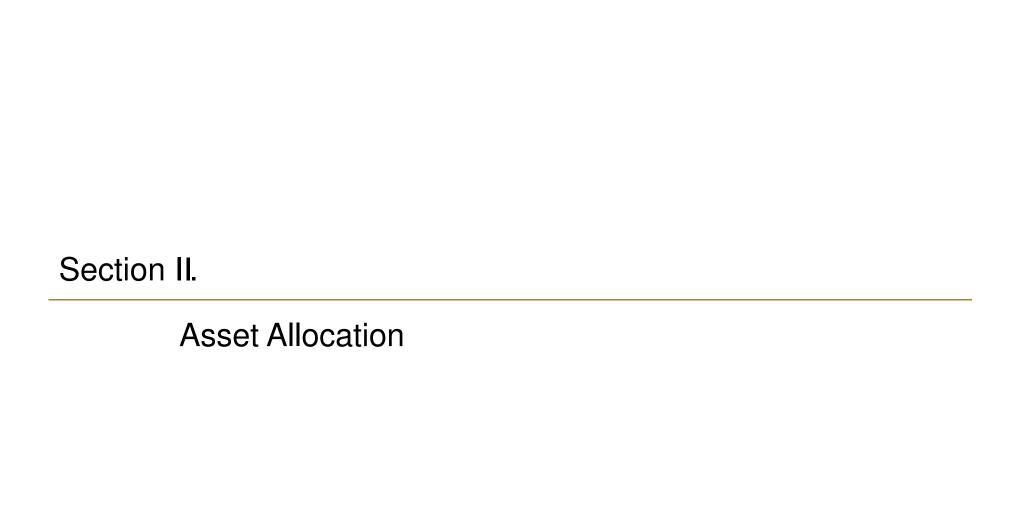
3.24

1.23

4.85

\$8,628.44 M

<sup>\*</sup>Allocation reflects physical exposure; Russell Overlay rebalancing program classified as, "Other"



**ERSRI Asset Allocation Tracking** 

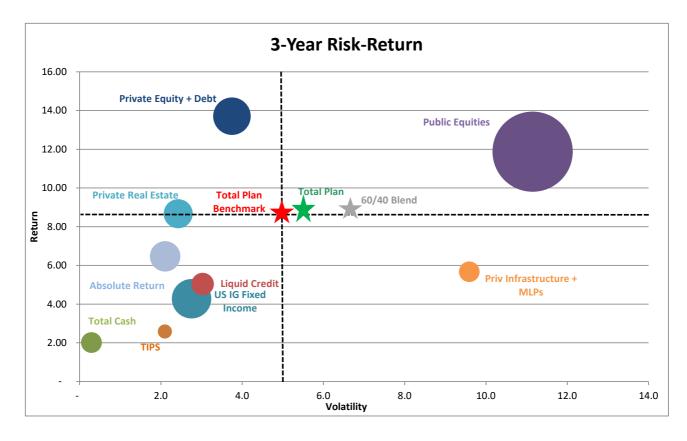
		Aggregate		Strategic	(a) Target	(b) Actual	
Functional	Aggregate	Allocation	Asset Class	Benchmark	Asset	exposure as of	
Bucket	Asset Class	Weight		Weight	Allocation	11/30/19	(b) - (a)
	Global	40.0%	US Equity	22.3%	22.3%	26.0%	3.6%
GROWTH	Equity		International Developed Equity	13.1%	13.1%	14.9%	1.9%
			EM Equity	4.6%	4.6%	5.1%	0.5%
	Private Growth	15.0%	PE Non-core RE	11.0%	11.25% 2.25%	7.4%	-3.8%
			Opp Private Credit	1.5%	1.5%	0.6%	-0.9%
			HY Infra	1.5%	1.0%	1.0%	0.0%
12100245	•	0.00/	REITs	0.0%	1.0%	1.0%	0.0%
INCOME	Income	8.0%	Liquid Credit	3.5%	2.8%	3.6%	0.8%
			Private Credit	3.0%	3.2%	2.0%	-1.2%
	СРС	8.0%	Treasury Duration	4.0%	4.0%	4.0%	0.0%
	CFC	8.0%	Systematic Trend	4.0%	4.0%	3.7%	-0.3%
	Inflation	0.007	Core RE	4.0%	3.6%	4.2%	0.6%
	Protection	8.0%	Private Infra	2.0%	2.4%	2.0%	-0.4%
			TIPs Nat' Resources	1.0% 1.0%	1.0% 1.0%	1.4% 0.0%	0.4% -1.0%
STABILITY	Volatility Protection	21.0%	IG Fixed Income	11.5%	11.5%	11.1%	-0.4%
			Absolute Return	6.5%	6.5%	6.6%	0.1%
			Strategic Cash	3.0%	3.0%	2.7%	-0.3%
07:150	Short-term	-	Short-Term Cash	-	-	0.3%	0.3%
OTHER	Tactical	-	Russell Overlay	-	-	0.3%	0.3%
TOTAL	Total	100.0%		100.0%	100.0%	100.0%	0.0%

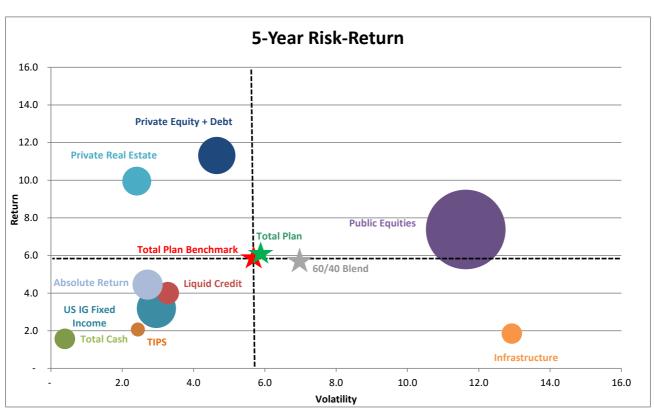


Risk Overview

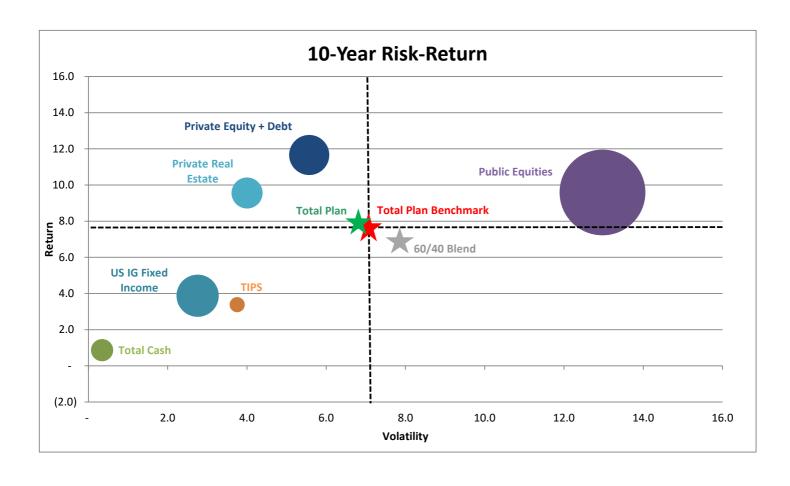
#### **ERSRI Portfolio**

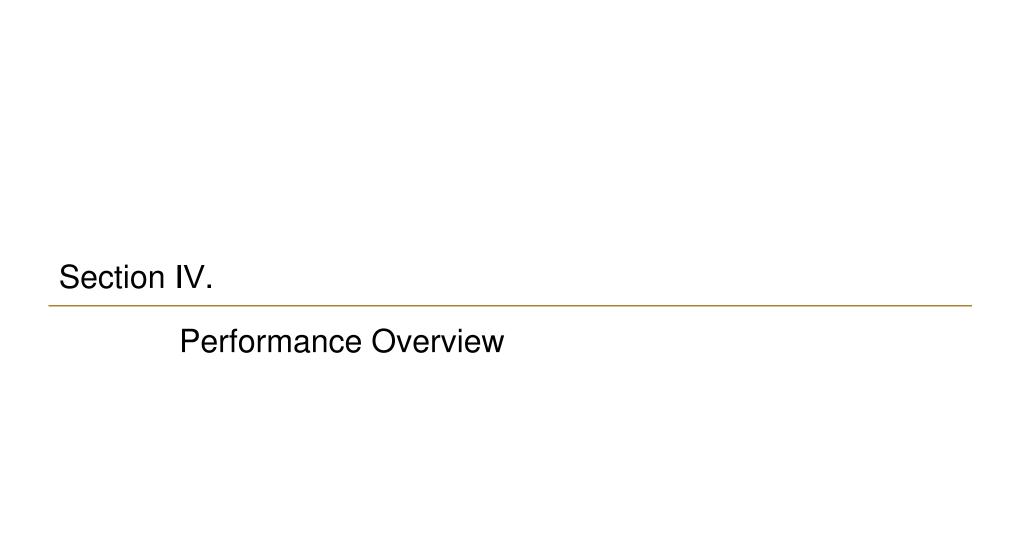
% - as of November 30th, 2019





### % - as of November 30th, 2019







### **TOTAL NET OF FEES**

11/30/2019

						-		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	1,410,340,206	16	3.74 3.80	27.51 27.34	7.30 7.27	15.70 15.49	14.30 14.22	10.70 10.61	13.29 13.41	8.72 8.70	8/1/2007 8/1/2007
Non-US Public Equity  Total International Equity BM	1,202,250,196	14	0.73 0.88	15.77 16.47	2.17 2.52	10.87 11.20	9.26 9.24	3.99 3.85	4.88 4.51	7.78 7.16	5/1/2009 5/1/2009
QVM Tilt  MSCI World Net Dividend Index	1,353,872,641	16	2.86 2.79	20.85 23.96	5.50 5.96	11.79 <i>14.5</i> 3	12.01 12.35			11.30 <i>11.45</i>	10/1/2015 10/1/2015
Total Public Growth  MSCI All Country World Net Index	3,966,463,043	46	2.51 2.44	21.55 22.29	5.09 5.22	12.90 <i>13.68</i>	11.88 <i>11</i> .95	7.38 7.24	9.59 8.63	5.01	7/1/2000 7/1/2000
Private Equity ILPA All Fds BM 1Q Lag 2	642,557,484	7	0.63 0.63	9.10 7.82	5.11 <i>4</i> .70	10.07 11.25	15.40 14.53	12.31 10.92	12.16 14.02	9.69	2/1/1989 2/1/1989
Non Core Real Estate	157,541,135	2	-0.09	6.61	1.66	6.83				16.61	7/1/2017
Opportunistic Private Credit  ILPA Distressed BM 1Q Lag	55,812,410	1	2.34 2.34	1.58 3.71	3.11 3.14	1.59 <i>5.18</i>				10.19 <i>7.4</i> 3	7/1/2017 7/1/2017
Total Private Growth  Private Growth Benchmark	855,911,029	10	0.61 <i>0.74</i>	8.16 7.23	4.35 4.20	8.91 <i>10.25</i>				15.19	7/1/2017 7/1/2017
TOTAL GROWTH COMPOSITE  Total Growth Composite BM	4,822,374,072	56	2.18 <i>1.</i> 98	19.19 <i>18.15</i>	4.97 4.96	12.23 13.00				9.96	7/1/2017 7/1/2017
Harvest Fund Advisor  Alerian MLP Index	86,521,495	1	-3.10 -5.75	6.40 -1.82	-12.60 -16.05	-4.91 -11.00	-3.21 -5.68			-6.26 -8.65	1/1/2015 1/1/2015
Heitman US Focused  MSCI US REIT Index	85,781,360	1	-1.55 -1.60		7.45 7.09					9.29 8.27	6/1/2019 6/1/2019
Liquid Credit  Liquid Credit BM (50% BoA US HY/50% CS LL)	312,499,308	4	0.61 <i>0.41</i>	9.42 9.24	1.98 1.36	6.90 6.80	5.04 <i>4.71</i>	4.00 4.43		3.76 4.29	5/1/2013 5/1/2013
Private Credit S&P LSTA Lev Loans + 3%	169,786,678	2	0.54 -0.02	2.28 5.32	3.42 3.17	2.69 6.33				3.94 6.88	7/1/2017 7/1/2017
TOTAL INCOME COMPOSITE  Income Aggregate BM	654,588,841	8	-0.20 -0.91	9.50 5.86	0.59 <i>-1.42</i>	5.24 3.34				3.22 3.24	7/1/2017 7/1/2017
CPC Long Duration  Barclays US Treasury LT Index	346,465,853	4	-0.50 -0.52	18.11 18.12	6.39 6.44	24.69 24.59				6.68 6.89	6/1/2017 6/1/2017
CPC Trend Following  Credit Suisse Liquid Alt Beta	322,027,043	4	0.56 -1.18	6.14 -8.67	0.76 -6.12	10.36 1.15				0.15 -4.79	6/1/2017 6/1/2017
Total Crisis Protection 50/50 CPC Custom BM	668,492,895	8	0.01 -0.85	12.07 <i>4.11</i>	3.58 0.06	17.51 12.55				3.76 1.23	6/1/2017 6/1/2017



## **TOTAL NET OF FEES**

11/30/2019

						-	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	175,355,014	2	0.63 <i>0.55</i>	15.27 <i>5.76</i>	6.25 2.13	15.44 <i>5</i> .76	14.13 <i>6.11</i>			10.51	3/1/2015 3/1/2015
Core Real Estate NFI-ODCE BM 2	363,411,470	4	0.07 0.07	4.67 4.35	2.29 1.58	4.67 6.30				6.25 6.30	7/1/2017 7/1/2017
Inflation-Linked Bonds  Total Inflation Linked Custom	123,477,470	1	-0.04 0.02	6.32 6.11	1.01 <i>0</i> .90	6.79 6.55	2.59 2.59	2.07 2.07	3.38 3.35	3.62 3.60	11/1/2009 11/1/2009
Total Inflation Protection Inflation Protection Custom BM	662,243,955	8	0.20 -0.15	7.55 <i>4.74</i>	3.06 1.13	7.71 <i>4.8</i> 7				6.91 <i>4.85</i>	7/1/2017 7/1/2017
Absolute Return  HFRI Fund of Funds Composite Index	570,866,111	7	0.83 <i>0.54</i>	7.43 6.22	1.47 0.06	7.52 4.47				6.51 2.62	7/1/2017 7/1/2017
Traditional Fixed Income  Bloomberg Barclays U.S. Aggregate Bond Index	959,872,425	11	0.03 -0.05	9.32 8.79	2.69 2.53	11.12 10.79	4.28 4.10	3.19 3.08	3.88 3.59	5.11 <i>4</i> .98	7/1/2000 7/1/2000
Strategic Cash ICE BofAML US Treasury Notes 0-1 Year	235,361,701	3	0.13 <i>0.11</i>	2.74 2.41	1.04 <i>0</i> .95	2.85 2.66				2.02 1.79	2/1/2017 2/1/2017
Total Volatility Protection  Total Volitility Protection BM	1,766,105,325	20	0.30 <i>0.16</i>	7.74 7.09	2.05 1.54	8.73 7.66				4.66	7/1/2017 7/1/2017
TOTAL STABILITY COMPOSITE  Total Stability Composite BM	3,096,842,175	36	0.21 <i>-0.13</i>	8.66 <i>6.06</i>	2.63 1.22	10.26 8.27				5.01	7/1/2017 7/1/2017
Short-Term Cash	30,646,636	0	0.18	4.72	0.89	4.90				2.94	7/1/2017
Russell Overlay Fd	23,616,156	0	-0.02	0.22	0.02	0.21	0.05	0.05	-0.01	-0.03	9/1/2008
TOTAL PLAN Total Plan Benchmark 60/40 Blend	8,628,443,396	100	<b>1.24</b> 0.97 1.44	<b>14.47</b> 12.71 16.97	<b>3.79</b> 3.09 4.19	<b>11.18</b> 10.66 12.89	<b>8.93</b> 8.67 8.93	<b>6.22</b> 5.86 5.75	<b>7.74</b> 7.58 6.84	5.23	<b>7/1/2000</b> 7/1/2000 7/1/2000
Total Plan ex PE,RE & Priv Inf  Total Plan BM ex PE RE	7,063,979,204	82	<b>1.41</b> 1.36	<b>15.95</b> 15.10	<b>3.76</b> 3.11	<b>11.81</b> 10.51	<b>8.40</b> 7.96	<b>5.47</b> 5.06	<b>7.09</b> 7.03	6.37	<b>4/1/1996</b> 4/1/1996



#### **END NOTES**

11/30/2019

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



### **TOTAL NET OF FEES**

11/30/2019

	Cumulative									
Account Name Benchmark Name	Market Value	% of Total	Month	10/1/2019 - 10/31/2019	9/1/2019 - 9/30/2019	YTD	2018	2017	2016	Inception Date
US Public Equity Russell 3000 Index	1,410,340,206	16	3.74 3.80	2.23 2.15	1.75 1.76	27.51 27.34	-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	1,202,250,196	14	0.73 <i>0.88</i>	3.61 3.49	2.51 2.57	15.77 16.47	-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	1,353,872,641	16	2.86 2.79	2.91 2.54	2.16 2.13	20.85 23.96	-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	3,966,463,043	46	2.51 2.44	2.88 2.74	2.13 2.10	21.55 22.29	-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	642,557,484	7	0.63 <i>0.6</i> 3	0.42 0.42	3.13 3.60	9.10 7.82	17.38 15.96	19.69 <i>15.75</i>	9.19 <i>8.07</i>	2/1/1989 2/1/1989
Non Core Real Estate	157,541,135	2	-0.09	0.01	0.38	6.61	25.66			7/1/2017
Opportunistic Private Credit  ILPA Distressed BM 1Q Lag	55,812,410	1	2.34 2.34	-0.65 -0.65	1.19 1.44	1.58 3.71	11.81 <i>8.00</i>			7/1/2017 7/1/2017
Total Private Growth  Private Growth Benchmark	855,911,029	10	0.61 <i>0.74</i>	0.28 <i>0.40</i>	2.50 2.95	8.16 7.23	18.83 <i>14.18</i>			7/1/2017 7/1/2017
TOTAL GROWTH COMPOSITE  Total Growth Composite BM	4,822,374,072	56	2.18 <i>1.</i> 98	2.40 2.10	2.19 2.34	19.19 <i>18.15</i>	-5.23 <i>-</i> 3.24			7/1/2017 7/1/2017
Harvest Fund Advisor Alerian MLP Index	86,521,495	1	-3.10 <i>-5.75</i>	-5.12 -6.22	1.35 <i>0.71</i>	6.40 -1.82	-13.27 -12.42	-5.26 -6.52	20.64 18.31	1/1/2015 1/1/2015
Heitman US Focused  MSCI US REIT Index	85,781,360	1	-1.55 -1.60	1.72 1.36	2.66 2.69					6/1/2019 6/1/2019
Liquid Credit  Liquid Credit BM (50% BoA US HY/50% CS LL)	312,499,308	4	0.61 <i>0.41</i>	-0.08 -0.13	0.52 0.37	9.42 9.24	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%	169,786,678	2	0.54 -0.02	0.00 1.02	0.70 <i>0.44</i>	2.28 5.32	3.71 8.19			7/1/2017 7/1/2017
TOTAL INCOME COMPOSITE  Income Aggregate BM	654,588,841	8	-0.20 -0.91	-0.55 -0.84	0.97 <i>0.4</i> 6	9.50 5.86	-2.47 0.57			7/1/2017 7/1/2017
CPC Long Duration  Barclays US Treasury LT Index	346,465,853	4	-0.50 -0.52	-0.85 -0.86	-2.61 -2.49	18.11 18.12	-1.89 -1.84			6/1/2017 6/1/2017
CPC Trend Following  Credit Suisse Liquid Alt Beta	322,027,043	4	0.56 -1.18	-5.36 -5.53	-6.13 -7.94	6.14 -8.67	-15.11 -10.01			6/1/2017 6/1/2017
Total Crisis Protection 50/50 CPC Custom BM	668,492,895	8	0.01 -0.85	-3.06 -3.19	-4.37 -5.22	12.07 <i>4.11</i>	-7.99 <i>-5.45</i>			6/1/2017 6/1/2017



### **TOTAL NET OF FEES**

11/30/2019

				Cumu	lative					
Account Name Benchmark Name	Market Value	% of Total	Month	10/1/2019 - 10/31/2019	9/1/2019 - 9/30/2019	YTD	2018	2017	2016	Inception Date
Priv Listed Infrastructure  CPI + 4% 1 Mo Lag	175,355,014	2	0.63 <i>0.55</i>	0.70 <i>0.40</i>	0.00 0.32	15.27 5.76	13.32 <i>6.18</i>	12.45 6.20	13.35 <i>5.6</i> 9	3/1/2015 3/1/2015
Core Real Estate NFI-ODCE BM 2	363,411,470	4	0.07 0.07	0.73 <i>0.7</i> 3	0.28 <i>0.77</i>	4.67 4.35	7.22 7.71			7/1/2017 7/1/2017
Inflation-Linked Bonds  Total Inflation Linked Custom	123,477,470	1	-0.04 <i>0.0</i> 2	0.30 <i>0</i> .28	-0.95 -0.82	6.32 6.11	-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	662,243,955	8	0.20 -0.15	0.64 <i>0.75</i>	-0.03 <i>0.51</i>	7.55 <i>4.74</i>	6.30 3.84			7/1/2017 7/1/2017
Absolute Return HFRI Fund of Funds Composite Index	570,866,111	7	0.83 <i>0.54</i>	0.04 0.48	-0.56 -0.45	7.43 6.22	4.48 -4.02			7/1/2017 7/1/2017
Traditional Fixed Income  Bloomberg Barclays U.S. Aggregate Bond Index	959,872,425	11	0.03 -0.05	0.36 0.30	-0.50 -0.53	9.32 8.79	-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	235,361,701	3	0.13 <i>0.11</i>	0.27 0.26	0.15 <i>0.15</i>	2.74 2.41	1.88 1.92			2/1/2017 2/1/2017
Total Volatility Protection  Total Volitility Protection BM	1,766,105,325	20	0.30 <i>0.16</i>	0.24 0.35	-0.43 -0.41	7.74 7.09	1.41 -0.95			7/1/2017 7/1/2017
TOTAL STABILITY COMPOSITE  Total Stability Composite BM	3,096,842,175	36	0.21 <i>-0.13</i>	-0.40 <i>-0.3</i> 3	-1.24 <i>-1.</i> 25	8.66 <i>6.06</i>	0.57 -0.79			7/1/2017 7/1/2017
Short-Term Cash	30,646,636	0	0.18	0.19	0.20	4.72	1.76			7/1/2017
Russell Overlay Fd	23,616,156	0	-0.02	0.00	0.00	0.22	0.06	-0.09	0.06	9/1/2008
TOTAL PLAN Total Plan Benchmark 60/40 Blend	8,628,443,396	100	<b>1.24</b> 0.97 1.44	<b>1.12</b> 0.97 1.76	<b>0.80</b> 0.86 1.05	<b>14.47</b> 12.71 16.97	<b>-2.69</b> -1.94 -5.52	<b>14.48</b> 14.30 15.41	<b>7.35</b> 6.43 5.92	<b>7/1/2000</b> 7/1/2000 7/1/2000
Total Plan ex PE,RE & Priv Inf Total Plan BM ex PE RE	7,063,979,204	82	<b>1.41</b> 1.36	<b>1.28</b> 1.51	<b>0.64</b> 0.95	<b>15.95</b> 15.10	<b>-5.64</b> -5.82	<b>14.66</b> 14.46	<b>6.97</b> 6.13	<b>4/1/1996</b> 4/1/1996



#### **END NOTES**

#### 11/30/2019

**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



Private Equity & Private Credit

#### **Portfolio Summary**

6/30/2019 All Investments

Performance Summary

		Number of		Multiple of						
Asset Class	Investment Type	Investments	Commitment	Contributions	Distributions	Valuation	Cost	IRR	TWR	
Private Equity Funds										
	Buyout Total	102	2,007,447,152	1,565,808,204	1,946,876,165	470,242,835	1.54	13.90%	12.92%	
	Fund of Funds Total	1	45,000,000	45,000,000	106,748,821	-	2.37	19.94%		
	Secondary Total	4	60,000,000	55,009,798	65,353,045	2,154,286	1.23	5.82%	3.18%	
	Venture Capital Total	24	328,750,000	283,356,745	276,077,065	132,058,399	1.44	6.61%	4.71%	
Total: Private Equity F	ŧu	131	2,441,197,152	1,949,174,747	2,395,055,094	604,455,520	1.54	13.94%	11.79%	



## Employees' Retirement System of Rhode Island Private Equity Performance 6/30/2019

**Cumulative Cash Flows (\$)** 

**Cumulative Performance\*** 

Current Partnerships	Vintage Year	Type	Amount Committed (In \$ unless otherwise noted)	Amount Drawn	Amount Distributed	Amount Unfunded	Valuation (\$)	Net IRR (%)	Net Multiple of Investment
Nautic Partners V	2000	Buyout	20,000,000	20,331,229	40,506,615	600,000	1,479,385	17.09	2.07
CVC European Equity Partners III	2001	Buyout	€ 20,000,000	23,760,732	59,551,716	200,000	1,310,426	41.03	2.56
Parthenon Investors II	2001	Buyout	23,960,000	23,409,381	37,415,960	1,916,800	289,962	12.23	1.61
Nordic Capital V	2003	Buyout	€ 14,615,550	18,983,120	50,053,191	-	307,264	20.21	2.65
TPG Partners IV	2003	Buyout	15,000,000	16,672,684	31,655,907	_	434,774	15.43	1.92
Birch Hill Equity Partners III	2005	Buyout	CAD 18,000,000	15,668,740	28,699,222	137,549	3,469,927	13.22	2.05
CVC Equity Partners IV	2005	Buyout	€ 16,500,000	18,454,958	36,087,583	2,250,468	18,228	16.64	1.96
Providence Equity Partners V	2005	Buyout	25,000,000	31,142,133	36,171,706	2,250,000	411,124	3.08	1.17
Fenway III	2006	Buyout	15,000,000	17,285,636	26,400,433	900,000	1,566,861	7.50	1.62
First Reserve Fund XI	2006	Buyout	20,000,000	22,125,580	15,331,412	-	1,015,367	-7.12	0.74
Nordic Capital VI	2006	Buyout	€ 15,000,000	16,290,264	31,753,706	-	274,035	8.62	1.73
TPG Partners V	2006	Buyout	20,000,000	20,697,887	27,205,576	400,000	1,411,848	4.99	1.38
Green Equity V	2007	Buyout	20,000,000	20,422,420	37,357,653	1,800,000	10,164,794	18.67	2.33
Kayne Anderson IV	2007	Buyout	15,000,000	16,605,519	17,447,153	-	418,862	2.46	1.08
Nautic Partners VI	2007	Buyout	20,000,000	24,233,473	50,881,593	600,000	4,628,954	17.44	2.29
Providence Equity Partners VI	2007	Buyout	25,000,000	29,530,644	31,538,289	1,250,000	6,398,197	4.96	1.28
Trilantic Capital Partners IV	2007	Buyout	11,098,351	11,611,409	17,227,741	1,442,786	1,275,436	13.64	1.59
Bain Capital X	2008	Buyout	25,000,000	24,300,000	35,341,024	750,000	5,586,028	9.95	1.68
CVC Equity Partners V	2008	Buyout	€ 20,000,000	24,883,744	48,959,410	227,320	5,807,668	20.08	2.20
Nordic Capital VII	2008	Buyout	€ 15,000,000	17,578,427	27,430,841	852,450	502,982	8.20	1.59
TPG Partners VI	2008	Buyout	10,000,000	13,924,603	16,645,164	400,000	2,515,151	8.68	1.38
Advent International GPE VII-C	2012	Buyout	20,000,000	18,800,000	16,941,346	1,200,000	16,535,694	16.10	1.78
Providence Equity Partners VII	2012	Buyout	25,000,000	31,243,494	25,917,449	4,500,000	24,081,245	21.21	1.60
EnCap Energy IX	2013	Buyout	18,000,000	20,203,414	15,052,953	1,080,000	11,588,782	12.04	1.32
Nordic Capital VIII	2013	Buyout	€ 15,000,000	18,177,563	11,632,693	10,399,890	15,797,444	15.81	1.51
Riverside Capital Appreciation Fund VI	2013	Buyout	20,000,000	18,519,214	8,979,951	2,200,000	17,876,040	13.21	1.45
Carlyle Asia Partners IV	2014	Buyout	30,000,000	33,129,558	12,022,708	3,300,000	28,235,246	8.08	1.22
CVC Capital Partners VI	2014	Buyout	€ 15,000,000	19,315,428	5,895,328	3,580,290	19,405,167	12.98	1.31
Nautic Partners VII	2014	Buyout	20,000,000	16,832,318	24,594,724	5,200,000	9,217,216	42.62	2.01
Riverside Micro-Cap III	2014	Buyout	20,000,000	21,874,016	14,135,671	2,400,000	45,324,570	30.88	2.72
Sorenson Capital Partners III	2014	Buyout	30,000,000	26,190,869	45,271	12,300,000	32,546,392	8.13	1.24
Baring Asia VI	2015	Buyout	15,000,000	15,272,501	2,903,337	1,950,000	17,110,939	15.55	1.31
Centerbridge Capital Partners III	2015	Buyout	25,000,000	16,092,081	5,154,875	14,000,000	16,542,436	14.90	1.35
EnCap Energy X	2015	Buyout	25,000,000	21,065,512	4,101,073	5,500,000	21,334,504	10.38	1.21
Paine & Partners Capital IV	2015	Buyout	30,000,000	22,461,836	6,305,447	8,400,000	21,755,545	9.93	1.25
Advent International GPE VIII	2016	Buyout	20,000,000	16,820,000	-	3,200,000	20,709,676	15.74	1.23
Nautic Partners VIII	2016	Buyout	20,000,000	11,836,838	11,217,232	10,200,000	5,238,956	63.57	1.39
Southvest Partners VII	2016	Buyout	37,500,000	13,262,398	1,895,264	24,750,000	7,382,275	-40.74	0.70
Tenex Capital Partners II	2016	Buyout	25,000,000	14,422,898	875,603	11,250,000	16,638,896	11.36	1.21
CVC Capital Partners VII	2017	Buyout	€ 35,000,000	6,321,791	136,036	33,416,040	7,552,372	N/A	1.22
EnCap Energy XI	2017	Buyout	50,000,000	9,066,217	-	41,000,000	7,558,373	N/A	0.83
RLH IV	2017	Buyout	40,000,000	9,340,271	_	30,800,000	7,831,140	N/A	0.84
Altaris Constellation Partners IV	2018	Buyout	6,000,000	1,848,514	_	4,140,000	2,123,536	N/A	1.15
Altaris IV	2018	Buyout	24,000,000	6,326,439	_	17,760,000	6,788,703	N/A	1.07
Baring Asia VII	2018	Buyout	50,000,000	5,155,956	-	45,000,000	4,082,442	N/A	0.79
Carlyle Asia V	2018	Buyout	50,000,000	4,201,587	-	46,000,000	4,271,561	N/A	1.02
German Equity Partners V	2018	Buyout	€ 21,500,000	2,407,148	-	21,993,210	1,809,163	N/A	0.75
Level Equity Opportunities Fund	2018	Growth	15,000,000	1,861,828	-	13,200,000	2,108,609	N/A	1.13
Siris Partners IV	2018	Buyout	50,000,000	7,629,044	-	42,500,000	7,521,483	N/A	0.99

<sup>\*</sup>IRR refers to the fund's Internal Rate of Return, or the annualized compounded yield on an investment. This calculation is typically applied in private 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.

## Employees' Retirement System of Rhode Island Private Equity Performance 6/30/2019

Cumulative Cash Flows (\$)

Cumulative Performance\*

Current Partnerships	Vintage Year	Туре	Amount Committed (In \$ unless otherwise noted)	Amount Drawn	Amount Distributed	Amount Unfunded	Valuation (\$)	Net IRR (%)	Net Multiple of Investment
Hastings Equity IV	2019	Buyout	25,000,000	4,516,452	-	20,500,000	3,686,572	N/A	0.82
Riverside Micro-Cap V	2019	Buyout	25,000,000	2,172,767	-	22,750,000	1,674,758	N/A	0.77
Vinci Capital Partners III-B	2019	Buyout	30,000,000	1,547,654	-	28,500,000	296,173	N/A	0.19
Coller V	2006	Secondary	15,000,000	12,620,912	16,902,008	3,300,000	1,355,446	8.27	1.45
W Capital II	2007	Secondary	15,000,000	14,896,718	19,924,585	1,650,000	798,840	10.26	1.39
Granite Global Ventures II	2004	Venture Capital	15,000,000	14,333,510	22,180,375	600,000	1,129,462	6.23	1.63
Leapfrog II	2005	Venture Capital	10,000,000	9,640,000	6,811,564	400,000	4,127,302	1.99	1.13
Alta VIII	2006	Venture Capital	15,000,000	15,000,000	28,214,986	-	12,261,118	18.05	2.70
Castile Ventures III	2006	Venture Capital	5,000,000	5,009,730	1,396,371	-	398,546	-19.39	0.36
Focus Ventures III	2006	Venture Capital	15,000,000	15,000,000	8,134,762	-	-	-9.96	0.54
Granite Global Ventures III	2006	Venture Capital	15,000,000	14,625,748	41,675,138	300,000	468,078	18.38	2.88
Point 406 Ventures I	2006	Venture Capital	10,000,000	11,317,207	9,439,777	200,000	8,411,529	7.40	1.58
Point Judith Venture II	2006	Venture Capital	5,000,000	6,286,683	7,928,451	100,000	1,240,162	5.76	1.46
Lighthouse VI	2007	Venture Capital	15,000,000	14,250,000	19,832,947	750,000	471,220	6.83	1.42
Paladin III	2008	Venture Capital	10,000,000	13,291,536	9,237,491	300,000	13,383,046	10.31	1.70
Industry Ventures III	2014	Venture Capital	25,000,000	25,314,348	5,106,429	1,750,000	40,973,195	22.50	1.82
Industry Ventures III Co-Inv.	2015	Venture Capital	15,000,000	10,395,765	181,258	4,650,000	15,756,992	21.83	1.53
Industry Ventures IV	2015	Venture Capital	10,000,000	6,400,000	489,841	3,600,000	7,142,988	14.25	1.19
Level Equity Growth Partners IV	2018	Growth	17,500,000	4,141,221	-	13,300,000	3,808,500	N/A	0.92
Industry Ventures V	2019	Venture Capital	30,000,000	2,550,000	78,296	27,300,000	3,233,217	N/A	1.30
Other funds in aggregrate**			115,000,000	119,553,772	141,304,162	3,200,000	19,490,657		
Total			\$ 1,596,832,285	\$ 1,160,455,340	\$ 1,210,307,297	\$ 570,346,802	\$ 588,363,479		

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

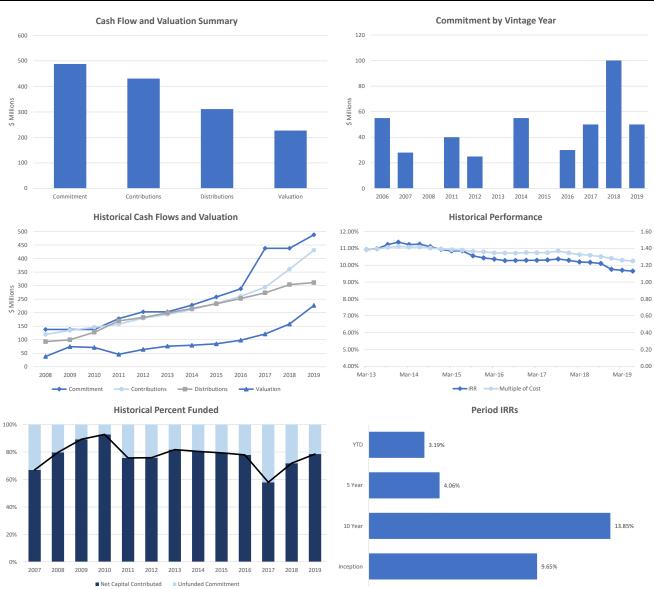
<sup>\*\*</sup>Other funds in aggregate are the total commitments to and amounts drawn and distributed by funds whose confidentiality provisions do not permit the disclosure of their performance data. These funds include Braemar Energy Ventures III, Constellation Ventures III, Thomas, McNerney & Partners and Thomas McNerney & Partners II." In addition, other funds in aggregate includes commitments to funds where no capital has been drawn, as well as funds in final liquidation.

#### **Portfolio Summary**

6/30/2019 All Investments

Performance Summary

		Number of		Multiple of						
Asset Class	Investment Type	Investments	Commitment	Contributions	Distributions	Valuation	Cost	IRR	TWR	
Private Credit Funds										
	Distressed Debt Total	15	263,000,000	228,823,412	254,785,394	62,993,972	1.39	10.21%	9.64%	
	Private Credit Total	7	225,000,000	202,158,034	56,458,282	163,886,693	1.09	5.93%	6.55%	
Total: Private Credit F	Funds	22	488,000,000	430,981,446	311,243,676	226,880,665	1.25	9.65%	9.61%	

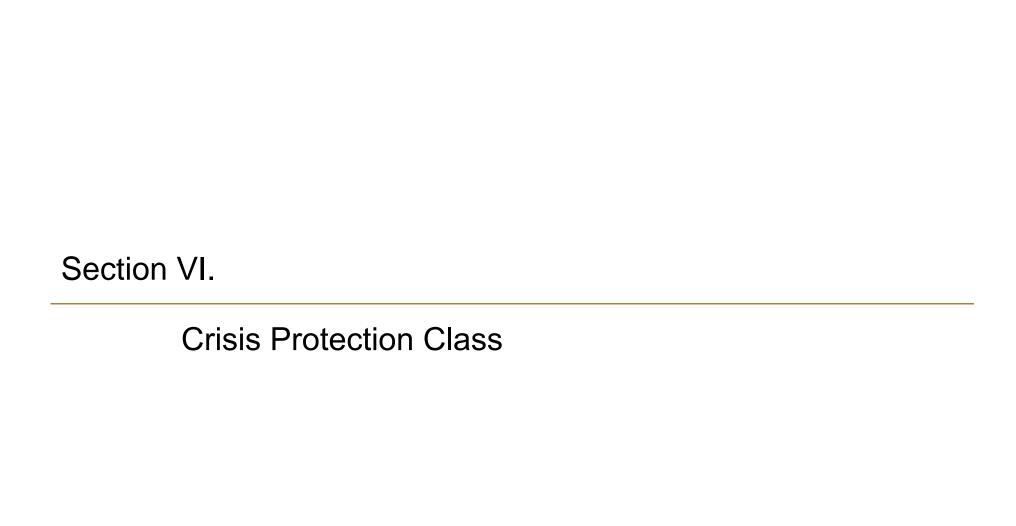


## Employees' Retirement System of Rhode Island Private Credit Performance 6/30/2019

				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		
GOF IV	2014	Private Credit	\$30,000,000	\$28,374,000	\$5,760,000	-	\$24,846,000	2.56	1.08		
CSIP V	2016	Private Credit	\$30,000,000	\$23,844,000	\$5,434,000	\$9,300,000	\$21,057,000	7.37	1.11		
Virgo Societas Partnership IV	2017	Private Credit	\$50,000,000	\$37,650,000	318,000	\$12,500,000	\$36,610,000	N/A	0.98		
Owl Rock Capital Corporation	2018	Private Credit	\$50,000,000	\$50,000,000	\$2,658,000	\$0	\$49,688,000	N/A	1.05		
Zephyrus Aviation Partners I	2019	Private Credit	\$20,000,000	\$9,706,000	-	\$10,200,000	\$9,834,000	N/A	N/A		
CCP	2006	Opportunistic Private Credit	\$15,000,000	\$23,811,000	\$40,475,000	\$900,000	\$2,021,000	19.39	1.78		
MHR III	2006	Opportunistic Private Credit	\$20,000,000	\$20,817,000	\$21,126,000	\$7,000,000	\$7,093,000	5.78	1.36		
WLR Recovery IV	2007	Opportunistic Private Credit	\$8,000,000	\$7,277,000	\$9,374,000	\$240,000	\$432,000	7.44	1.35		
OCM EPF III	2011	Opportunistic Private Credit	\$20,000,000	\$17,150,000	\$13,136,000	\$5,800,000	\$14,434,000	10.37	1.61		
Centerbridge Sp. Credit II	2012	Opportunistic Private Credit	\$25,000,000	\$22,500,000	\$19,847,000	\$2,500,000	\$5,175,000	2.66	1.11		
DK L-T Opps. IV	2018	Opportunistic Private Credit	\$50,000,000	\$32,000,000	-	\$18,000,000	\$33,840,000	N/A	0.98		
Other funds in aggregrate**			\$75,000,000	\$52,585,000	\$42,416,000	\$9,200,000	\$19,724,000				
Total			\$ 393,000,000	\$ 325,714,000	\$ 160,544,000	75,640,000	\$ 224,754,000				

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

<sup>\*\*</sup>Other funds in aggregate are the total commitments to and amounts drawn and distributed by funds whose confidentiality provisions do not permit the disclosure of their performance data. These funds include Summit Credit Partners I and Summit Credit Partners II.



CPC Returns CPC Program, November 30, 2019, %												
CPC Program, November 30, 2019, %  Annualized Std. Dev Annualized  Return (Since (November Std. Dev (Since Account Name MTD Return Inception) '19) Inception)  Total CPC Program 0.01 3.76 7.76 9.49												
Total CPC Program	0.01	3.76	7.76	9.49								
CPC Trend	0.56	0.15	6.13	14.82								
CPC Long Duration	-0.50	6.68	11.63	9.73								

				sitive Risk n, 11/30/2019, USI	)			
Account Name	SPX +10%(No Decay) - P&L % MV	FTSE 100 +10% (No Decay) - P&L % MV	MSCI EM +10% (No Decay) - P&L % MV	Gold +10% (No Decay) - P&L % MV	Oil +10% (No Decay) - P&L % MV	20+ Year Treasury +10% (No Decay) - P&L % MV	DXY +10% (No Decay) - P&L % MV	MSCI AII Country -20% (No Decay) - P&L % MV
Total CPC Program	0.97%	0.97%	-0.01%	1.11%	-0.02%	5.53%	3.65%	-1.30%
CPC Trend	4.46%	4.65%	1.85%	-2.05%	0.79%	1.18%	8.53%	-8.47%
<b>CPC Long Duration</b>	-2.27%	-2.46%	-1.74%	4.05%	-0.77%	9.57%	-0.89%	5.37%

Return Correlation (Since Inception)											
Total CPC Program 1 00 0 86 0 65											
Total CPC Program	1.00	0.86	0.65								
CPC Trend	_										
CPC Long Duration	0.65	0.17	1.00								

Return Correlation (NOV '19)													
	Total CPC Program	CPC Trend	CPC Long Duration										
<b>Total CPC Program</b>	1.00	0.72	0.94										
CPC Trend	0.72	1.00	0.44										
<b>CPC Long Duration</b>													



Absolute Return



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

Absolute Return Portfolio Portfolio Performance Summary Estimated as of November 30, 2019

						Ret	urns					LTD	Sharpe	Incep
Fund	Market Value	Actual %	Nov	QTD	YTD	FYTD	1 Year	3 Year	5 Year	Incep	Std Dev	Beta	Ratio	Date
Absolute Return Portfolio														
Capula Global Relative Value Fund Ltd.	78,447,181	13.7%		1.76%	6.30%	2.44%	6.45%	5.49%	6.35%	5.79%	1.74%	-0.03	2.65	Dec-11
Davidson Kempner Institutional Partners, L.P.	84,721,736	14.8%	0.17%	0.57%	5.75%	1.38%	4.98%	4.96%	4.57%	5.55%	1.99%	0.10	2.20	Nov-11
DE Shaw Composite Fund LLC	130,720,040	22.8%		0.99%	11.05%	5.07%	14.98%	10.74%	11.50%	12.62%	4.15%	0.04	2.65	Nov-11
Elliott Associates, L.P.	114,266,616	19.9%	-0.20%	-0.30%	5.30%	0.50%	5.66%	6.52%	6.82%	8.30%	3.53%	0.08	1.98	Nov-11
Graham Absolute Return Trading Ltd.	55,126,259	9.6%	-0.33%	1.02%	8.65%	0.51%	5.66%	1.95%	3.02%	3.20%	5.68%	0.07	0.41	Jan-12
Viking Global Equities, LP	69,872,501	12.2%	3.42%	4.64%	17.07%	-0.21%	13.43%	9.92%	6.72%	10.19%	7.61%	0.34	1.19	Dec-11
Winton Fund Limited	38,971,142	6.8%	-0.76%	-2.02%	1.53%	1.41%	0.01%	3.39%	1.53%	3.32%	8.26%	0.10	0.32	Dec-11
Absolute Return Portfolio - Total	572,125,475	99.8%	0.68%	0.99%	8.14%	1.86%	8.08%	7.02%	4.91%	6.10%	3.02%	0.16	1.66	Nov-11
HFRI Fund of Funds Composite Index			0.54%	1.03%	6.22%	0.06%	4.47%	3.49%	2.03%	3.10%	3.54%		0.60	Nov-11
MSCI AC World Index Free - Net			2.44%	5.24%	22.29%	5.22%	13.68%	11.95%	7.24%	9.48%	11.32%		0.77	Nov-11
ML 3-month T-Bills			0.12%	0.32%	2.13%	0.88%	2.32%	1.63%	1.04%	0.67%	0.25%		-	Nov-11
25% MSCI ACWI/75% Barclays Aggregate			0.57%	1.49%	12.23%	3.23%	11.80%	6.16%	4.26%	4.73%	3.49%		1.07	Nov-11
<b>Liquidating Portfolio</b> Indus Asia Pacific Distribution Holding Company II, 06.30.14 Series														
(liquidating trust)	306,254	0.1%	-0.67%	-0.77%	-6.45%	-5.08%	-5.82%	-3.11%	-15.44%	-10.29%	17.60%	0.36	-0.58	Jan-12
Luxor Capital Partners, LP - Liquidating SPV	751,751	0.1%	-0.03%	-7.08%	-22.81%	-7.03%	-22.77%	3.45%	-	0.52%	18.55%	-0.41	0.03	Jul-16
Liquidating/Redeeming - Total	1,058,005	0.2%	-0.22%	-5.34%	-18.69%	-6.47%	-18.53%	-5.83%	-3.82%	-1.83%	7.55%	-0.08	-0.33	Nov-11
Total Absolute Return Portfolio	573,183,480	100.0%	0.68%	0.98%	8.08%	1.84%	8.02%	6.54%	4.51%	5.52%	2.87%	0.15	1.55	Nov-11
HFRI Fund of Funds Composite Index			0.54%	1.03%	6.22%	0.06%	4.47%	3.49%	2.03%	3.10%	3.54%		-	Nov-11
Market Indices														
Libor3Month			0.16%	0.32%	2.13%	0.86%	2.37%	1.95%	1.38%	0.97%	0.24%		-	Nov-11
Bloomberg Barclays US Aggregate Bond Index			-0.05%	0.25%	8.80%	2.53%	10.81%	4.11%	3.09%	3.02%	2.91%		0.71	Nov-11
Bloomberg Barclays US High Yield Bond Index			0.33%	0.60%	12.06%	1.94%	9.66%	6.31%	5.40%	6.71%	5.10%		1.11	Nov-11
S&P 500 TR			3.63%	5.87%	27.63%	7.67%	16.11%	14.88%	10.98%	14.42%	10.92%		1.20	Nov-11
MSCI EAFE - Net			1.13%	4.76%	18.17%	3.64%	12.44%	9.62%	4.26%	6.37%	12.62%		0.48	Nov-11
MSCI EMF (Emerging Markets Free) - Net			-0.14%	4.07%	10.21%	-0.34%	7.28%	9.01%	3.12%	3.00%	15.43%		0.21	Nov-11

<sup>\*</sup>LTD Beta is calculated with Holding Level Returns. The market benchmark is MSCI AC World Index Free - Net Index

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

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

This report reflects information only through the date hereof. Our due diligence and reporting rely upon the accuracy and completeness of financial information (which may or may not be audited by the fund manager) and other information publicly available or provided to us by the fund manager, its professional staff, and references we have contacted and other third parties. We have not conducted an independent verification of the information provided other than a described other than a continued as providing legal advice. Past performance does not guarantee future performance. The information contained herein is confidential commercial of financial information, the disclosure of which would cause substantial competitive harm to you, Cliffwater LLC, or the person or entity from whom the information was obtained, and may not be disclosed except as required by applicable law.



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

Absolute Return Portfolio Fund Level Performance Report Estimated as of November 30, 2019

						Tra	ailing Retu	rns		Calen	dar Year R	eturns		5 Yr	ITD Beta to		Sharpe Rat	io	Start
Fund	QTD	YTD	Nov	Oct	Sep	1 Year	3 Year	5 Year	2018	2017	2016	2015	2014	Std Dev	MSCI ACWI <sup>1</sup>	3 yr	5 yr	Incep.	Date
Absolute Return																			
Capula Global Relative Value Fund Ltd.	1.78%	6.42%				6.53%	5.53%	6.38%	4.63%	3.79%	8.37%	7.54%	8.14%	1.59%	-0.03	2.19	2.93	1.82	Oct-05
Davidson Kempner Institutional Partners, L.P.	0.53%	5.43%	0.17%	0.36%	0.13%	4.59%	4.61%	4.31%	1.81%	6.11%	6.71%	1.51%	4.45%	1.77%	0.10	1.38	1.61	1.53	Mar-96
DE Shaw Composite Fund LLC	1.10%	11.13%				15.02%	10.60%	11.11%	11.38%	10.41%	6.12%	13.68%	15.57%	4.04%	0.03	2.06	2.29	1.62	Mar-01
Elliott Associates, L.P.	-0.30%	4.96%	-0.20%	-0.10%	0.80%	5.17%	6.12%	6.38%	2.91%	8.80%	12.98%	2.51%	8.24%	3.48%	0.08	1.34	1.39	1.86	Jan-90
Graham Absolute Return Trading Ltd.	1.01%	8.00%	-0.33%	1.34%	-1.38%	5.02%	1.72%	3.30%	2.36%	-7.01%	11.78%	1.50%	10.42%	7.12%	0.08	0.00	0.30	0.89	Jan-05
Viking Global Equities, LP	4.43%	16.65%	3.40%	1.00%	-4.80%	13.04%	11.36%	7.56%	4.64%	13.01%	-3.92%	8.27%	13.47%	8.25%	0.32	1.24	0.76	1.39	Oct-99
Winton Fund Limited	-2.03%	1.48%	-0.76%	-1.28%	-2.87%	-0.04%	3.34%	1.50%	-0.56%	7.88%	-3.01%	0.95%	13.88%	8.20%	0.10	0.22	0.06	0.63	Oct-97
Liquidating Portfolio																			
Indus Asia Pacific Fund, LP	-0.77%	-6.45%	-0.67%	-0.11%	-0.81%	-5.82%	-3.11%	-15.44%	-11.10%	9.70%	-26.00%	-33.23%	-15.60%	21.48%	0.37	-0.25	-0.73	-0.03	Dec-00
Luxor Capital Partners, LP	-7.08%	-22.81%	-0.03%	-7.06%	0.09%	-22.77%	7.08%	0.08%	1.19%	54.38%	7.80%	-19.05%	-9.83%	17.36%	-0.41	0.35	0.01	0.67	Apr-02
Editor Capital Farthers, El	7.0070	22.01/0	0.0370	7.00%	0.0370	22.7770	7.0070	0.0070	1.1370	34.3070	7.0070	15.0570	3.0370	17.5070	0.41	0.55	0.01	0.07	71p1 02
Benchmark																			
HFRI Fund of Funds Composite Index	1.03%	6.22%	0.54%	0.48%	-0.45%	4.47%	3.49%	2.03%	-4.02%	7.77%	0.51%	-0.27%	3.37%	8.96%					Aug-90
HFRI Fund Weighted Composite Index	1.73%	8.53%	1.12%	0.60%	-0.16%	5.78%	4.28%	3.15%	-4.75%	8.59%	5.44%	-1.12%	2.98%	9.13%					Aug-90
Market Indices																			
3 Month Libor - BOM	0.32%	2.13%	0.16%	0.16%	0.17%	2.37%	1.95%	1.38%	2.36%	1.29%	0.76%	0.33%	0.23%	0.24%					Aug-87
Barclays Aggregate Bond Index	0.32%	8.80%	-0.05%	0.16%	-0.53%	10.81%	4.11%	3.09%	0.02%	3.55%	2.66%	0.57%	5.94%	3.06%					Aug-87 Aug-76
Barclays High Yield Credit Bond Index	0.60%	12.06%	0.33%	0.30%	0.36%	9.66%	6.31%	5.40%	-2.08%	7.50%	17.14%	-4.46%	2.46%	5.31%					Feb-84
, 3			3.63%	2.17%										5.31% 11.96%					
S&P 500 (TR)	5.87%	27.63%			1.87%	16.11%	14.88% 9.62%	10.98%	-4.38%	21.83%	11.96%	1.38%	13.69%						Jan-89
MSCI EAFE - Net - USD	4.76%	18.17%	1.13%	3.59%	2.87%	12.44%		4.26%	-13.79%	25.03%	1.00%	-0.81%	-4.90%	12.30%					Jul-70
MSCI EMF (EMERGING MARKETS FREE) - Net - USD	4.07%	10.21%	-0.14%	4.22%	1.91%	7.28%	9.01%	3.12%	-14.58%	37.28%	11.19%	-14.92%	-2.19%	15.64%	1 1				Jul-88

 $<sup>\</sup>hbox{*LTD Beta is calculated with Fund Level Returns. The market benchmark is MSCI AC World Index Free-Net Index}$ 

Note: The above is manager composite history.

 $<sup>{\</sup>bf 1.} \ \ {\bf The inception \ date \ for \ this \ calculation \ is \ equivalent \ to \ the inception \ date \ of \ ERSRI's \ initial \ investment \ into \ the \ relevant \ fund.$ 



Real Estate

#### **PORTFOLIO SUMMARY**

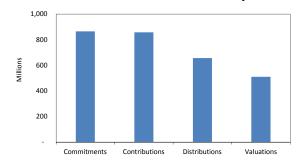
6/30/2019

All Portfolio Investments - Real Estate (1)

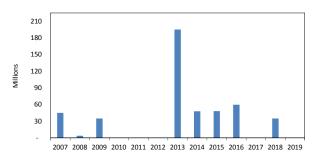
#### Performance Summary

Asset Class	Investment Type	Number of Investments (4)	Commitment	Contributions (2), (3)	Distributions <sup>(3)</sup>	Adjusted Valuation	Multiple of Cost	IRR	TWR
Real Estate Funds	Core	8	414,873,660	483,441,494	405,104,209	365,532,400	1.6x	5.5%	5.7%
	Non-Core	22	450,260,817	373,281,430	251,553,685	144,379,117	1.1x	1.2%	3.6%
Total: Real Estate Funds		30	865,134,477	856,722,924	656,657,894	509,911,517	1.4x	4.6%	5.1%
Total:		30	865,134,477	856,722,924	656,657,894	509,911,517	1.4x	4.6%	5.1%

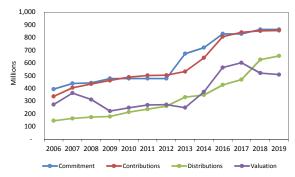
#### **Cash Flow and Valuation Summary**



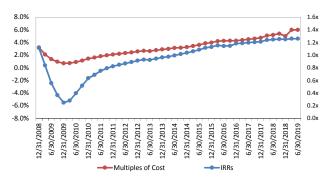
#### **Commitment by Vintage Year**



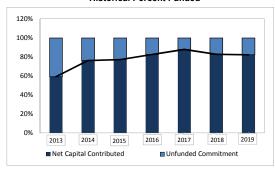
#### **Historical Cash Flows and Valuation**



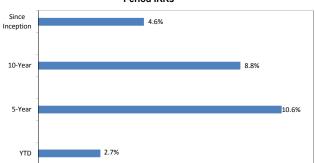
#### **Historical Performance**



#### Historical Percent Funded



#### Period IRRs (5)



<sup>(1)</sup> Investment information listed as of March 31, 1989 through June 30, 2019 and includes those investments which have been liquidated.

<sup>(2)</sup> 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.

<sup>(3)</sup> 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.

<sup>(4)</sup> As of June 30, 2019 there are four core funds and eleven non-core funds.

<sup>(5)</sup> The YTD IRR presented is an unannualized percentage.

## Employees' Retirement System of Rhode Island Real Estate Performance 6/30/2019

**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
Morgan Stanley Prime Property Fund	2005	Core	35,000,000	35,000,000	25,593,729	-	66,299,186	7.3%	2.2
JP Morgan Strategic Property Fund	2006	Core	75,000,000	75,000,000	34,263,914	-	110,728,989	6.2%	1.7
AEW Core Property Trust	2010	Core	69,873,660	69,873,660	57,093,344	-	107,288,205	10.7%	1.6
Heitman America Real Estate Trust	2014	Core	60,000,000	60,000,000	14,457,314	-	81,216,020	8.6%	1.4
TriCon Capital Fund VII	2005	Non-Core	15,000,000	14,571,533	4,818,706	428,467	514,697	-15.8%	0.3
Magna Hotel Fund III	2008	Non-Core	4,000,000	3,426,573	5,764,047	573,427	10,331	14.4%	1.7
IC Berkeley Partners III	2013	Non-Core	18,000,000	16,038,326	24,551,493	1,961,674	182,040	19.9%	1.5
GEM Realty Fund V	2013	Non-Core	50,000,000	39,874,323	13,068,468	10,125,677	46,858,480	11.9%	1.4
Exeter Industrial Value Fund III	2014	Non-Core	30,000,000	29,099,454	44,580,952	900,546	12,378,001	29.1%	1.9
Waterton Fund XII	2014	Non-Core	35,000,000	34,265,141	17,544,728	-	34,685,966	14.0%	1.4
Crow Holdings Retail Fund	2015	Non-Core	24,000,000	20,935,313	3,340,836	3,064,687	24,282,487	11.0%	1.3
Lone Star Real Estate Fund IV	2015	Non-Core	24,260,817	19,056,195	16,432,132	5,204,622	10,823,961	18.8%	1.4
IC Berkeley Partners IV	2016	Non-Core	30,000,000	11,541,818	1,783,071	18,458,182	12,463,078	4.5%	1.1
GEM Realty Fund VI	2017	Non-Core	20,000,000	2,204,599	1,200,000	17,795,401	1,653,713	-2.7%	1.0
Raith Real Estate II	2018	Non-Core	35,000,000	692,688	242,368	34,307,312	526,363	N/A	N/A
Total			\$ 525,134,477	\$ 431,579,623	\$ 264,735,102	\$ 92,819,995	\$ 509,911,517		

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



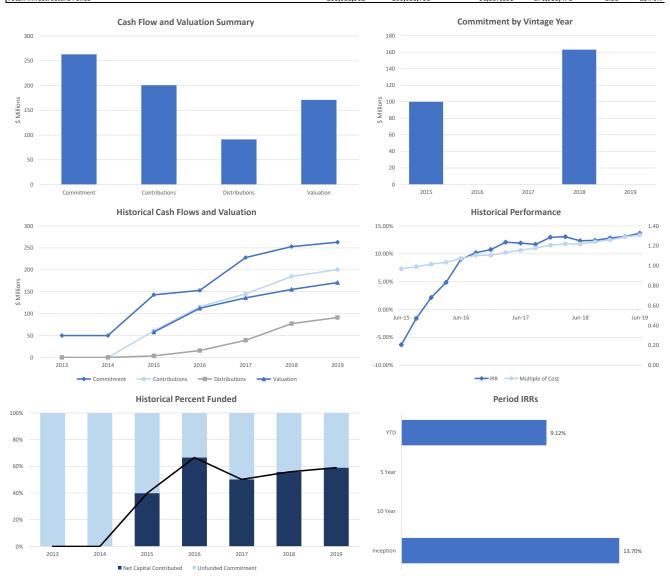
Infrastructure

#### **Portfolio Summary**

6/30/2019 All Investments

Performance Summary

Asset						Multiple of	
Class	Investment Type	Commitment	Contributions	Distributions	Valuation	Cost	IRR
Infrast	ructure Funds						
	Homestead Capital USA Farmland Fund III, L.P.	25,000,000	167,157	-	28,594	-	
	IFM Global Infrastructure Fund	50,032,902	50,032,902	20,776,714	55,507,125	1.52	11.87%
	ISQ Global Infrastructure Fund (UST), L.P.	50,000,000	64,895,667	41,384,814	43,599,264	1.31	16.63%
	ISQ Global Infrastructure Fund II (UST), L.P.	40,000,000	11,026,498	1,018,913	10,965,884	1.09	13.20%
	Stonepeak Infrastructure Fund II - Master Co- Investment Partners LP	20,000,000	9,325,844	632,375	10,078,019	1.15	9.63%
	Stonepeak Infrastructure Fund II Cayman (G AIV) LP	43,000,000	51,313,410	26,531,433	36,198,061	1.22	14.82%
	Stonepeak Infrastructure Fund III LP	35,000,000	13,877,253	822,809	14,556,524	1.11	27.81%
Total:	Infrastructure Funds	263.032.902	200.638.731	91.167.058	170.933.471	1.31	13.70%



## Employees' Retirement System of Rhode Island Private Infrastructure Performance 6/30/2019

**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
IFM Global Infrastructure, L.P.	2015	Core	50,033,000	50,033,000	20,777,000	-	55,507,000	11.9	1.5
Stonepeak Infrastructure Fund II, L.P.	2016	Opportunistic	43,000,000	51,313,000	26,531,000	8,170,000	36,198,000	14.8	1.2
Stonepeak Infrastructure Fund II-C	2016	Opportunistic	20,000,000	9,326,000	632,000	11,200,000	10,078,000	9.6	1.2
Stonepeak Infrastrucutre Fund III	2018	Opportunistic	35,000,000	13,877,000	823,000	22,050,000	14,557,000	N/A	1.1
ISQ Global Infrastructure Fund, L.P.	2015	Value-Add	50,000,000	64,896,000	41,385,000	12,500,000	43,599,000	16.6	1.3
ISQ Global Infrastructure Fund II, L.P.	2017	Value-Add	40,000,000	11,026,000	1,019,000	30,000,000	10,966,000	N/A	1.1
Homestead USA Farmland III	2018	Value-Add	25,000,000	167,000	-	24,750,000	29,000	N/A	N/A
Total			\$ 263,033,000	\$ 200,638,000	\$ 91,167,000	\$ 108,670,000	\$ 170,934,000		

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



Cash Flow

## CASH FLOW ANALYSIS - INCOME & EXPENSES

## **Employees Retirement System**

FISCAL YEAR 2020	FY 2019-20												
	TOTAL	Projected June	Projected May	Projected April	Projected March	Projected February	Projected January 2019	Projected December	Actual November	Actual October	Actual September	Actual August	Actual July 2019
MEMBER BENEFITS	832,747,334	69,132,324	69,155,407	69,178,465	69,266,687	69,343,077	69,424,081	69,501,214	69,588,526	69,696,408	69,594,830	69,472,755	69,393,560
ADMINISTRATIVE EXPENSES	9,042,485	1,245,040.43	610,799	594,437	861,267	801,556	610,285	912,931	927,674	685,823	620,260	817,218	355,195
INVESTMENT EXPENSES	44,702,706	10,037,448	17,681	18,470	10,062,340	20,460	18,168	13,124,115	17,500	17,509	11,333,904	17,530	17,581
TOTAL OUTFLOW	886,492,525	80,414,813	69,783,888	69,791,371	80,190,294	70,165,093	70,052,534	83,538,260	70,533,700	70,399,740	81,548,993	70,307,503	69,766,336
CONTRIBUTIONS	544,335,984	50,184,219	62,786,062	44,874,628	55,109,606	36,090,355	54,923,714	34,863,860	41,714,021	48,498,890	26,559,817	26,653,809	62,077,003
OTHER INCOME*	80,277,689	3,294,658	8,361,789	(926,666)	683,544	10,162,489	5,717,704	1,540,773	16,964,649	9,773,079	9,240,586	10,304,355	5,160,730
TOTAL INCOME	624,613,673	53,478,877	71,147,851	43,947,962	55,793,150	46,252,844	60,641,418	36,404,633	58,678,670	58,271,969	35,800,403	36,958,164	67,237,733
DIFFERENCE	(261,878,851)	(26,935,936)	1,363,964	(25,843,409)	(24,397,144)	(23,912,249)	(9,411,116)	(47,133,628)	(11,855,030)	(12,127,771)	(45,748,591)	(33,349,339)	(2,528,602)

## Municipal Employees Retirement System

	TOTAL	Projected June	Projected May	Projected April	Projected March	Projected February	Projected January 2019	Projected December	Actual November	Actual October	Actual September	Actual August	Actual July 2019
MEMBER BENEFITS	102,091,387	8,492,798	8,506,904	8,490,720	8,451,729	8,415,263	8,384,093	8,351,832	8,671,244	8,650,757	8,586,800	8,558,190	8,531,056
ADMINISTRATIVE EXPENSES	2,205,011	303,272	148,540	144,781	209,053	194,360	147,562	220,523	229,041	168,937	152,513	199,939	86,489
INVESTMENT EXPENSES	10,879,765	2,444,966	4,300	4,499	2,442,403	4,961	4,393	3,170,198	4,321	4,313	2,786,843	4,289	4,281
TOTAL OUTFLOW	115,176,162	11,241,036	8,659,743	8,640,000	11,103,185	8,614,584	8,536,047	11,742,553	8,904,607	8,824,007	11,526,156	8,762,418	8,621,827
CONTRIBUTIONS	76,623,486	6,431,212	5,735,660	9,706,407	6,695,695	5,748,136	6,227,640	6,054,796	5,289,544	6,927,606	6,155,497	5,721,125	5,930,168
OTHER INCOME*	19,640,813	802,527	2,033,494	(225,699)	165,915	2,464,179	1,382,494	372,182	4,188,547	2,407,374	2,272,126	2,521,044	1,256,630
TOTAL INCOME	96,264,299	7,233,739	7,769,154	9,480,708	6,861,610	8,212,315	7,610,134	6,426,978	9,478,091	9,334,980	8,427,623	8,242,169	7,186,798
DIFFERENCE	(18,911,862)	(4,007,297)	(890,589)	840,707	(4,241,575)	(402,268)	(925,913)	(5,315,576)	573,485	510,974	(3,098,532)	(520,249)	(1,435,029)

### CASH FLOW ANALYSIS - INCOME & EXPENSES

Retirement System	TOTAL	Projected June	Projected May	Projected April	Projected March	Projected February	Projected January 2019	Projected December	Actual November	Actual October	Actual September	Actual August	Actual July 2019
MEMBER BENEFITS	6,009,936	499,445	499,445	499,445	499,003	508,193	499,263	499,263	508,102	499,445	499,445	499,445	499,445
ADMINISTRATIVE EXPENSES	200,492	27,589	13,497	13,113	18,896	17,553	13,297	19,845	21,101	15,479	13,967	18,271	7,884
INVESTMENT EXPENSES	986,903	222,419	391	407	220,762	448	396	285,288	398	395	255,217	392	390
TOTAL OUTFLOW	7,197,331	749,453	513,332	512,965	738,660	526,194	512,955	804,396	529,601	515,319	768,629	518,107	507,719
CONTRIBUTIONS	6,413,533	446,796	643,522	418,874	517,636	553,816	464,517	381,166	848,591	505,274	552,960	562,117	518,267
OTHER INCOME*	1,792,418	73,006	184,770	-20,442	14,997	222,547	124,577	33,493	385,877	220,584	208,080	230,376	114,554
TOTAL INCOME	8,205,951	519,802	828,291	398,432	532,632	776,363	589,093	414,658	1,234,468	725,858	761,039	792,493	632,821
DIFFERENCE	1,008,620	(229,651)	314,959	(114,534)	(206,028)	250,169	76,138	(389,737)	704,867	210,538	(7,589)	274,385	125,102

# Judicial

Judiciai													
Retirement System	TOTAL	Projected June	Projected May	Projected April	Projected March	Projected February	Projected January 2019	Projected December	Actual November	Actual October	Actual September	Actual August	Actual July 2019
MEMBER BENEFITS	3,678,373	307,623	307,623	307,623	305,669	303,954	304,022	303,781	307,586	307,623	307,623	307,623	307,623
ADMINISTRATIVE EXPENSES	105,548	14,526	7,110	6,912	9,960	9,255	7,016	10,482	11,062	8,134	7,337	9,607	4,147
INVESTMENT EXPENSES	519,918	117,108	206	215	116,360	236	209	150,694	209	208	134,063	206	205
TOTAL OUTFLOW	4,303,839	439,256	314,939	314,749	431,989	313,445	311,247	464,958	318,857	315,965	449,023	317,436	311,976
CONTRIBUTIONS	3,243,078	241,159	365,766	241,379	242,261	221,422	219,459	212,730	381,785	254,526	308,067	308,121	246,403
OTHER INCOME*	835,455	38,439	97,335	(10,775)	7,904	155,323	65,732	17,692	202,293	(29,185)	109,302	121,135	60,259
TOTAL INCOME	4,078,533	279,598	463,101	230,604	250,166	376,745	285,191	230,421	584,078	225,341	417,369	429,256	306,662
DIFFERENCE	(225,306)	(159,659)	148,162	(84,145)	(181,823)	63,300	(26,056)	(234,536)	265,221	(90,623)	(31,654)	111,820	(5,313)

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

**ERSRI Pooled Trust** 

**ACCRUAL BASIS** 

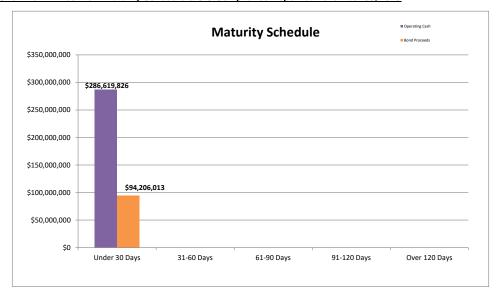
	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected
	Jul 19	Aug	Sept	Oct	Nov	Dec	Jan 20	Feb	Mar	Apr	May	June	TOTAL
EQUITIES US													
SSGA Russell 3000			41,899			42,000			42,000			42,000	167,899
Shott Capital/Hamilton Lane			338			500			500			500	1,838
SSGA QVM Tilt			<u>190,229</u>			190,000			190,000			190,000	760,229
			232,467			232,500			232,500			239,300	176,537
FIXED INCOME													
Fidelity			156,000			156,000			156,000			156,000	624,000
Mackay Shields			146,479			170,000			170,000			170,000	656,479
Brown Bros.TIPS/GILB			43,330			60,000			60,000			60,000	223,330
,			345,809			386,000			386,000			386,000	1,503,809
INT'L EQUITIES			,			,			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
SSGA MSCI EAFE			51,564			55,000			55,000			55,000	216,564
SSGA MSCI CAD			4,509			5,000			5,000			5,000	19,509
SSGA MSCI Emerg Mkts			103,790			108,000			<u>108,000</u>			108,000	427,790
33GA MSCI EITIETY WIKES			159,863			168,000			168,000				663,863
CREDIT			159,005			100,000			100,000			168,000	003,003
CREDIT			420.620			110 000			110.000			110.000	460 630
Loomis			139,630			110,000			110,000			110,000	469,630
PIMCO			110,000			<u>110,000</u>			110,000			110,000	440,000
			249,630			220,000			220,000			220,000	909,630
Infrastructure													
Harvest Partners			214,627			300,000			300,000			300,000	1,114,627
Systematic Trend Followers	215,362	224,302	230,692	226,120	206,950	210,000	210,000	210,000	210,000	210,000	210,000	210,000	2,573,426
Long Duration													
WAMCO			33,396			30,000			30,000			30,000	123,396
Mackay Shields			32,951			30,000			30,000			30,000	<u>122,951</u>
			66,347			60,000			60,000			60,000	246,347
REAL ESTATE	0	0	2,268,181	0	0	1,316,299	0	0	6,013,911	0	0	3,900,000	13,498,391
ALTERNATIVE INVESTMENTS													
Private Infrastructure			1,526,570			1,962,839			1,707,969			2,250,000	7,447,378
Hedge Funds			4,907,979			2,549,827			7,307,576			5,500,000	20,265,382
Private Equity						2,143,095							
Private Equity		0	<u>5,786,256</u>	0	0		0	0	9,861,859	0	0	<u>5,000,000</u>	<u>22,791,211</u>
	0	0	12,220,805	0	0	6,655,761	0	0	18,877,404	0	0	12,750,000	50,503,970
Other													
			FO 000			FO 000			F0 000			75 000	225 000
Russell Overlay			50,000			50,000			50,000			75,000	225,000
Heitman	20.524	24 776	100,825	40.000	22 500	100,000	22 500	22 500	100,000	22 500	22 500	100,000	400,825
Payden & Rygel	20,531	<u>21,776</u>	22,500	<u>19,893</u>	<u>22,500</u>	22,500	<u>22,500</u>	<u>22,500</u>	22,500	22,500	22,500	22,500	<u>264,700</u>
	20,531	21,776	173,325	19,893	22,500	172,500	22,500	22,500	172,500	22,500	22,500	197,500	890,525
SUB TOTAL-INV MGMT FEES	235,893	246,078	16,161,747	246,013	229,450	9,721,060	232,500	232,500	26,640,315	232,500	232,500	18,430,800	72,081,126
PROFESSIONAL FEES													
Legal	9,173	7,250	9,804	17,650	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	123,877
_	-	-		•									
BNY Mellon - Custodial	42,213	42,213	42,213	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	558,638
Cliffwater	33,333	33,333	35,417	35,417	33,333	33,334	33,333	33,333	33,334	33,333	33,333	33,333	404,166
Meketa General & Infrastructure	6,250	6,250	6,250	6,250	6,250	6,250	6,250	6,250	6,250	6,250	6,250	6,250	75,000
NEPC	0	0	91,250	0	0	91,250	0	0	91,250	0	0	91,250	365,000
Aberdeen	28,721	29,811	28,985	28,834	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	332,351
Meketa Real Estate	<u>10,417</u>	<u>10,417</u>	<u>10,417</u>	<u>10,417</u>	<u>10,417</u>	<u>10,417</u>	<u>10,417</u>	<u>10,417</u>	<u>10,417</u>	<u>10,417</u>	<u>10,417</u>	<u>10,417</u>	125,004
	130,107	129,273	224,335	146,568	135,000	226,251	135,000	135,000	226,251	135,000	135,000	226,250	1,984,035
OPERATING EXPENSE													
Retirement Transfers	465,094	478,478	882,244	910,680	1,057,736	553,937	968,951	780,086	834,367	630,113	650,150	1,361,470	9,573,304
Other Expense	0	4,000		25,420		29,250	6,098	2,005	25,394	96	3,080	6,420	<u>101,763</u>
	465,094	482,478	882,244	936,100	1,057,736	583,187	975,048	782,091	859,761	630,209	653,230	1,367,890	9,675,067
TOTAL:	831,094	857,829	17,268,325	1,328,680	1,422,186	10,530,497	1,342,548	1,149,591	27,726,327	997,709	1,020,730	20,024,940	83,740,228

Note: Numbers in bold are actual.



**Short-Term Investments** 

Short-Term Investment Maturity Schedule & SIC Compliance Report at November 30, 2019



CD = Certificate of Deposit

CDARS = Cert.of Dep.Acct Registry Svc

MMKT = Money Market

CoD = Collateralized Deposit

OSIP = Ocean State Investment Pool

Vendor	CD	CDARS	Money Mkt	CoD	OSIP	Total (\$)
Guidelines-Total/Vendor	50%/20%	50%/20%	75%/35%	75%/35%	50%/50%	
OSIP	0	0	0	0	42,083,151	\$ 42,083,150.78
	0%	0%	0%	0%	15%	14.7%
Bank RI	0	0	10,321,317	0	0	\$ 10,321,316.95
	0%	0%	4%	0%	0%	3.6%
Santander Bank	0	0	0	18,099,045	0	\$ 18,099,044.72
	0%	0%	0%	6%	0%	6.3%
People's Credit Union Comm Dep.	0	2,703,943	0	0	0	\$ 2,703,942.79
	0%	1%	0%	0%	0%	0.94%
Navigant Credit Union Comm Dep	0	6,297,893	0	0	0	\$ 6,297,892.53
	0%	2%	0%	0%	0%	2.20%
Fidelity	0	0	0	0	0	0
	0%	0%	0%	0%	0%	0.00%
Bristol County Savings Bk Comm Dep.	0	0	0	5,119,041	0	\$ 5,119,040.88
	0%	0%	0%	2%	0%	1.79%
Centreville Bank		\$ 15,252,323.03	0%	0	0	\$ 15,252,323.03
Community Deposit	0	7,374,082	0	0	0	7,374,082
	0%	3%	0%	0%	0%	7.89%
Citizens Bank	0	0	0	22,183,935	0	\$ 22,183,935.40
	0%	0%	0%	8%	0%	7.7%
Webster Bank	0	0	0	68,382,070	0	\$ 68,382,070.11
	0%	0%	0%	24%	0%	23.9%
Customers Bank	0	0	0	32,013,666	0	\$ 32,013,665.50
	0%	0%	0%	11%	0%	11.2%
Washington Trust	0	36,818,429	0	0	0	\$ 36,818,428.73
Community Deposit	0	2,877,375	0	0	0	\$ 2,877,374.67
	. 0%	13%	0%	0%	0%	13.8%
Freedom National Community Dep.	0	0	0	5,030,196	0	\$ 5,030,195.63
	0%	0%	0%	2%	0%	1.8%
TD Bank	0	0	0	8,222,139	0	\$ 8,222,139.38
	0%	0%	0%	3%	0%	2.9%
BankNewport Community Deposit	0	3,841,223	0	0	0	\$ 3,841,223.03
	0%	1%	0%	0%	0%	1.3%
TOTALS	-	53,194,346	10,321,317	154,019,896	42,083,151	\$ 286,619,826.29
(%) PORTFOLIO	0.0%	18.6%	3.6%	53.7%	14.7%	100.0%

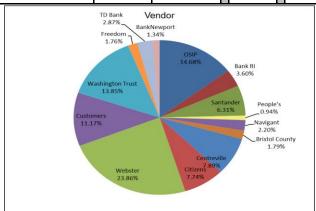
# State of Rhode Island Short Term Cash Monthly Performance Performance for November 01, 2019 to November 30, 2019

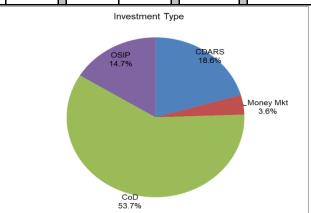
Fund Name	Ве	eginning Balance		Ending Balance	Α	verage Daily Balance		Earnings	Yield(Annual)
GENERAL FUND	\$	122,670,634.74	\$	50,606,219.37	\$	106,271,100.45	\$	153,567.92	1.7582%
H.A.V.A	\$	2,336,190.41	\$	2,339,365.07	\$	2,339,276.94	\$	2,643.80	1.3751%
GENERAL FUND (HIST PRES)	\$	568,618.30	\$	569,548.20	\$	569,520.06	\$	844.25	1.8036%
HISTORIC TAX CREDITS	\$	9,948,390.54	\$	9,964,659.89	\$	9,964,167.53	\$	14,770.83	1.8036%
HIGHWAY FUND	\$	54,752,081.81	\$	39,639,112.72	\$	40,983,726.40	\$	61,589.97	1.8284%
T.D.I. RESERVE (DET)	\$	108,661,050.63	\$	129,840,818.24	\$	131,641,579.32	\$	123,563.67	1.1420%
RICAP GL FUND 21	\$	1,100,422.24	\$	1,102,200.35	\$	1,102,144.45	\$	1,677.07	1.8513%
BOND CAPITAL FUND	\$	1,294,326.18	\$	2,695,446.38	\$	2,162,031.46	\$	2,447.69	1.3774%
R.I. CLEAN WATER ACT	\$	3,951,090.44	\$	3,957,166.37	\$	3,956,980.42	\$	5,578.49	1.7152%
STATE LOTTERY FUND	\$	24,274,843.56	\$	25,062,994.47	\$	36,454,513.72	\$	54,422.15	1.8163%
ASSESSED FRINGE BEN ADM	\$	1,738,196.31	\$	741,062.85	\$	924,350.55	\$	1,368.97	1.8019%
AUTO EQUIPMENT SERVICE	\$	4,252.67	\$	4,258.45	\$	4,258.29	\$	4.81	1.3743%
HEALTH INSURANCE FUND	\$	15,184,341.33	\$	3,512,569.77	\$	7,575,539.87	\$	10,896.89	1.7501%
FLEET REVOLVING LOAN FUND	\$	3,964,596.35	\$	3,970,737.94	\$	3,970,700.03	\$	1,137.32	0.3485%
EMPLOYEES RETIREMENT	\$	2,195,641.15	\$	1,669,430.49	\$	7,167,420.16	\$	10,309.59	1.7500%
MUNICIPAL EMPLOYEES RET.	\$	966,213.40	\$	70,878.05	\$	2,757,415.33	\$	3,881.49	1.7126%
RETIREE HEALTH FUND	\$	1,875,508.55	\$	3,378,699.47	\$	2,111,953.12	\$	2,390.60	1.3772%
BOG RETIREE FUND	\$	2,162.10	\$	2,165.04	\$	2,164.96	\$	2.45	1.3769%
RIPTA HEALTH FUND	\$	3,278,199.55	\$	2,782,435.13	\$	2,782,330.31	\$	3,144.53	1.3751%
PERMANENT SCHOOL FUND	\$	734,215.43	\$	735,416.15	\$	735,379.81	\$	1,090.12	1.8036%
TEACHER RETIREE HEALTH FUND	\$	728,082.02	\$	229,082.02	\$	462,397.30	\$	541.60	1.4251%
RI ST POL RETIREE HEALTH	\$	834,589.66	\$	735,425.70	\$	758,730.40	\$	859.08	1.3776%
RI LEG RETIREE HEALTH	\$	860.30	\$	861.47	\$	861.44	\$	0.97	1.3700%
RI JUDICIAL RETIREE HEALTH	\$	342,021.47	\$	342,262.68	\$	342,249.79	\$	386.80	1.3750%
UNIVERSITY COLLEGE	\$	2,951,618.86	\$	2,456,283.05	\$	2,456,161.78	\$	3,637.86	1.8020%
INDUS. BLDG. & MTG. INS.	\$	761,688.22	\$	762,933.87			\$	-	
Operating Funds Totals	\$	365,119,836.22	\$	287,172,033.19	\$	367,496,953.89	\$	460,758.92	1.525%
2012 2021 2022 272172 2		470.045.40		470.045.40		470.004.45		740.05	4.000.00/
BOND CCDL 2006 SERIES C	\$	479,015.13		479,015.13		478,991.46		710.05	1.8036%
GO BND-NTAX 2007 SERIES A	\$	124,237.53		124,237.53		124,231.39		184.16	1.8036%
CCDL10B BOND CAPITAL COMPONENT	\$	950,000.00		950,000.00	\$	949,953.06		1,408.21	1.8036%
CCDL10C	\$	168,298.48				168,565.38		249.88	1.8036%
CCDL2011A	\$	1,180,853.07		1,172,503.07		1,176,063.29		1,743.40	1.8036%
CCDL2012B	\$	5,100,000.00		5,100,000.00		5,099,748.01		7,559.84	1.8036%
GO CCDL 2013A	\$	2,590,915.50		2,590,915.50		2,590,787.48		3,840.57	1.8036%
GO CCDL 2014A	\$	94,193.10		94,193.10		94,188.45		139.62	1.8035%
GO CCDL 2014B	\$	40,664.27		40,664.27		40,662.26		60.28	1.8037%
GO CCDL 2016A	\$	2,492,316.02		2,458,928.12		2,473,274.00		3,666.40	1.8036%
GO CCDL 2016B	\$	3,186,395.03		3,026,752.49		3,095,777.95		4,589.31	1.8036%
GO CCDL 2017	\$	594,422.15		567,212.22		578,974.58		858.29	1.8036%
CCDL99A 1999A	\$	206,569.39		206,569.39	\$	206,559.18		306.20	1.8036%
CLEAN WATER 2007 SERIES A	\$		\$		_	<del></del> -	\$	-	4 000=-1
CCDL2011A CLEAN WATER COMPONENT	\$	4,157.58		4,157.58		4,157.37		6.16	1.8027%
GO CCDL 2018A	\$	5,293,299.50		3,000,000.00		3,993,565.71		5,922.14	1.8042%
GO CCDL 2018B	\$	10,916,435.13		10,916,435.13		10,915,895.74		16,181.67	1.8036%
GO CCDL 2019A	\$	49,070,987.56		38,305,855.72		-	\$	63,706.32	1.8039%
GO CCDL 2019B	\$	25,000,000.00	\$	25,000,000.00	\$	-	\$	37,058.05	1.8036%
Bond Proceeds Fund Totals	\$	107,492,759.44	\$	94,206,012.96	\$	31,991,395.31	\$	148,190.55	1.804%
TANS PROCEEDS	\$	-	\$	-	\$	-	\$	-	
Grand Totals	\$	472,612,595.66	Ġ	381,378,046.15	Ġ	399,488,349.20	Ġ	608,949.47	1.585%

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

#### Issuer Credit Rating November 30, 2019

			Issuer Ratings	S-T Deb	t Rating	L-T Deb	t Rating	Credit Outlook	Rating
Issuer	Type of Instrument*	M/E % Portfolio	Moody's	Moody's	S&P	Moody's	<u>S&amp;P</u>	S&P	Veribanc
Bank of America	-	0.0%	Baa1	P-1	A-1	A2	A-	Stable	GREEN/***
Bank RI	3,4	3.6%	N/R	N/R	N/R	N/R	N/R	N/R	GREEN/***
Bristol County Sav. Bank	4	1.8%	N/R	N/R	N/R	N/R	N/R	N/R	GREEN/***
Centreville Bank	4	7.9%	N/R	N/R	N/R	N/R	N/R	N/R	GREEN/***/BB
Citizens Bank	4	7.7%	Baa1	P-1	A-2	A1	BBB+	Stable	GREEN/***
Customers Bank	4	11.2%	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	2.2%	N/R	N/R	N/R	N/R	N/R	N/R	GREEN/***
Ocean State Inv. Pool	6	14.7%	N/R	N/R	N/R	N/R	N/R	N/R	N/R
People's Credit Union	4	0.9%	N/R	N/R	N/R	N/R	N/R	N/R	GREEN/***
Santander Bank	4	6.3%	A3	P-1	A-1	A2	Α	Stable	GREEN/***/B
TD Bank	4	2.9%	Aa2	P-1	A-1+	A2	AA-	Stable	GREEN/***
Washington Trust	4,7	13.9%	N/R	N/R	N/R	N/R	N/R	N/R	GREEN/***
Webster Bank	4	23.9%	Baa1	P-2	A-2	А3	BBB+	Stable	GREEN/***





CD	= Certificate of Deposit	1*
CDARS	S = Cert.of Dep.Acct Registry Svc	2*
MMKT	= Money Market	3*
CoD	= Collateralized Deposit	4*
OSIP	<ul><li>= Collateralized Deposit</li><li>= Ocean State Investment Pool</li></ul>	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
- C 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
- C Lowest rated class of bonds

### Modifiers:

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

### **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

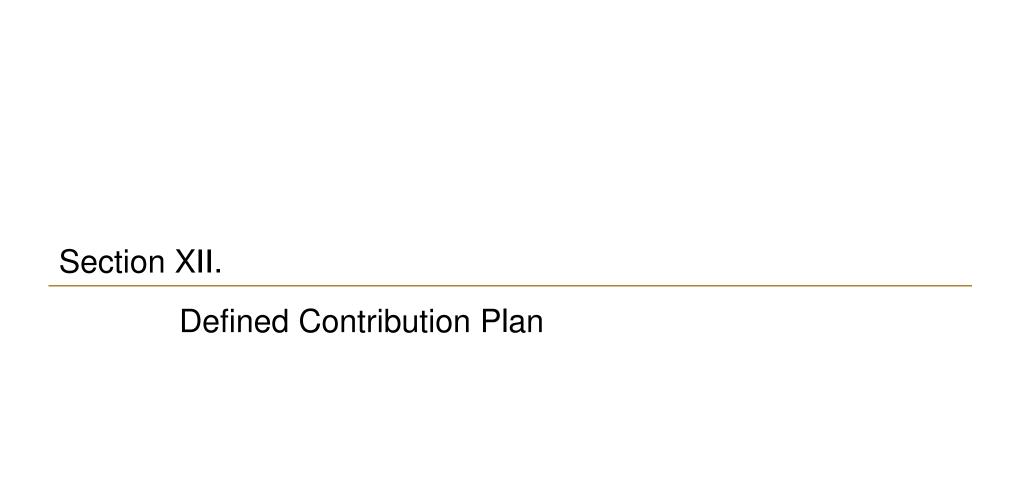
#### S&P Long-Term Debt Ratings:

- 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

Modifiers: + or - show relative standing within the category.
---

### 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.
- RED 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).
- BB Blue Ribbon Bank
- Modifiers: \*\*\*-Very Strong, \*\*-Strong, \*-Moderate, No Stars-Poor





# State of Rhode Island

**401(a) Monthly Performance Summary** 

As of 11/30/2019

**BUILT TO PERFORM.** 

**CREATED TO SERVE.** 

# **State of Rhode Island 401(a) Performance Summary**



As of 11/30/2019

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 monthend, visit the TIAA Website at www.tiaa.org, or call 877 518-9161.

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)	(W)	(X)	(Y)
									Recent	Returns					Annualiz	ed Tota	l Return	s as of 9/30	0/2019					
Investment Name	Ticker	Morningstar Category	Mgr Tenure	AUM \$M	Gross ER	Net ER	%-ile ER	Rev Share	1 Mo	YTD	1 Yr	Category Rank	%-ile	3 Yr	Category Rank	%-ile	5 Yr	Category Rank		10 Yr	Category Rank	%-ile	SI	Incep Date
TABLE VALUE																								
table Value/Guaranteed																								
TIAA Stable Value <sup>1</sup>	Current	crediting rate = 2.40							0.20	2.09	2.23			2.07			1.99						1.95	3/31/20
IXED INCOME																								
ntermediate Core Bond																								
Vanguard Total Bond Market Index I	VBTIX	US Fund Intermediate Core Bond	6.0	67 241,3	9 0.05	0.05	5	0.00	(0.05)	8.88	10.45	55	14	2.91	110	32	3.36	65	22	3.71	108	47	5.17	9/18/19
BBgBarc US Agg Float Adj TR USD						0.50			(0.06)	8.97	10.44			2.96			3.40			3.79				
Intermediate Core Bond Mediar Intermediate Core Bond Number of Funds						0.58	404		(0.07)	8.49	9.69		399	2.64		379	3.02		363	3.70		333		
nflation-Protected Bond							101						000			010			000			000		
PIMCO Real Return Insti	PRRIX		11.8	33 9,1	0.98	0.98	69	0.00	0.27	7.90	6.54	54	37	2.27	25	16	2.13	39	33	3.52	6	10	5.68	1/29/1
BBgBarc US Treasury US TIPS TR USD									0.15	8.02	7.13			2.21			2.45			3.46				
Inflation-Protected Bond Median Inflation-Protected Bond Number of Funds						0.66	215		0.18	7.05	5.74		215	1.76		207	1.76		203	2.84		146		
illiador i rotodo Bora Hamber of Fanac							210						210			201			200			140		
QUITY																								
arge Cap Blend																								
Vanguard Institutional Index I		US Fund Large Blend	18.8	33 227,2	0.04	0.04	2	0.00		27.62	4.23	448	33	13.36	193	19	10.81	112	13	13.22	55	8	9.84	7/31/19
${\it S\&P~500~TR~USD} \\ {\it Vanguard~FTSE~Social~Index~Admiral}^{6,7}$		US Fund Large Blend	3.8	3 6,4	69 0.14	0.14	5	0.00	3.63 4.12	27.63 <b>29.63</b>	4.25 <b>5.30</b>		24	13.39 <b>14.64</b>		5	10.84 <b>11.66</b>		5	13.24 13.79		3	11.81	2/7/2
Spliced Social Index Admiral		03 Fulld Large Blelld	3.0	03 0,4	9 0.14	0.14	3	0.00	4.12	29.77	5.35		24	14.74		3	11.77		3	13.79		3	11.01	2/1/20
FTSE 4Good US Select PR USD									3.94	27.61	3.39			12.67			9.71			11.96				
Russell 3000 TR USD									3.80	27.34	2.92			12.83			10.44			13.08				
Large Blend Mediar Large Blend Number of Funds						0.87	1,350		3.56	25.98	2.94		1,317	12.00		1,241	9.18		1,185	11.96		1,029		
lid-Cap Blend							1,000						1,011			1,211			1,100			1,020		
Vanguard Mid Cap Index Institutional	VMCIX	US Fund Mid-Cap Blend	21.4	12 105,4	0.04	0.04	2	0.00	3.21	27.96	3.65	77	20	10.68	56	20	9.21	33	15	13.06	12	8	9.82	5/21/1
Spliced Mid Cap Index <sup>3</sup>									3.22	27.99	3.70			10.70			9.24			13.10				
CRSP US Mid Cap TR USD Mid-Cap Blend Mediar						1.00			3.22 3.37	27.99 24.15	3.70 (1.98)			10.70 8.79			9.24 6.71			13.14 10.79				
міd-Сар Blend Number of Funds						1.00	396		3.37	24.10	(1.90)		391	0.79		373	0.71		337	10.79		288		
mall Blend																								
Vanguard Small Cap Index I	VSCIX	US Fund Small Blend	3.5	0 90,2	27 0.04	0.04	2	0.00	4.16	24.67	(3.80)	127	20	9.64	75	13	8.63	108	22	12.40	32	9	8.74	7/7/19
Spliced Small Cap Index '									4.14	24.62	(3.80)			9.61			8.60			12.35				
CRSP US Small Cap TR USD Small Blend Mediar						1.09			4.14 3.55	24.62 21.20	(3.80) (7.97)			9.61 7.40			8.60 7.33			12.71 10.86				
Small Blend Number of Funds						1.03	698		0.00	21.20	(1.31)		695	7.40		676	7.00		605	10.00		507		
oreign Large Blend																								
Schwab International Index		US Fund Foreign Large Blend	2.5	50 5,2	35 0.06	0.06	3	0.00		18.25	(1.02)	211	33	6.50	108	20	3.34	124	30	4.90	121	35	4.24	5/19/19
MSCI EAFE NR USD						0.97			1.13 1.30	18.17 17.72	(1.34) (2.53)			6.48 5.44			3.27 2.81			4.90 4.66				
Foreign Large Blend Median																								

# **State of Rhode Island 401(a) Performance Summary**



As of 11/30/2019

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(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(0)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)	(W)	(X)	(Y)
									Recent	Returns					Annualiz	zed Tota	II Return	s as of 9/3	0/2019					
			Mgr	AUM	Gross	Net	%-ile	Rev				Category			Category			Category			Category			Incep
Investment Name	Ticker	Morningstar Category	Tenure	\$M	ER	ER	ER	Share	1 Mo	YTD	1 Yr	Rank		3 Yr	Rank	%-ile	5 Yr			10 Yr	Rank	%-ile	SI	Date
EQUITY																								
Diversified Emerging Mkts																								
Vanguard Emerging Mkts Stock Idx Adm	VEMAX	US Fund Diversified Emerging Mkts	11 '	17 83.54	1 0 14	0.14	2	0.00	0.20	12.48	1.27	341	34	5.26	348	49	2.01	286	48	3.16	131	52	4.94	6/23/2006
Spliced Emerging Markets Index		C 00 I did Diversified Efficigling Mikts		17 00,04	0.14	0.14	-	0.00	0.12	12.68	1.16	341	34	5.41	340	70	1.97	200	70	3.25	131	32	4.54	0/23/2000
MSCI EM NR US									(0.14)	10.20	(2.02)			5.97			2.33			3.37				
FTSE Emerging NR US									0.28	12.30	0.86			6.12			2.56			3.55				
FTSE EMs AC China A Incl (US RIC) NR US									0.12	12.69	1.16			5.41			2.34			3.55				
Diversified Emerging Mkts Media						1.26			0.85	11.90	0.58			5.33			2.14			3.55				
Diversified Emerging Mkts Number of Fund							802						779			718			630			344		
5 5																								
ALLOCATION																								
Target-Date																								
Vanguard Target Retire Inc Trust I		US Fund Target-Date Retirement			0.07	0.07			0.77	12.14	6.82		13	5.14		42	4.64		32	5.84		21	5.13	6/22/2007
Vanguard Target Retirement Income Composit	te								0.75	12.22	6.83			5.24			4.73			5.90				
Target-Date Retirement Media						0.67			0.85	11.90	5.87			4.65			3.97			5.33				
Target-Date Retirement Number of Fund							198						198			176			157			129		
Vanguard Target Retire 2015 Trust I		US Fund Target-Date 2015			0.07	0.07			0.96	13.51	6.08		15	6.23		32	5.40		33	7.34		22	5.14	6/28/2007
Vanguard Target Retirement 2015 Composit	te	·							0.94	13.62	6.17			6.36			5.51			7.40				
Target-Date 2015 Media	an					0.40			1.12	13.29	5.03			5.87			5.02			6.97				
Target-Date 2015 Number of Fund	ds						69						136			109			91			72		
Vanguard Target Retire 2020 Trust I		US Fund Target-Date 2020			0.07	0.07			1.33	15.74	5.35		22	7.14		19	6.06		15	8.05		21	5.41	6/22/2007
Vanguard Target Retirement 2020 Composit									1.31	15.85	5.45			7.27			6.16			8.19				
Target-Date 2020 Media						0.42			1.24	14.10	4.82			6.25			5.22			7.14				
Target-Date 2020 Number of Fund	ds						148						253			222			194			141		
Vanguard Target Retire 2025 Trust I		US Fund Target-Date 2025			0.07	0.07			1.60	17.45	4.95		26	7.85		14	6.48		14	8.57		26	5.47	6/28/2007
Vanguard Target Retirement 2025 Composit						0.40			1.56	17.53	5.02			7.98			6.58			8.71				
Target-Date 2025 Media Target-Date 2025 Number of Fund						0.42	444		1.49	15.82	4.41		220	6.99		209	5.73		400	7.88		115		
Vanguard Target Retire 2030 Trust I	IS	US Fund Target-Date 2030			0.07	0.07	141		1.81	18.49	4.25		239 <b>33</b>	8.38		209 <b>22</b>	6.75		182 <b>23</b>	9.01		115 <b>26</b>	5.52	6/28/2007
Vanguard Target Retire 2030 Trust I	to.	03 Fullu Talget-Date 2030			0.07	0.07			1.77	18.60	4.30		33	8.50		22	6.86		23	9.16		20	J.J2	0/20/2007
Target-Date 2030 Media						0.45			1.72	17.36	3.80			7.66			6.11			8.19				
Target-Date 2030 Number of Fund						0.70	148			11.00	0.00		245	7.00		215	0		187	0.70		134		
Vanguard Target Retire 2035 Trust I		US Fund Target-Date 2035			0.07	0.07			2.03	19.56	3.49		38	8.87		19	7.02		23	9.44		19	5.67	6/28/2007
Vanguard Target Retirement 2035 Composit	te								1.98	19.66	3.57			9.00			7.13			9.58				
Target-Date 2035 Media	an					0.43			1.93	18.95	2.88			8.28			6.45			8.64				
Target-Date 2035 Number of Fund	ds						141						233			203			176			109		
Vanguard Target Retire 2040 Trust I		US Fund Target-Date 2040			0.07	0.07			2.24	20.58	2.69		42	9.35		16	7.24		21	9.71		18	5.91	6/28/2007
Vanguard Target Retirement 2040 Composit	te								2.19	20.73	2.83			9.51			7.39			9.87				
Target-Date 2040 Media						0.46			2.11	19.71	2.28			8.59			6.62			8.74				
Target-Date 2040 Number of Fund	ds						148						245			215			187			134		

# State of Rhode Island 401(a) Performance Summary



As of 11/30/2019

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(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(0)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)	(W)	(X)	(Y)
									Recent	Returns					Annualiz	ed Tota	ıl Return	s as of 9/3	0/2019					
Investment Name	Ticker	Morningstar Category	Mgr Tenure	AUM \$M	Gross ER	Net ER	%-ile ER	Rev Share	1 Mo	YTD	1 Yr	Category Rank	%-ile	3 Yr	Category Rank	%-ile	5 Yr	Category Rank	%-ile	10 Yr	Category Rank	%-ile	SI	Incep Date
ALLOCATION																								
Target-Date																								
Vanguard Target Retire 2045 Trust I		US Fund Target-Date 2045			0.07	0.07			2.43	21.40	2.16		56	9.49		16	7.32		22	9.75		26	5.91	6/28/2007
Vanguard Target Retirement 2045 Con	nposite	·							2.37	21.58	2.32			9.66			7.49			9.92				
Target-Date 2045 I						0.45			2.27	20.56	1.96			8.80			6.78			8.99				
Target-Date 2045 Number of	Funds						141						233			203			176			108		
Vanguard Target Retire 2050 Trust I		US Fund Target-Date 2050			0.07	0.07			2.42	21.37	2.14		45	9.48		19	7.31		31	9.76		25	5.96	6/28/2007
Vanguard Target Retirement 2050 Con						0.40			2.37	21.58	2.32			9.66			7.49			9.92				
Target-Date 2050 I						0.46	4.45		2.31	20.53	1.93		245	8.86		245	6.79		407	9.04		109		
Target-Date 2050 Number of Vanguard Target Retire 2055 Trust I	runas	US Fund Target-Date 2055			0.07	0.07	145		2.43	21.38	2.14		53	9.48		215 18	7.29		187 <b>40</b>			109	9.52	10/5/2010
Vanguard Target Retirement 2055 Con	nnosite	00 I und larget-Date 2003			0.07	0.01			2.37	21.58	2.32		33	9.66		10	7.49		40				3.32	10/3/2010
Target-Date 2055 I						0.45			2.38	21.39	1.78			8.94			6.83							
Target-Date 2055 Number of							135						233			200			170					
Vanguard Target Retire 2060 Trust I		US Fund Target-Date 2060+			0.07	0.07			2.43	21.37	2.14		51	9.49		29	7.30		45				9.23	3/1/2012
Vanguard Target Retirement 2060 Con	nposite								2.37	21.58	2.32			9.66			7.49							
Target-Date 2060+ I						0.44			2.39	20.99	1.84			9.06			7.28							
Target-Date 2060+ Number of	Funds						78						222			146			42					
Vanguard Target Retire 2065 Trust I		US Fund Target-Date 2060+			0.07	0.07			2.40	21.39	2.25		45										8.65	7/21/2017
Vanguard Target Retirement 2060 Con									2.37	21.58	2.32													
Target-Date 2060+ I						0.44	70		2.39	20.99	1.84		000											
Target-Date 2060+ Number of	runas						78						222											

#### Source: Morningstar & TIAA

1 month and YTD (Year To Date) returns are as of 11/30/19. All others returns and data are as of 09/30/19.

%-ile --> Percentile Ranking in Morningstar Category

Note: Rankings shown for returns are calculated by Morningstar. Rankings for expense ratio is calculated by TIAA and may differ based on calculation methods

Morningstar peer rankings include fractional weights for all share classes. Morningstar peer rankings also include ETFs. Depending on the category, this may cause some variances with the category median illustrated in this report since most ETFs are index based options that can include more volatile and less mainstream indices.

SI = Since Inception Annualized Total Return; Incep. Date = Since Inception Date (SI return is calculated from this date)

You cannot invest directly in an index.

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.

The expense ratio paid by an investor is the net expense ratio as stated in the prospectus. The net expense ratio reflects total annual fund operating expenses excluding interest expense. If interest expense was included, returns would have been lower.

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

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

<sup>1</sup> The TIAA Stable Value Inception Date represents the date that the plan's TIAA Stable Value record was initiated on TIAA-CREF's recordkeeping system which may be earlier than the date of first deposit to the contract.

<sup>&</sup>lt;sup>2</sup>Calvert Social Index through December 16, 2005; FTSE4Good US Select Index thereafter

<sup>3</sup> S&P MidCap 400 Index through May 16, 2003; the MSCI US Mid Cap 450 Index through January 30, 2013; and the CRSP US Mid Cap Index thereafter

<sup>&</sup>lt;sup>4</sup> Russell 2000 Index through May 16, 2003; the MSCI US Small Cap 1750 Index through January 30, 2013; and the CRSP US Small Cap Index thereafter

<sup>&</sup>lt;sup>5</sup> Spliced Emerging Markets Index reflects performance of the Select Emerging Markets Index through August 23, 2006; the MSCI Emerging Markets Index through January 9, 2013; FTSE Emerging Transition Index through June 27, 2013; FTSE Emerging Markets All Cap China A Transition Index through September 18, 2016; and FTSE Emerging Markets All Cap China A Inclusion Index through September 18, 2016; and FTSE Emerging Markets All Cap China A Inclusion Index through September 18, 2016; and FTSE Emerging Markets All Cap China A Inclusion Index through September 18, 2016; and FTSE Emerging Markets All Cap China A Inclusion Index through September 18, 2016; and FTSE Emerging Markets All Cap China A Inclusion Index through September 18, 2016; and FTSE Emerging Markets All Cap China A Inclusion Index through September 18, 2016; and FTSE Emerging Markets All Cap China A Inclusion Index through September 18, 2016; and FTSE Emerging Markets All Cap China A Inclusion Index through September 18, 2016; and FTSE Emerging Markets All Cap China A Inclusion Index through September 18, 2016; and FTSE Emerging Markets All Cap China A Inclusion Index through September 18, 2016; and FTSE Emerging Markets All Cap China A Inclusion Index through September 18, 2016; and FTSE Emerging Markets All Cap China A Inclusion Index through September 18, 2016; and FTSE Emerging Markets All Cap China A Inclusion Index through September 18, 2016; and FTSE Emerging Markets All Cap China A Inclusion Index through September 18, 2016; and FTSE Emerging Markets All Cap China A Inclusion Index through September 18, 2016; and FTSE Emerging Markets All Cap China A Inclusion Index through September 18, 2016; and FTSE Emerging Markets All Cap China A Inclusion Index through September 18, 2016; and FTSE Emerging Markets All Cap China A Inclusion Index through September 18, 2016; and FTSE Emerging Markets All Cap China A Inclusion Index through September 18, 2016; and FTSE Emerging Markets All Cap China A Inclusion Index through September 18, 2016; and FTSE Emerg

<sup>&</sup>lt;sup>6</sup> Investor share migrated to Admiral share 08/1/2019

<sup>&</sup>lt;sup>7</sup> Performance shown for periods prior to the inception date reflects the performance of an oldest share class of the fund/account or underlying fund. Total returns have not been restated to reflect any expense differential between any of the classes. Had the expense differential been reflected, total returns for the fund may have been higher or lower. Category ranks are not available for periods prior to the inception of the fund.

### **Disclosures**



As of 11/30/2019

Investing in non-investment grade securities presents special risks, including significantly higher interest-rate and credit risk.

Small-cap and mid-cap stocks may have limited marketability and may be subject to more abrupt or erratic market movements than large-cap stocks.

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

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

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

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

Any guarantees under annuities issued by TIAA are subject to TIAA's claims-paying ability. TIAA Stable Value is a 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.

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.

Morningstar Ranking/Number of Funds in Category displays the Fund's actual rank within its Morningstar Category based on average annual total return and number of funds in that Category. The returns assume reinvestment of dividends and do not reflect any applicable sales charge. Absent expense limitation, total return would be less. Morningstar Percentile Rankings are the Fund's total return rank relative to all funds in the same Morningstar category, where 1 is the highest percentile and 100 is the lowest percentile.

### **Disclosures**



As of 11/30/2019

### **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, 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.

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.

# **State of Rhode Island - Plan Balance Summary**

401(a)/414(h)(2)
State of Rhode Island Defined Contribution Retirement Plan



As of 11/30/2019

Ticker	Investment Name	Asset Class Description	Total
PRRIX	PIMCO Real Return Inst Class	Fixed Income	\$7,224,211.15
SWISX	Schwab International Index Fd	Equities	\$8,612,274.59
TSVX#	TIAA STABLE VALUE	Guaranteed	\$15,708,329.32
VBTIX	Vanguard Ttl Bd Mkt Idx Inst	Fixed Income	\$8,423,845.31
VEMAX	Vanguard Emr Mkts Stk ldx Adm	Equities	\$5,979,964.73
VFTAX	Vanguard FTSE Social Index Adm	Equities	\$4,050,630.27
VINIX	Vanguard Inst Idx Inst	Equities	\$35,939,772.56
VMCIX	Vanguard Mid-Cap Idx Inst	Equities	\$13,612,337.42
VSCIX	Vanguard Small-Cap Idx Inst	Equities	\$13,878,228.10
VT15#	Vanguard Tgt Rtmt 2015 Tr I	Multi-Asset	\$42,245,902.82
VT20#	Vanguard Tgt Rtmt 2020 Tr I	Multi-Asset	\$109,800,248.92
VT25#	Vanguard Tgt Rtmt 2025 Tr I	Multi-Asset	\$144,945,165.42
VT30#	Vanguard Tgt Rtmt 2030 Tr I	Multi-Asset	\$157,019,601.30
VT35#	Vanguard Tgt Rtmt 2035 Tr I	Multi-Asset	\$175,843,796.35
VT40#	Vanguard Tgt Rtmt 2040 Tr I	Multi-Asset	\$142,006,711.02
VT45#	Vanguard Tgt Rtmt 2045 Tr I	Multi-Asset	\$108,805,580.04
VT50#	Vanguard Tgt Rtmt 2050 Tr I	Multi-Asset	\$65,883,132.68
VT55#	Vanguard Tgt Rtmt 2055 Tr I	Multi-Asset	\$28,706,745.09
VT60#	Vanguard Tgt Rtmt 2060 Tr I	Multi-Asset	\$5,915,915.65
VT65#	Vanguard Target Rtmt 2065 Tr I	Multi-Asset	\$392,589.84
VTIN#	Vanguard Tgt Rtmt Income Tr I	Multi-Asset	\$11,339,568.54
	STATE OF RHODE ISLAND DEFINED CONTRI	BUTION RETIREMENT PLAN Total	\$1,106,334,551.12

# **State of Rhode Island - Plan Balance Summary**

401(a)

Rhode Island FICA 406403 Alternative Retirement Income Security Program



As of 11/30/2019

Ticker	Investment Name	Asset Class Description	Total
TSVX#	TIAA STABLE VALUE	Guaranteed	\$2,261.69
VT15#	Vanguard Tgt Rtmt 2015 Tr I	Multi-Asset	\$13,945.41
VT20#	Vanguard Tgt Rtmt 2020 Tr I	Multi-Asset	\$1,485,376.76
VT25#	Vanguard Tgt Rtmt 2025 Tr I	Multi-Asset	\$178,380.97
VT30#	Vanguard Tgt Rtmt 2030 Tr I	Multi-Asset	\$196,995.41
VT35#	Vanguard Tgt Rtmt 2035 Tr I	Multi-Asset	\$117,234.89
VT40#	Vanguard Tgt Rtmt 2040 Tr I	Multi-Asset	\$96,891.26
VT45#	Vanguard Tgt Rtmt 2045 Tr I	Multi-Asset	\$117,446.07
VT50#	Vanguard Tgt Rtmt 2050 Tr I	Multi-Asset	\$132,292.35
VT55#	Vanguard Tgt Rtmt 2055 Tr I	Multi-Asset	\$251,645.46
VT60#	Vanguard Tgt Rtmt 2060 Tr I	Multi-Asset	\$649,807.86
VT65#	Vanguard Target Rtmt 2065 Tr I	Multi-Asset	\$203,108.23
VTIN#	Vanguard Tgt Rtmt Income Tr I	Multi-Asset	\$13,603.17
	RHODE ISLAND FICA ALTERNATIVE RET INCOME	SECURITY PROGRAM Total	\$3,458,989.53

## **Disclosures**



TIAA is providing educational services concerning plan menu construction and the plan sponsor's fiduciary duties under its plan. It is not providing investment advice and is not a plan fiduciary with respect to the education and information presented herein. Note also that TIAA cannot and does not provide legal advice and that we recommend that you seek such advice from your own legal advisors.

TIAA 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 hypothetical investor over the requested time period. The return for one year is calculated using the same formula as one month. TIAA calculates returns by \$1,000 owned by hypothetical investor for one month then links returns for requested time period. Both set of returns would include dividends and capital gains, if applicable.

Investment products may be subject to market and other risk factors. See the applicable product literature or visit tiaa.org for details. You should consider the investment objectives, risks, charges and expenses carefully before investing. Please call 877-518-9161 or go to www.TIAA.org/prospectuses for current product and fund prospectuses that contain this and other information. Please read the prospectuses carefully before investing.

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1037981



457 Plans



# State of Rhode Island

**457(b) Monthly Performance Summary** 

As of 11/30/2019

**BUILT TO PERFORM.** 

**CREATED TO SERVE.** 

# **State of Rhode Island 457(b) Performance Summary**



As of 11/30/2019

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

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L	(M)	(1	N) (C	0)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)	(W)	(X)	(Y)
									Recent	Returns	,					Annualize	d Total I	Returns	s as of 9/3	0/2019					
Investment Name	Ticker	Morningstar Category	Mgr Tenure	AUM \$M	Gross ER	Net ER	%-ile ER	Rev Share	1 Mo	YTD	11	Catego r Rani		-ile 3		Category Rank	%-ile	5 Yr	Category Rank	%-ile	10 Yr	Category Rank	%-ile	SI	Incep Date
GUARANTEED Guaranteed																									
TIAA Traditional RCP	Current c	rediting rate = 2.75							(	).26 2.	.98	3.30			3.35			3.43			3.46			3.69	6/1/2006
FIXED INCOME																									
Intermediate Core Bond																									
Vanguard Total Bond Market Index I	VBTIX	US Fund Intermediate Core Bond		6.67 241,3	09 0.0	5 0.05	6		0.00 (0.	05) 8.	.88	10.45	55	14	2.91	110	32	3.36	65	22	3.71	108	47	5.17	9/18/1995
BBgBarc US Agg Float Adj TR USD									(0.	06) 8.	.97	10.44			2.96			3.40			3.79				
Intermediate Core Bond Median						0.58			(0.	07) 8.	49	9.69			2.64			3.02			3.70				
Intermediate Core Bond Number of Funds							404	1						399			379			363			333		
Intermediate Core-Plus Bond																									
PIMCO Total Return Insti	PTTRX	US Fund Intermediate Core-Plus B	ond	5.08 68,3	81 0.7	1 0.71	51						180	30	3.56	130	24	3.58		33	4.32	162	53	7.18	5/11/1987
BBgBarc US Agg Bond TR USD						0.70						10.30			2.92			3.38			3.75				
Intermediate Core-Plus Bond Median Intermediate Core-Plus Bond Number of Funds						0.70	623	2	(0.	40) 8.	52	9.52 612		612	3.18		581	3.33		531	4.38		469		
Inflation-Protected Bond							020					OIL		012			001			001			100		
American Century Inflation-Adjs Bond R6 <sup>5</sup>	ALADY	US Fund Inflation-Protected Bond	1	7.92 2,5	13 0.2	2 0.22	9		0.00 0.	17 7	.71	6.48	60	40	1.87		55	2.07		36	3.01		49	3.14	7/28/2017
BBgBarc US Treasury US TIPS TR USD	AIADA	03 Fulla lilliation-Flotectea Bolla		1.52 2,5	13 0.2	2 0.22	. 3		0.00 0.			7.13	00	40	2.21		33	2.45		30	3.46		43	3.14	112012011
Inflation-Protected Bond Median						0.66			0.	18 7.	.05	5.74			1.76			1.76			2.84				
Inflation-Protected Bond Number of Funds							215	5						215			207			203			146		
EQUITY																									
Large Cap Blend Vanguard Institutional Index I	VINIX	US Fund Large Blend		8.83 227,2	92 0.0	4 0.04	2		0.00 3.	20 07	7.62	4.23	448	33	13.36	193	19	10.81	112	13	13.22	55	8	9.84	7/31/1990
S&P 500 TR USD	VINIX	03 Fullu Large Biellu		0.03 221,2	92 0.0	4 0.04			3.0			4.25	440	33	13.39	193	19	10.84		13	13.24	33	0	9.04	1/31/1990
Vanguard FTSE Social Index Admiral 4,5	VFTAX	US Fund Large Blend		3.83 6,4	69 0.1	4 0.14	. 5		0.00 4			5.30		24	14.64		5	11.66		5	13.79		3	11.81	2/7/2019
Spliced Social Index <sup>1</sup>		<b>.</b>							4.			5.35			14.74			11.77	,		13.93				
FTSE 4Good US Select PR USD									3.			3.39			12.67			9.71			11.96				
Russell 3000 TR USD Large Blend Median						0.87			3.			2.92 2.94			12.83 12.00			10.44 9.18			13.08 11.96				
Large Blend Number of Funds						0.07	1.35	0	3.	00 20	.90	2.94		1,317	12.00		1,241	9.10		1.185	11.90		1,029		
Mid-Cap Blend							1,00							1,011			1,211			1,100			1,020		
Vanguard Mid Cap Index Institutional	VMCIX	US Fund Mid-Cap Blend	2	1.42 105,4	04 0.0	4 0.04	2		0.00 3.	21 27	.96	3.65	77	20	10.68	56	20	9.21	33	15	13.06	12	8	9.82	5/21/1998
Spliced Mid Cap Index <sup>2</sup>		r		,								3.70			10.70			9.24			13.10				
CRSP US Mid Cap TR USD									3			3.70			10.70			9.24			13.14				
Mid-Cap Blend Median						1.00			3.	37 24	1.15	(1.98)			8.79			6.71			10.79				
Mid-Cap Blend Number of Funds					_		396	)			_			391	_		373			337			288		
Small Blend	110.01:	110.5										(0.00)	407						40-		40.45			0.74	=1=14
Vanguard Small Cap Index I  Spliced Small Cap Index <sup>3</sup>	VSCIX	US Fund Small Blend		3.50 90,2	27 0.0	4 0.04	2		0.00 4.			` '	127	20	9.64	75	13	8.63		22	<b>12.40</b> 12.35	32	9	8.74	7/7/1997
Spliced Small Cap Index ° CRSP US Small Cap TR USD									4. 4.			(3.80) (3.80)			9.61 9.61			8.60 8.60			12.35				
Small Blend Median						1.09			3.			(7.97)			7.40			7.33			10.86				
Small Blend Number of Funds							698							695			676			605			507		

# State of Rhode Island 457(b) Performance Summary



As of 11/30/2019

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(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(F	()	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)	(W)	(X)	(Y)
									Recer	nt Retu	rne					Δnnuali	ed Total	Returns	as of 9/30	1/2019					
							٠, ،،		recon	T TCTU							cu rotur			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
Investment Name	Ticker	Morningstar Category	Mgr Tenure	AUM \$M	Gross ER	Net ER	%-ile ER	Rev Share	1 Mo	Y	TD .	1 Yr	Category Rank	%-ile	3 Yr	Category Rank	%-ile	5 Yr	Category Rank	%-ile	10 Yr	Category Rank	%-ile	SI	Incep Date
EQUITY																									
Foreign Large Blend																									
Schwab International Index	SWIS	US Fund Foreign Large Blend		2.50	5,235 0.0	6 0.0	6 3		0.00	1.22	18.25	(1.02	2) 211	33	6.5	0 108	20	3.34	124	30	4.90	121	35	4.24	5/19/19
MSCI EAFE NR USI										1.13	18.17				6.4			3.27			4.90				
Foreign Large Blend Media						0.9			1	1.30	17.72	(2.53	3)		5.4	4		2.81			4.66				
Foreign Large Blend Number of Fund	S						710							675	j		641	_		573			488		
Foreign Large Growth																									
American Funds Europacific Growth R6	RERG	US Fund Foreign Large Growth	1	8.33 15	8,448 0.4	9 0.4	9 4		0.00	2.05	22.15			41			39	5.02	133	44	6.07	124	56	8.66	5/1/20
MSCI ACWI Ex USA NR USI										0.88	16.47	(1.23			6.3			2.90			4.45				
Foreign Large Growth Media						1.0				2.09	23.33	0.35			6.9	7		4.66			6.14				
Foreign Large Growth Number of Fund	S						482							466	3		439			406			336		
ALLOCATION																									
Target-Date																									
Vanguard Target Retire Inc Trust I		US Fund Target-Date Retirement			0.0	7 0.0	7		(	0.77	12.14	6.82		13	5.1	4	42	4.64		32	5.84		21	5.13	6/22/200
Vanguard Target Retirement Income Composit	9								(	0.75	12.22	6.83			5.2	24		4.73			5.90				
Target-Date Retirement Media						0.6	7			0.85	11.90	5.87			4.6			3.97			5.33				
Target-Date Retirement Number of Fund						0.0	198	3		0.00	11.00	0.01		198		•	176	0.07		157	0.00		129		
Vanguard Target Retire 2015 Trust I		US Fund Target-Date 2015			0.0	7 0.0				0.96	13.51	6.08		15		:3	32	5.40		33	7.34		22	5.14	6/28/200
Vanguard Target Retirement 2015 Composit	е	-							(	0.94	13.62	6.17			6.3	6		5.51			7.40				
Target-Date 2015 Media	n					0.4	)			1.12	13.29	5.03			5.8	7		5.02			6.97				
Target-Date 2015 Number of Fund	S						69							130			109			91			72		
Vanguard Target Retire 2020 Trust I		US Fund Target-Date 2020			0.0	7 0.0	7			1.33	15.74			22			19	6.06		15	8.05		21	5.41	6/22/200
Vanguard Target Retirement 2020 Composit							,			1.31	15.85	5.45			7.2			6.16			8.19				
Target-Date 2020 Media Target-Date 2020 Number of Fund						0.4	14	2		1.24	14.10	4.82		25	6.2	5	222	5.22		194	7.14		141		
Vanguard Target Retire 2025 Trust I	S	US Fund Target-Date 2025			0.0	7 0.0		,		1.60	17.45	4.95		26		15	14	6.48		194	8.57		26	5.47	6/28/200
Vanquard Target Retirement 2025 Composit	e	00 Tunu Taiget-Date 2020			0.0	, 0.0	1			1.56	17.53			20	7.9			6.58		17	8.71		20	3.47	0/20/200
Target-Date 2025 Media						0.4	2			1.49	15.82				6.9			5.73			7.88				
Target-Date 2025 Number of Fund	S						14	1						239	9		209			182			115		
Vanguard Target Retire 2030 Trust I		US Fund Target-Date 2030			0.0	7 0.0	7			1.81	18.49	4.25	i	33	8.3	8	22	6.75		23	9.01		26	5.52	6/28/200
Vanguard Target Retirement 2030 Composit									1	1.77	18.60	4.30			8.5			6.86			9.16				
Target-Date 2030 Media						0.4				1.72	17.36	3.80			7.6	6		6.11			8.19				
Target-Date 2030 Number of Fund	S						14	3			40.50			24		_	215			187			134		0/00/000
Vanguard Target Retire 2035 Trust I  Vanguard Target Retirement 2035 Composit	_	US Fund Target-Date 2035			0.0	7 0.0	<b>'</b>			<b>2.03</b> 1.98	<b>19.56</b> 19.66	3.49 3.57		38	8.8 9.0		19	7.02 7.13		23	9.44 9.58		19	5.67	6/28/200
vanguard Target Retirement 2035 Composit Target-Date 2035 Media						0.4	3			1.96 1.93	18.95				9.0 8.2			6.45			8.64				
Target-Date 2035 Number of Fund						0.4	14	1		1.00	10.00	2.00		233			203	0.70		176	0.04		109		
Vanguard Target Retire 2040 Trust I	-	US Fund Target-Date 2040			0.0	7 0.0				2.24	20.58	2.69		42		15	16	7.24		21	9.71		18	5.91	6/28/200
Vanguard Target Retirement 2040 Composit	е	· · · •								2.19	20.73	2.83			9.5			7.39			9.87				
Target-Date 2040 Media						0.4	6			2.11	19.71	2.28			8.5	9		6.62			8.74				
Target-Date 2040 Number of Fund	S						14	3						24	5		215			187			134		

# State of Rhode Island 457(b) Performance Summary



As of 11/30/2019

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(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)	(W)	(X)	(Y)
									Recent R	eturns					Annualiz	zed Total	Return	s as of 9/3	0/2019					
Investment Name	Ticker	Morningstar Category	Mgr Tenure	AUM \$M	Gross ER	Net ER	%-ile ER	Rev Share	1 Mo	YTD	1 Yr	Category Rank	%-ile	3 Yr	Category Rank	%-ile	5 Yr	Category Rank	%-ile	10 Yr	Category Rank	%-ile	SI	Incep Date
ALLOCATION																								
Target-Date																								
Vanguard Target Retire 2045 Trust I		US Fund Target-Date 2045			0.07	0.07			2.43	21.40	2.1	16	56	9.4	19	16	7.32	2	22	9.75		26	5.91	6/28/2007
Vanguard Target Retirement 2045 Composi									2.37	21.58				9.6			7.49			9.92				
Target-Date 2045 Media						0.45			2.27	20.56	1.9	96	00	8.8	80	000	6.78	}	470	8.99		400		
Target-Date 2045 Number of Fund Vanguard Target Retire 2050 Trust I	as	US Fund Target-Date 2050			0.07	0.07	14	1	2.42	21.37	2.1	14	23 <b>4</b> 5		IR.	203 <b>19</b>	7.31	ı	176 <b>31</b>	9.76		108 <b>25</b>	5.96	6/28/2007
Vanguard Target Retirement 2050 Composi	ite	55 Tuna Taiget Bate 2000			0.01	0.01			2.37	21.58				9.6			7.49		٠.	9.92			0.50	0/20/2001
Target-Date 2050 Media						0.46			2.31	20.53	1.9	93		8.8	36		6.79	)		9.04				
Target-Date 2050 Number of Fund	ds						14	5					24			215			187			109		
Vanguard Target Retire 2055 Trust I		US Fund Target-Date 2055			0.07	0.07			2.43	21.38			53			18	7.29		40				9.52	10/5/2010
Vanguard Target Retirement 2055 Composi Target-Date 2055 Media						0.45			2.37 2.38	21.58 21.39				9.6 8.9			7.49 6.83							
Target-Date 2055 Number of Fund						0.40	69	)	2.30	21.38	1.1	0	23		14	200		•	170					
Vanguard Target Retire 2060 Trust I		US Fund Target-Date 2060+			0.07	0.07			2.43	21.37	2.1	14	51		19	29	7.30	)	45				9.23	3/1/2012
Vanguard Target Retirement 2060 Composi	ite	-							2.37	21.58		32		9.6	66		7.49							
Target-Date 2060+ Media						0.44			2.39	20.99	1.8	34		9.0	06		7.28	3						
Target-Date 2060+ Number of Fund	ds						78	3					22			146			42					7/04/0047
Vanguard Target Retire 2065 Trust I  Vanguard Target Retirement 2060 Composi	itα	US Fund Target-Date 2060+			0.07	0.07			<b>2.40</b> 2.37	<b>21.3</b> 9			45	•									8.65	7/21/2017
Target-Date 2000+ Media						0.44			2.37	20.99														
Target-Date 2060+ Number of Fund						3.11	78	3	2.00	20.00	70		22	2										

#### Source: Morningstar & TIAA

1 month and YTD (Year To Date) returns are as of 11/30/19. All others returns and data are as of 09/30/19.

%-ile --> Percentile Ranking in Morningstar Category

Note: Rankings shown for returns are calculated by Morningstar. Rankings for expense ratio is calculated by TIAA and may differ based on calculation methods

Morningstar peer rankings include fractional weights for all share classes. Morningstar peer rankings also include ETFs. Depending on the category, this may cuase some variances with the category median illustrated in this report since most ETFs are index based options that can include more volatile and less mainstream indices.

SI = Since Inception Annualized Total Return; Incep. Date = Since Inception Date (SI return is calculated from this date)

5Performance shown for periods prior to the inception date reflects the performance of an oldest share class of the fund/account or underlying fund. Total returns have not been restated to reflect any expense differential between any of the classes. Had the expense differential been reflected, total returns for the fund may have been higher or lower. Category ranks are not available for periods prior to the inception of the fund.

You cannot invest directly in an index.

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.

The expense ratio paid by an investor is the net expense ratio as stated in the prospectus. The net expense ratio reflects total annual fund operating expenses excluding interest expense. If interest expense was included, returns would have been lower.

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

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

<sup>&</sup>lt;sup>1</sup> Calvert Social Index through December 16, 2005; FTSE4Good US Select Index thereafter

<sup>2</sup> S&P MidCap 400 Index through May 16, 2003; the MSCI US Mid Cap 450 Index through January 30, 2013; and the CRSP US Mid Cap Index thereafter

<sup>3</sup> Russell 2000 Index through May 16, 2003; the MSCI US Small Cap 1750 Index through January 30, 2013; and the CRSP US Small Cap Index thereafter

<sup>&</sup>lt;sup>4</sup> Investor share migrated to Admiral share 08/1/2019

### **Disclosures**



As of 11/30/2019

Investing in non-investment grade securities presents special risks, including significantly higher interest-rate and credit risk.

Small-cap and mid-cap stocks may have limited marketability and may be subject to more abrupt or erratic market movements than large-cap stocks.

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

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

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

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

Any guarantees under annuities issued by TIAA are subject to TIAA's claims-paying ability. TIAA Traditional is a 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.

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.

Morningstar Ranking/Number of Funds in Category displays the Fund's actual rank within its Morningstar Category based on average annual total return and number of funds in that Category. The returns assume reinvestment of dividends and do not reflect any applicable sales charge. Absent expense limitation, total return would be less. Morningstar Percentile Rankings are the Fund's total return rank relative to all funds in the same Morningstar category, where 1 is the highest percentile and 100 is the lowest percentile.

### **Disclosures**



As of 11/30/2019

### **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, 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.

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.

# **State of Rhode Island - Plan Balance Summary**

457(b)

State of Rhode Island 457(b) Deferred Compensation Plan



As of 11/30/2019

Ticker	Investment Name	Asset Class Description	Total
AIADX	American Century Inf Adj Bd R6	Fixed Income	\$602,874.99
PTTRX	PIMCO Total Return Instl	Fixed Income	\$633,513.46
RERGX	American EuroPac Growth R6	Equities	\$1,770,880.01
SWISX	Schwab International Index Fd	Equities	\$396,545.38
TIAA#	TIAA Traditional Benefit Responsive 2	Guaranteed	\$9,405,528.49
VBTIX	Vanguard Ttl Bd Mkt Idx Inst	Fixed Income	\$365,033.15
VFTAX	Vanguard FTSE Social Index Adm	Equities	\$582,165.85
VINIX	Vanguard Inst Idx Inst	Equities	\$11,380,271.76
VLC1#	VALIC Fixed-Interest Opt 3%	Guaranteed	\$4,086,039.35
VLC2#	VALIC Fixed-Interest Opt 1.5%	Guaranteed	\$23,483.08
VMCIX	Vanguard Mid-Cap Idx Inst	Equities	\$5,726,993.82
VSCIX	Vanguard Small-Cap Idx Inst	Equities	\$3,490,146.25
VT15#	Vanguard Tgt Rtmt 2015 Tr I	Multi-Asset	\$266,508.60
VT20#	Vanguard Tgt Rtmt 2020 Tr I	Multi-Asset	\$722,557.71
VT25#	Vanguard Tgt Rtmt 2025 Tr I	Multi-Asset	\$756,946.39
VT30#	Vanguard Tgt Rtmt 2030 Tr I	Multi-Asset	\$1,173,054.50
VT35#	Vanguard Tgt Rtmt 2035 Tr I	Multi-Asset	\$434,889.23
VT40#	Vanguard Tgt Rtmt 2040 Tr I	Multi-Asset	\$129,564.99
VT45#	Vanguard Tgt Rtmt 2045 Tr I	Multi-Asset	\$156,842.26
VT50#	Vanguard Tgt Rtmt 2050 Tr I	Multi-Asset	\$130,991.56
VT55#	Vanguard Tgt Rtmt 2055 Tr I	Multi-Asset	\$47,902.51
VT60#	Vanguard Tgt Rtmt 2060 Tr I	Multi-Asset	\$23,144.26
VT65#	Vanguard Target Rtmt 2065 Tr I	Multi-Asset	\$4,072.71
VTIN#	Vanguard Tgt Rtmt Income Tr I	Multi-Asset	\$77,029.16
	STATE OF RHODE ISLAND 457(B) DEFERRED COMP	ENSATION PLAN Total	\$42,386,979.47

## **Disclosures**



TIAA is providing educational services concerning plan menu construction and the plan sponsor's fiduciary duties under its plan. It is not providing investment advice and is not a plan fiduciary with respect to the education and information presented herein. Note also that TIAA cannot and does not provide legal advice and that we recommend that you seek such advice from your own legal advisors.

TIAA 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 hypothetical investor over the requested time period. The return for one year is calculated using the same formula as one month. TIAA calculates returns by \$1,000 owned by hypothetical investor for one month then links returns for requested time period. Both set of returns would include dividends and capital gains, if applicable.

Investment products may be subject to market and other risk factors. See the applicable product literature or visit tiaa.org for details. You should consider the investment objectives, risks, charges and expenses carefully before investing. Please call 877-518-9161 or go to www.TIAA.org/prospectuses for current product and fund prospectuses that contain this and other information. Please read the prospectuses carefully before investing.

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## **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.

	Cumu	ılative T	otal Retu	ırns	Ave	rage 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	11/30/2019	4.11	6.87	23.05	09/30/2019	4.21	16.44	12.28	13.56
BLOOMBERG BARCLAYS U.S. AGGREGATE BOND INDEX	11/30/2019	-0.05	-0.28	8.79	09/30/2019	10.30	2.92	3.38	3.75
NASDAQ COMPOSITE INDEX	11/30/2019	4.64	9.11	31.91	09/30/2019	0.52	15.89	13.51	15.49
RUSSELL 2000 INDEX	11/30/2019	4.12	9.08	22.01	09/30/2019	-8.89	8.23	8.19	11.19
S&P 500 INDEX	11/30/2019	3.63	7.86	27.63	09/30/2019	4.25	13.39	10.84	13.24

	Cum	ılative T	otal Retu	ırns	Ave	rage Ar	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
Stock Investments	6												
Others													
VAN FTSE SOC IDX ADM	11/30/2019	4.12	8.90	29.63	09/30/2019	5.30	14.64	11.66	13.79	5.42		0.14% on 02/05/2019	01/14/2003
Large Cap													
FID 500 INDEX	11/30/2019	3.62	7.85	27.63	09/30/2019	4.24	13.38	10.83	13.22	10.28		0.01% on 04/29/2019	02/17/1988
FID CONTRAFUND K	11/30/2019	4.31	5.58	26.54	09/30/2019	-1.14	15.01	11.71	13.78	12.46		0.73% on 03/01/2019	05/17/1967
FID LARGE CAP STOCK	11/30/2019	5.01	12.02	28.13	09/30/2019	-1.61	10.48	7.96	12.41	8.44		0.63% on 06/29/2019	06/22/1995
INVESCO DIVRS DIV R6	11/30/2019	1.56	5.43	21.69	09/30/2019	8.61	8.03	8.25	11.21	7.94		0.43% on 02/28/2019	12/31/2001
Mid-Cap													
FID LOW PRICED STK K	11/30/2019	4.82	12.20	21.02	09/30/2019	-3.28	7.63	6.38	11.09	13.06		0.43% on 09/28/2019	12/27/1989
FID MID CAP IDX	11/30/2019	3.59	6.71	27.61	09/30/2019	3.23	10.67	9.09		13.22		0.03% on 06/29/2019	09/08/2011
Small Cap													
FID SM CAP IDX	11/30/2019	4.12	9.10	22.13	09/30/2019	-8.79	8.39	8.39		11.93		0.03% on 06/29/2019	09/08/2011
International													
FID INTL INDEX	11/30/2019	1.23	7.84	18.34	09/30/2019	-0.99	6.54	3.43	5.04	4.76		0.04% on 05/01/2019	11/05/1997
HARBOR INTL INST	11/30/2019	1.89	8.82	18.20	09/30/2019	-3.35	2.56	0.84	4.16	9.89		0.89% on 03/01/2019	12/29/1987

	Cum	ulative T	otal Retu	urns	Ave	rage 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
<b>Blended Investm</b>	ents*												
Others													
FID FREEDOM 2005 K	11/30/2019	0.72	1.94	10.95	09/30/2019	5.48	5.31	4.67	5.69	4.91		0.42% on 05/30/2019	11/06/2003
FID FREEDOM 2010 K	11/30/2019	1.01	2.70	12.64	09/30/2019	4.88	6.01	5.18	6.50	6.39		0.46% on 05/30/2019	10/17/1996
FID FREEDOM 2015 K	11/30/2019	1.31	3.46	14.18	09/30/2019	4.25	6.62	5.65	6.86	5.82		0.49% on 05/30/2019	11/06/2003
FID FREEDOM 2020 K	11/30/2019	1.60	4.17	15.56	09/30/2019	3.66	7.05	5.94	7.31	6.68		0.53% on 05/30/2019	10/17/1996
FID FREEDOM 2025 K	11/30/2019	1.84	4.72	16.71	09/30/2019	3.20	7.46	6.21	7.86	6.35		0.56% on 05/30/2019	11/06/2003
FID FREEDOM 2030 K	11/30/2019	2.22	5.59	18.60	09/30/2019	2.33	8.48	6.87	8.36	6.84		0.60% on 05/30/2019	10/17/1996
FID FREEDOM 2035 K	11/30/2019	2.66	6.89	20.54	09/30/2019	0.75	9.05	7.20	8.75	6.75		0.63% on 05/30/2019	11/06/2003
FID FREEDOM 2040 K	11/30/2019	2.94	7.57	21.25	09/30/2019	0.06	8.99	7.15	8.77	4.12		0.65% on 05/30/2019	09/06/2000
FID FREEDOM 2045 K	11/30/2019	2.94	7.58	21.25	09/30/2019	0.04	8.94	7.13	8.83	5.85		0.65% on 05/30/2019	
FID FREEDOM 2050 K	11/30/2019	2.92	7.53	21.18	09/30/2019	0.07	8.95	7.14	8.83	5.71		0.65% on 05/30/2019	06/01/2006
FID FREEDOM 2055 K	11/30/2019	2.93	7.55	21.22	09/30/2019	0.01	8.93	7.13		7.73		0.65% on 05/30/2019	06/01/2011
FID FREEDOM 2060 K	11/30/2019	2.92	7.50	21.16	09/30/2019	0.04	8.92	7.10		7.09		0.65% on 05/30/2019	08/05/2014
FID FREEDOM 2065 K	11/30/2019	2.93	7.55		09/30/2019					-0.40		0.65% on 05/30/2019	06/28/2019
FID FREEDOM INC K	11/30/2019	0.40	1.33	9.54	09/30/2019	6.01	4.45	4.02	4.57	4.79		0.42% on 05/30/2019	10/17/1996
<b>Bond Investment</b>	ts												
Stable Value													
TRP STABLE VALUE A	11/30/2019	0.18	0.53	2.02	09/30/2019	2.21	2.01	1.97	2.41	4.73		0.30% on 12/31/2018	09/12/1988
Income													
FID US BOND IDX	11/30/2019	-0.04	-0.36	8.70	09/30/2019	10.28	2.82	3.33	3.68	5.95		0.03% on 10/30/2019	03/08/1990
PIM TOTAL RT INST	11/30/2019	-0.40	-0.47	8.52	09/30/2019	10.08	3.56	3.58	4.32	7.18		0.71% on 07/31/2019	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: 11/30/2019

DC Plan Number	DC Plan Short Name	Fund Code	Fund Name	Fund Ticker Symbol	Fund Type	Fund Distinct Count By Participant	Market Value	Asset Percentage
35835	STATE OF RI	338	FID LARGE CAP STOCK	FLCSX	DOMESTIC EQUITY	278	\$8,939,567.04	5.36%
35835	STATE OF RI	2080	FID CONTRAFUND K	FCNKX	DOMESTIC EQUITY	738	\$38,177,476.37	22.90%
35835	STATE OF RI	2095	FID LOW PRICED STK K	FLPKX	DOMESTIC EQUITY	344	\$10,147,854.34	6.09%
35835	STATE OF RI	2326	FID US BOND IDX	FXNAX	BOND	202	\$2,695,279.90	1.62%
35835	STATE OF RI	2328	FID 500 INDEX	FXAIX	DOMESTIC EQUITY	367	\$13,719,621.13	8.23%
35835	STATE OF RI	2352	FID MID CAP IDX	FSMDX	DOMESTIC EQUITY	231	\$2,244,146.66	1.35%
35835	STATE OF RI	2358	FID SM CAP IDX	FSSNX	DOMESTIC EQUITY	265	\$2,046,231.43	1.23%
35835	STATE OF RI	2363	FID INTL INDEX	FSPSX	INTERNATIONAL EQUITY	223	\$3,028,443.49	1.82%
35835	STATE OF RI	3019	FID FREEDOM INC K	FNSHX	LIFECYCLE	47	\$1,742,923.01	1.05%
35835	STATE OF RI	3020	FID FREEDOM 2005 K	FSNJX	LIFECYCLE	9	\$368,528.73	0.22%
35835	STATE OF RI	3021	FID FREEDOM 2010 K	FSNKX	LIFECYCLE	70	\$4,260,124.96	2.56%
35835	STATE OF RI	3022	FID FREEDOM 2015 K	FSNLX	LIFECYCLE	49	\$2,121,678.81	1.27%
35835	STATE OF RI	3023	FID FREEDOM 2020 K	FSNOX	LIFECYCLE	227	\$14,991,170.39	8.99%
35835	STATE OF RI	3024	FID FREEDOM 2025 K	FSNPX	LIFECYCLE	110	\$4,520,444.17	2.71%
35835	STATE OF RI	3025	FID FREEDOM 2030 K	FSNQX	LIFECYCLE	261	\$13,506,163.44	8.10%
35835	STATE OF RI	3026	FID FREEDOM 2035 K	FSNUX	LIFECYCLE	83	\$3,347,187.66	2.01%
35835	STATE OF RI	3027	FID FREEDOM 2040 K	FSNVX	LIFECYCLE	64	\$1,694,317.77	1.02%
35835	STATE OF RI	3028	FID FREEDOM 2045 K	FSNZX	LIFECYCLE	62	\$1,343,588.65	0.81%
35835	STATE OF RI	3029	FID FREEDOM 2050 K	FNSBX	LIFECYCLE	60	\$349,126.81	0.21%
35835	STATE OF RI	3030	FID FREEDOM 2055 K	FNSDX	LIFECYCLE	50	\$811,340.75	0.49%
35835	STATE OF RI	3031	FID FREEDOM 2060 K	FNSFX	LIFECYCLE	23	\$101,612.17	0.06%
35835	STATE OF RI	BLNK	BROKERAGELINK		OTHER	115	\$13,344,432.65	8.00%
35835	STATE OF RI	OE9Q	VAN FTSE SOC IDX ADM	VFTAX	DOMESTIC EQUITY	148	\$1,301,038.07	0.78%
35835	STATE OF RI	OF1P	PIM TOTAL RT INST	PTTRX	BOND	261	\$7,369,273.78	4.42%
35835	STATE OF RI	OFHL	HARBOR INTL INST	HAINX	INTERNATIONAL EQUITY	248	\$3,936,600.13	2.36%
35835	STATE OF RI	OGMU	TRP STABLE VALUE A		STABLE VALUE	340	\$7,889,154.33	4.73%
35835	STATE OF RI	OK26	INVESCO DIVRS DIV R6	LCEFX	DOMESTIC EQUITY	210	\$2,728,611.50	1.64%

\$166,725,938.15

### PERFORMANCE UPDATE

### **Voya Retirement Insurance and Annuity Company**

#### State of RI 457 Plan

### Average Annual Total Returns as of: 11/30/2019 (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.

	Fund Benchmark	1-N	Ло	3-1	VIO	Υ٦	ΓD	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 %*
Stability of Principal																			
Stability of Principal																			
Voya Fixed Account - 457/401 II A - 4573 (21)(22)	MFR	0.13	0.11	0.40	0.38	1.57	1.74	1.72	1.92	1.75	1.21	1.88	1.42	2.23	0.72				
Bonds																			
High Yield Bond																			
PGIM High Yield Fund - Class Z - 2482	BCUSH1IC	0.90	0.32	1.52	0.97	13.67	11.99	11.44	9.57	7.19	6.23	6.01	5.36	7.83	7.62		03/01/1996	0.54	0.54
Inflation-Protected Bond																			



	Fund																Fund	Gross	Net
land the section of Ordinary	Benchmark	1-N		3-1		Y1	_	-	Yr	3-		5-`			·Yr		Inception	Fund	Fund
Investment Options	ID (BM)	Fund	BM	Fund	BM	Fund	BM		BM	Fund		Fund	ВМ	Fund		Incept	Date	Exp %*	
PIMCO VIT Real Return Portfolio - Administrative Class - 833	LBUSTIPS	0.30	0.15	-0.65	-0.96	7.87	8.02	8.14	8.61	3.02	3.15	1.85	2.31	3.03	3.09		09/30/1999	1.42	1.42
Intermediate Core Bond																			
Voya U.S. Bond Index Portfolio - Class I - 1554 (1)	LEHM	-0.06	-0.05	-0.45	-0.28	8.47	8.79	10.39	10.79	3.75	4.10	2.73	3.08	3.21	3.59		03/07/2008	0.38	0.38
Intermediate Core-Plus Bond																			
Voya Intermediate Bond Portfolio - Class I - 004 (2)	LEHM	-0.02	-0.05	-0.12	-0.28	9.92	8.79	11.47	10.79	4.85	4.10	3.77	3.08	5.16	3.59		05/23/1973	0.55	0.55
Asset Allocation		0.02	0.00	V2	0.20	0.02	00				0	•	0.00	0.10	0.00		00/20/10/0	0.00	0.00
Lifecycle																			
Voya Solution 2020 Portfolio - Initial Class - 6750 (3)(4)	SPT2020	1.10	1.26	2.15	3.52	13.97	14.72	10.68	10.76	7.70	7.94	5.63	5.69			8.57	10/03/2011	0.87	0.72
Voya Solution 2025 Portfolio - Initial Class - 790 (4)(5)	SPT2025	1.68	1.48	3.70	4.24	16.20	16.18	11.65	11.22	8.73	8.68	6.01	6.16	7.92	8.10	0.01	04/29/2005	0.85	0.78
Voya Solution 2030 Portfolio - Initial Class - 6753 (4)(6)	SPT2030	1.98	1.73	4.54	5.02	17.97	17.76	12.12	11.67	9.44	9.36	6.55	6.61			10.35	10/03/2011	0.94	0.79
Voya Solution 2035 Portfolio - Initial Class - 761 (4)(7)	SP2035	2.28	1.94	5.32	5.76	19.05	19.15	12.06	12.03	9.99	9.99	6.60	7.02	8.72	9.07		04/29/2005	0.90	0.83
Voya Solution 2040 Portfolio - Initial Class - 6756 (4)(8)	SPT2040	2.35	2.10	5.91	6.26	20.01	20.05	12.35	12.29	10.26	10.43	6.94	7.31			11.43	10/03/2011	1.01	0.83
Voya Solution 2045 Portfolio - Initial Class - 764 (4)(9)	SP2045	2.59	2.18	6.28	6.56	20.62	20.53	12.25	12.43	10.22	10.68	6.68	7.48	9.15	9.59		04/29/2005	0.92	0.86
Voya Solution 2050 Portfolio - Initial Class - 6759 (4)(10)	SPT2050	2.58	2.23	6.51	6.71	20.97	20.76	12.52	12.43	10.32	10.89	6.94	7.61			11.54	10/03/2011	1.03	0.86
Voya Solution 2055 Portfolio - Initial Class - 1166 (4)(11)	SPT2055	2.61	2.24	6.59	6.78	20.97	20.85	12.58	12.48	10.38	11.01	6.77	7.69			9.00	03/08/2010	0.93	0.86
Voya Solution 2060 Portfolio - Initial Class - 3290 (4)(12)	SPT2060	2.59	2.29	6.55	6.84	20.92	21.06	12.43	12.55	10.37	11.17					7.28	02/09/2015	1.13	0.87
Voya Solution Income Portfolio - Initial Class - 767 (4)(13)	SPTREIN	0.93	0.92	1.62	2.41	12.25	12.07	10.28	10.00	6.44	6.12	4.56	4.37	5.72	5.38		04/29/2005	0.80	0.68
Balanced																			
Allocation50% to 70% Equity																			
VY® T. Rowe Price Capital Appreciation Portfolio - Inst - 1257	SPXLBGC	2.42	2.14	3.94	4.43	22.43	20.55	16.83	14.91	12.81	10.64	10.18	7.94	11.95	9.67		01/24/1989	0.64	0.64
Large Cap Value																			
Large Blend																			
Voya Growth and Income Portfolio - Class I - 001	SPXRE	3.76	3.63	6.07	7.86	25.38	27.63	15.73	16.11	13.52	14.88	9.12	10.98	11.73	13.44		12/31/1979	0.63	0.58
Voya U.S. Stock Index Portfolio - Institutional Class - 829	SPXRE	3.60	3.63	7.74	7.86	27.29	27.63	15.78	16.11	14.57	14.88	10.68	10.98	13.13	13.44		05/03/2004	0.27	0.27
Large Value																			
BlackRock Equity Dividend Fund - Institutional Shares - 8518 (14)	RS1000V	3.35	3.09	8.15	8.26	24.04	23.15	13.37	11.33	11.22	9.59	9.44	7.83	11.22	11.69		11/29/1988	0.73	0.73
Large Cap Growth																			
Large Growth																			
Voya Large Cap Growth Portfolio - Institutional Class -	RS1000G	3.98	4.44	5.92	7.39	29.42	32.40	18.43	21.01	18.59	19.79	12.61	13.71	14.63	15.23		05/03/2004	0.67	0.67
742 (15) Small/Mid/Specialty	Ī																		
Mid-Cap Blend																			
Voya Russell™ Mid Cap Index Portfolio - Class I - 1560	RSMID	3.57	3.57	6.65	6.72	27.09	27.61	14.54	14.96	11.18	11.63	8.46	8.88	13.15	13.56		03/04/2008	0.46	0.41
(16)																			

#### See Performance Introduction Page for Important Information

	Fund Benchmark	1-N	lo	3-1	Мо	ΥT	D.	1-	Yr	3-	Yr	5-`	۲r	10-	-Yr		Fund Inception	Gross Fund	Net Fund
Investment Options	ID (BM)	Fund	BM	Fund	ВМ	Fund	BM	Fund	ВМ	Fund	BM	Fund	BM	Fund	BM	Incept	Date	Exp %*	Exp %*
Mid-Cap Growth																			
Principal MidCap Fund - Class R-5 - 3412	RSMID	3.11	3.57	5.53	6.72	40.79	27.61	28.61	14.96	18.20	11.63	12.90	8.88	16.12	13.56		12/06/2000	0.85	0.85
Small Blend																			
Voya Russell™ Small Cap Index Portfolio - Class I - 1563 (17)	RS2000	4.12	4.12	9.11	9.08	21.75	22.01	7.22	7.51	8.25	8.57	7.95	8.22	12.20	12.38		03/04/2008	0.47	0.46
Voya Small Company Portfolio - Class I - 042 (18)	RS2000	3.88	4.12	8.93	9.08	22.88	22.01	7.34	7.51	5.76	8.57	7.73	8.22	12.02	12.38		12/27/1996	0.90	0.90
Global / International																			
Foreign Large Blend																			
Voya International Index Portfolio - Class I - 1551 (19)	MSEAFANET	1.18	1.13	7.63	7.76	17.90	18.17	11.82	12.44	9.25	9.62	4.06	4.26	5.13	5.32		03/04/2008	0.54	0.45
Foreign Large Growth																			
American Funds EuroPacific Growth Fund® - Class R-4 - 573	MSCIXUS	2.01	0.88	7.40	7.09	21.78	16.47	15.49	11.19	10.68	9.24	5.29	3.85	6.04	4.74		04/16/1984	0.84	0.84
World Large Stock																			
VY® Invesco Oppenheimer Global Portfolio - Initial Class 432 (20)	- MSCIACN	4.80	2.44	10.35	7.46	28.55	22.29	18.59	13.68	15.29	11.95	9.08	7.24	10.60	8.63		05/01/2002	0.75	0.75

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

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

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

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

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

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

### PERFORMANCE UPDATE

### **Voya Retirement Insurance and Annuity Company**

#### State of RI 457 Plan

### Average Annual Total Returns as of: 09/30/2019 (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.

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	1-1	Ло	3-1	Ио	Υ٦	D.	1-	Yr	3-	Yr	5-`	<b>′</b> r	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 %*
Stability of Principal																			
Stability of Principal																			
Voya Fixed Account - 457/401 II A - 4573 (21)(22)	MFR	0.14	0.14	0.44	0.46	1.31	1.50	1.75	1.98	1.77	2.26	1.90	1.37	2.25	0.69				
Bonds																			
High Yield Bond																			
PGIM High Yield Fund - Class Z - 2482	BCUSH1IC	0.64	0.38	1.58	1.29	12.67	11.34	7.97	6.20	6.73	6.00	6.02	5.33	8.10	7.86		03/01/1996	0.54	0.54
Inflation-Protected Bond																			
PIMCO VIT Real Return Portfolio - Administrative Class - 833	LBUSTIPS	-0.97	-1.36	1.10	1.35	7.52	7.58	6.31	7.13	2.13	2.21	2.03	2.45	3.44	3.46		09/30/1999	1.42	1.42

	Fund Benchmark	1-1	Мо	3-1	Mo	Υ٦	TD.	1-	Yr	3-	Yr	5-	Yr	10	-Yr		Fund Inception	Gross Fund	Net Fund
Investment Options	ID (BM)	Fund	ВМ	Fund	ВМ	Fund	ВМ	Fund	ВМ	Fund	ВМ	Fund	ВМ	Fund	ВМ	Incept	Date		Exp %*
Voya U.S. Bond Index Portfolio - Class I - 1554 (1)	LEHM	-0.62	-0.53	2.27	2.27	8.28	8.52	9.99	10.30	2.54	2.92	3.04	3.38	3.38	3.75		03/07/2008	0.38	0.38
Intermediate Core-Plus Bond																			
Voya Intermediate Bond Portfolio - Class I - 004 (2)	LEHM	-0.33	-0.53	2.56	2.27	9.70	8.52	10.77	10.30	3.75	2.92	4.04	3.38	5.38	3.75		05/23/1973	0.55	0.55
Asset Allocation																			
Lifecycle																			
Voya Solution 2020 Portfolio - Initial Class - 6750 (3)(4)	SPT2020	0.32	0.91	1.16	1.17	11.92	11.83	5.73	4.57	6.73	6.71	5.87	5.70			8.51	10/03/2011	0.87	0.72
Voya Solution 2025 Portfolio - Initial Class - 790 (4)(5)	SPT2025	0.72	1.18	0.89	1.04	12.87	12.77	4.62	3.96	7.38	7.36	6.05	6.10	7.86	8.03		04/29/2005	0.85	0.78
Voya Solution 2030 Portfolio - Initial Class - 6753 (4)(6)	SPT2030	0.95	1.46	0.58	0.88	13.91	13.77	3.54	3.23	8.02	7.93	6.55	6.48			10.10	10/03/2011	0.94	0.79
Voya Solution 2035 Portfolio - Initial Class - 761 (4)(7)	SP2035	1.17	1.73	0.19	0.73	14.36	14.60	2.33	2.52	8.29	8.46	6.48	6.82	8.54	8.91		04/29/2005	0.90	0.83
Voya Solution 2040 Portfolio - Initial Class - 6756 (4)(8)	SPT2040	1.44	1.91	0.14	0.60	14.96	15.13	1.89	2.09	8.59	8.84	6.81	7.06			11.08	10/03/2011	1.01	0.83
Voya Solution 2045 Portfolio - Initial Class - 764 (4)(9)	SP2045	1.48	2.01	-0.10	0.53	15.17	15.39	0.96	1.83	8.43	9.07	6.48	7.21	8.87	9.39		04/29/2005	0.92	0.86
Voya Solution 2050 Portfolio - Initial Class - 6759 (4)(10)	SPT2050	1.59	2.07	-0.14	0.47	15.39	15.51	0.96	1.59	8.49	9.29	6.74	7.34			11.13	10/03/2011	1.03	0.86
Voya Solution 2055 Portfolio - Initial Class - 1166 (4)(11)	SPT2055	1.63	2.10	-0.11	0.46	15.34	15.55	1.00	1.57	8.52	9.43	6.57	7.41			8.63	03/08/2010	0.93	0.86
Voya Solution 2060 Portfolio - Initial Class - 3290 (4)(12)	SPT2060	1.62	2.10	-0.14	0.45	15.31	15.69	0.94	1.56	8.57	9.61					6.46	02/09/2015	1.13	0.87
Voya Solution Income Portfolio - Initial Class - 767 (4)(13)	SPTREIN	0.09	0.49	1.40	1.32	10.56	9.98	6.46	5.66	5.38	4.91	4.74	4.36	5.82	5.38		04/29/2005	0.80	0.68
Balanced																			
Allocation50% to 70% Equity																			
VY® T. Rowe Price Capital Appreciation Portfolio - Inst - 1257	SPXLBGC	0.36	0.82	0.65	2.11	18.20	16.38	10.75	7.50	11.24	9.23	10.47	7.99	11.90	9.62		01/24/1989	0.64	0.64
Large Cap Value																			
Large Blend																			
Voya Growth and Income Portfolio - Class I - 001	SPXRE	1.45	1.87	2.06	1.70	19.92	20.55	5.85	4.25	12.45	13.39	8.97	10.84	11.56	13.24		12/31/1979	0.63	0.58
Voya U.S. Stock Index Portfolio - Institutional Class - 829	SPXRE	1.81	1.87	1.63	1.70	20.28	20.55	3.98	4.25	13.08	13.39	10.53	10.84	12.94	13.24		05/03/2004	0.27	0.27
Large Value																			
BlackRock Equity Dividend Fund - Institutional Shares - 8518 (14)	RS1000V	2.64	3.57	2.00	1.36	17.72	17.81	3.33	4.00	11.54	9.43	9.08	7.79	11.24	11.46		11/29/1988	0.73	0.73
Large Cap Growth																			
Large Growth																			
Voya Large Cap Growth Portfolio - Institutional Class - 742 (15)	RS1000G	-0.55	0.01	1.87	1.49	21.52	23.30	3.92	3.71	15.77	16.89	12.56	13.39	14.59	14.94		05/03/2004	0.67	0.67
Small/Mid/Specialty																			
Mid-Cap Blend																			
Voya Russell™ Mid Cap Index Portfolio - Class I - 1560 (16)	RSMID	1.92	1.97	0.31	0.48	21.45	21.93	2.74	3.19	10.23	10.69	8.67	9.10	12.67	13.07		03/04/2008	0.46	0.41
Mid-Cap Growth																			
Principal MidCap Fund - Class R-5 - 3412	RSMID	0.77	1.97	3.23	0.48	34.44	21.93	16.54	3.19	16.50	10.69	13.29	9.10	15.94	13.07		12/06/2000	0.85	0.85
Small Blend		V.11	1.01	0.20	0.10	V 1. 1 7	21.00	10.07	0.10	10.00	10.00	10.20	0.10	10.01	10.01		.2/00/2000	0.00	0.00
Jiliali Diella																			

#### See Performance Introduction Page for Important Information

	Fund Benchmark	1-N	lo	3-I	Мо	ΥT	D.	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 %*
Voya Russell™ Small Cap Index Portfolio - Class I - 1563 (17)	RS2000	2.12	2.08	-2.47	-2.40	13.95	14.18	-9.15	-8.89	7.93	8.23	7.94	8.19	11.02	11.19		03/04/2008	0.47	0.46
Voya Small Company Portfolio - Class I - 042 (18)	RS2000	2.76	2.08	-1.20	-2.40	15.92	14.18	-6.09	-8.89	6.11	8.23	8.01	8.19	11.09	11.19		12/27/1996	0.90	0.90
Global / International																			
Foreign Large Blend																			
Voya International Index Portfolio - Class I - 1551 (19)	MSEAFANET	2.93	2.87	-1.10	-1.07	12.75	12.80	-1.36	-1.34	6.14	6.48	3.07	3.27	4.71	4.90		03/04/2008	0.54	0.45
Foreign Large Growth																			
American Funds EuroPacific Growth Fund® - Class R-4 - 573	MSCIXUS	1.80	2.57	-1.68	-1.80	15.43	11.56	0.80	-1.23	7.00	6.33	4.65	2.90	5.70	4.45		04/16/1984	0.84	0.84
World Large Stock																			
VY® Invesco Oppenheimer Global Portfolio - Initial Class 432 (20)	- MSCIACN	0.00	2.10	-4.12	-0.03	16.50	16.20	-2.09	1.38	11.41	9.71	7.50	6.65	9.83	8.35		05/01/2002	0.75	0.75

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

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

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

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

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

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

### PERFORMANCE UPDATE

### **Voya Retirement Insurance and Annuity Company**

State of RI 457 Plan

**Separate Account D** 

### Average Annual Total Returns as of: 09/30/2019 (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- <b>M</b> o	3-Mo	YTD	1-Yr	3-Yr	5-Yr	10-Yr	Fund Inception Incept Date
Stability of Principal								
Stability of Principal								
Voya Fixed Account - 457/401 II A - 4573 (21)(22)  This fund is not part of the product's separate account.	0.14	0.44	1.31	1.75	1.77	1.90	2.25	
Bonds								
High Yield Bond								
PGIM High Yield Fund - Class Z - 2482	0.63	1.54	12.52	7.79	6.55	5.84	7.93	03/01/1996
Inflation-Protected Bond								
PIMCO VIT Real Return Portfolio - Administrative Class - 833	-0.98	1.06	7.39	6.14	1.97	1.87	3.28	09/30/1999

Intermediate Core Bond

Investment Options	1-Mo	3-Mo	YTD	1-Yr	3-Yr	5-Yr	10-Yr	Incept	Fund Inception Date
Voya U.S. Bond Index Portfolio - Class I - 1554 (1)	-0.63	2.23	8.15	9.81	2.38	2.89	3.22	шоорс	03/07/2008
Intermediate Core-Plus Bond	-0.00	2.20	0.10	3.01	2.50	2.03	0.22		03/01/2000
Voya Intermediate Bond Portfolio - Class I - 004 (2)	-0.34	2.52	9.56	10.58	3.59	3.88	5.22		05/23/1973
Asset Allocation	-0.04	2.52	9.50	10.50	3.33	3.00	J.22		03/23/1913
Lifecycle									
Voya Solution 2020 Portfolio - Initial Class - 6750 (3)(4)	0.31	1.13	11.80	5.57	6.57	5.71		8.35	10/03/2011
Voya Solution 2025 Portfolio - Initial Class - 790 (4)(5)	0.71	0.85	12.74	4.46	7.22	5.89	7.70		04/29/2005
Voya Solution 2030 Portfolio - Initial Class - 6753 (4)(6)	0.94	0.54	13.78	3.39	7.86	6.39		9.93	10/03/2011
Voya Solution 2035 Portfolio - Initial Class - 761 (4)(7)	1.16	0.15	14.23	2.18	8.13	6.32	8.38		04/29/2005
Voya Solution 2040 Portfolio - Initial Class - 6756 (4)(8)	1.43	0.10	14.83	1.74	8.43	6.65		10.92	10/03/2011
Voya Solution 2045 Portfolio - Initial Class - 764 (4)(9)	1.47	-0.14	15.04	0.81	8.27	6.32	8.71		04/29/2005
Voya Solution 2050 Portfolio - Initial Class - 6759 (4)(10)	1.58	-0.18	15.27	0.81	8.33	6.58		10.97	10/03/2011
Voya Solution 2055 Portfolio - Initial Class - 1166 (4)(11)	1.62	-0.15	15.21	0.85	8.36	6.41		8.46	03/08/2010
Voya Solution 2060 Portfolio - Initial Class - 3290 (4)(12)	1.60	-0.17	15.19	0.78	8.41			6.30	02/09/2015
Voya Solution Income Portfolio - Initial Class - 767 (4)(13)	0.07	1.36	10.43	6.30	5.22	4.58	5.66		04/29/2005
Balanced									
Allocation50% to 70% Equity									
VY® T. Rowe Price Capital Appreciation Portfolio - Inst - 1257	0.34	0.61	18.07	10.58	11.07	10.31	11.73		01/24/1989
Large Cap Value									
Large Blend									
Voya Growth and Income Portfolio - Class I - 001	1.43	2.02	19.78	5.70	12.28	8.80	11.40		12/31/1979
Voya U.S. Stock Index Portfolio - Institutional Class - 829	1.79	1.60	20.14	3.83	12.91	10.37	12.77		05/03/2004
Large Value									
BlackRock Equity Dividend Fund - Institutional Shares - 8518 (14)	2.62	1.96	17.59	3.17	11.37	8.91	11.08		11/29/1988
Large Cap Growth									
Large Growth									
Voya Large Cap Growth Portfolio - Institutional Class - 742 (15)	-0.56	1.83	21.38	3.77	15.59	12.40	14.42		05/03/2004
Small/Mid/Specialty	-0.00	1.00	21.00	5.11	10.00	12.40	14.42		03/03/2004
Mid-Cap Blend									
Voya Russell™ Mid Cap Index Portfolio - Class I - 1560 (16)	1.90	0.28	21.32	2.59	10.07	8.51	12.50		03/04/2008
	1.50	0.20	21.02	2.00	10.01	0.01	12.50		00/04/2000
Mid-Cap Growth Principal MidCap Fund - Class R-5 - 3412	0.76	3.19	34.29	16.36	16.33	13.12	15.77		12/06/2000
·	0.76	3.19	34.29	10.30	10.33	13.12	15.77		12/00/2000
Small Blend	0.15	0.74	40.00	0.00		7	40.00		00/04/0000
Voya Russell™ Small Cap Index Portfolio - Class I - 1563 (17)	2.10	-2.51	13.82	-9.29	7.77	7.78	10.86		03/04/2008
Voya Small Company Portfolio - Class I - 042 (18)	2.74	-1.24	15.79	-6.23	5.95	7.85	10.92		12/27/1996
Global / International									

Investment Ontions	1- <b>M</b> o	3-Mo	YTD	1-Yr	3-Yr	5-Yr	10-Yr	Incont	Fund Inception
Investment Options	1-IVIO	3-IVIO	לוו	1-11	3-11	5-1 r	10-11	Incept	Date
Foreign Large Blend									
Voya International Index Portfolio - Class I - 1551 (19)	2.91	-1.14	12.62	-1.51	5.98	2.91	4.55		03/04/2008
Foreign Large Growth									
American Funds EuroPacific Growth Fund® - Class R-4 - 573	1.79	-1.72	15.30	0.65	6.84	4.50	5.54		04/16/1984
World Large Stock									
VY® Invesco Oppenheimer Global Portfolio - Initial Class - 432 (20)	-0.01	-4.15	16.37	-2.24	11.24	7.34	9.67		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 U.S. Bond Index Portfolio Class I: The adviser is contractually obligated to limit expenses to 0.40% for Class I 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.
- (2)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.
- (3)Voya Solution 2020 Portfolio Initial Class: The adviser is contractually obligated to limit expenses to 0.72% of Class I 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

### See Performance Introduction Page for Important Information

### **Additional Notes**

of principal.

The Voya Solution / Target Date 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 The Voya Solution / Target Date PortfoliosSM.

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.

(5)Voya Solution 2025 Portfolio - Initial Class: The adviser is contractually obligated to limit expenses to 0.78% of Class I 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% of Class I 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% of Class I shares 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 0.83% of Class I 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.

(9) Voya Solution 2045 Portfolio - Initial Class: The adviser is contractually obligated to limit expenses to 0.86% of Class I 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% of Class I shares 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% of Class I 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% for Class I 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% for Class I 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)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

### See Performance Introduction Page for Important Information

### **Additional Notes**

expenses to average net assets given in the Fund's most recent annual report which does not include Acquired Fund Fees and Expenses.

- (15)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.
- (16)Voya Russell Mid Cap Index Portfolio Class I: The adviser is contractually obligated to limit expenses to 0.40% for Class I 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 Small Cap Index Portfolio Class I: The adviser is contractually obligated to limit expenses to 0.45% for Class I 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.
- (18)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.
- (19)Voya International Index Portfolio Class I: The adviser is contractually obligated to limit expenses to 0.50% for Class I through May 1, 2019. In addition, the adviser is contractually obligated to further limit expenses to 0.45% for the Portfolio's Class I 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.
- (20)VY Invesco 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.
- (21)The current rate for the Voya Fixed Account 457/401 II A MC 901, Fund 4573 is 1.55%, 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.
- (22)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 BCUSH1IC	Benchmark Description BBgBarc US HY 1% Issuer Cap TR USD
всознис	
LBUSTIPS	BBgBarc Capital U.S. Treasury U.S. TIPS Index measures the performance of rulesbased, market value-weighted inflation-protected securities issued by the U.S. Treasury. It is a subset of the Global Inflation-Linked Index (Series-L).
LEHM	BBgBarc 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.

Benchmark Id	See Performance Introduction Page for Important Information  Benchmark Description
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 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

See Performance Introduction Page for Important Information

Benchmark Id	Benchmark Description 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: Monday, December 16, 2019

State of Rhode Island Plan Balance By Investment 11/30/2019											
Fund Name	Fund Number	Asset Class	Balance	YTD Contributions	Percent						
Voya Solution 2020 Port I	6750	Asset Allocation	\$26,514.63	\$0.00	0.01%						
Voya Solution 2025 Portfolio I	790	Asset Allocation	\$1,634,038.85	\$132,180.18	0.82%						
Voya Solution 2030 Port I	6753	Asset Allocation	\$46,441.28	\$4,782.50	0.02%						
Voya Solution 2035 Portfolio I	761	Asset Allocation	\$1,245,912.52	\$187,134.38	0.63%						
Voya Solution 2040 Port I	6756	Asset Allocation	\$2,814.73	\$2,677.50	0.00%						
Voya Solution 2045 Portfolio I	764	Asset Allocation	\$1,094,474.82	\$174,869.32	0.55%						
Voya Solution 2050 Port I	6759	Asset Allocation	\$9,810.28	\$6,363.24	0.00%						
Voya Solution 2055 Portfolio I	1166	Asset Allocation	\$572,205.33	\$122,101.62	0.29%						
Voya Solution 2060 Port I	3290	Asset Allocation	\$29,929.21	\$26,977.00	0.02%						
Voya Solution Income Prt I	767	Asset Allocation	\$458,608.20	\$51,585.06	0.23%						
VY TRowePrice Captl Apprec Pt Inst	1257	Balanced	\$9,466,648.95	\$437,623.15	4.75%						
PGIM High Yield Fund Z	2482	Bonds	\$717,260.99	\$44,116.82	0.36%						
PIMCO VIT Real Return Portfolio Adm	833	Bonds	\$530,081.58	\$44,969.51	0.27%						
Voya Intermediate Bond Port I	4	Bonds	\$8,184,618.13	\$705,612.41	4.11%						
Voya U.S. Bond Index Portfolio I	1554	Bonds	\$703,209.61	\$54,059.01	0.35%						
American Funds EuroPacific Grw R4	573	Global / International	\$6,373,426.03	\$405,413.67	3.20%						
Voya International Index Port I	1551	Global / International	\$531,627.16	\$39,757.54	0.27%						
VY Inv Opp Global Port I	432	Global / International	\$7,609,487.90	\$405,542.46	3.82%						
Voya Growth and Income Port I	1	Large Cap Blend	\$28,986,615.51	\$875,345.35	14.54%						
Voya Large Cap Growth Port Inst	742	Large Cap Growth	\$13,173,908.54	\$741,617.39	6.61%						
BlackRock Equity Dividend Fund Inst	8518	Large Cap Value	\$4,595,439.39	\$241,904.36	2.31%						
Voya U.S. Stock Index Port Inst	829	Large Cap Value	\$9,799,070.65	\$474,039.27	4.92%						
Principal MidCap Fund R5	3412	Small/Mid/Specialty	\$12,309,458.92	\$405,007.87	6.18%						
Voya Russell Mid Cap Index Port I	1560	Small/Mid/Specialty	\$1,728,897.68	\$160,714.60	0.87%						
Voya Russell Sm Cp Index Port I	1563	Small/Mid/Specialty	\$1,452,095.02	\$149,590.22	0.73%						
Voya Small Company Portfolio I	42	Small/Mid/Specialty	\$7,711,967.48	\$350,626.38	3.87%						
Voya Fixed Account - 457/401	43	Stability of Principal	\$70,367,317.75	\$0.00	35.30%						
Voya Fixed Account 457401 II A	4573	Stability of Principal	\$9,877,945.73	\$2,925,703.86	4.96%						
Voya Long-Term GAA (4560)	4560	Stability of Principal	\$25,807.32	\$0.00	0.01%						

TOTAL \$199,265,634.19 \$9,170,314.67



**OPEB Trust** 



Report ID: IPM0005

Reporting Currency: USD

# TOTAL NET OF FEES 11/30/2019

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	123,174,515.9	33.7	-0.06 -0.05	9.00 <i>8.79</i>	2.56 2.53	10.91 10.79	4.08 <i>4.10</i>	2.97 3.08		2.69 2.76	5/1/2013 5/1/2013
SSGA S&P 500 INDX S&P 500 - Total Return Index	242,106,177.3	66.3	3.63 3.63	27.36 27.63	7.66 7.67	15.85 16.11	14.77 14.88	10.94 <i>10.98</i>		13.05 12.55	5/1/2011 5/1/2011
Total OPEB OPEB Custom Blend 1	365,280,693.2	100.0	<b>2.36</b> 2.34	<b>20.66</b> 20.99	<b>5.93</b> 5.89	<b>14.29</b> <i>14.66</i>	<b>11.07</b> 11.20	<b>8.22</b> 8.35		<b>9.33</b> 8.79	<b>5/1/2011</b> 5/1/2011



Report ID: IPM0005

Reporting Currency: USD

# **END NOTES**

11/30/2019

1 RI7GX0903OPE

OPEB Custom Blend

35% Barclays Aggregate and 65% S&P 500



Report ID: IPM0005

Reporting Currency: USD

# **TOTAL NET OF FEES**

11/30/2019

			Cumulative									
Account Name Benchmark Name		Market Value	% of Total	YTD	Month	10/1/2019 - 10/31/2019	9/1/2019 - 9/30/2019	2018	2017	2016	Inception Date	
Mackay Shields OPEB Bloomberg Barclays U.S. Aggregate Bond Index	9	123,174,515.9	33.7	9.00 <i>8.7</i> 9	-0.06 -0.05	0.23 <i>0</i> .30	-0.57 -0.53	-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		242,106,177.3	66.3	27.36 27.63	3.63 3.63	2.17 2.17	1.87 1.87	-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	365,280,693.2	100.0	<b>20.66</b> 20.99	<b>2.36</b> 2.34	<b>1.49</b> 1.51	<b>1.00</b> 1.03	<b>-2.85</b> -2.58	<b>15.32</b> <i>15.14</i>	<b>8.69</b> 8.77	<b>5/1/2011</b> 5/1/2011	



Report ID: IPM0005

**Reporting Currency: USD** 

### **END NOTES**

11/30/2019

1 RI7G1000000 Total OPEB YTD - Calendar Year to Date

Month - Current Month

Cumulative Months - Prior Month and Second Prior Month

2013, 2012, 2011 - Calendar Year

2 RI7GX0903OPE OPEB Custom Blend

65% S&P 500 and 35% Barclays Aggregate