

MONTHLY GROSS PERFORMANCE REPORT

BOSTON RETIREMENT SYSTEM

JUNE 30, 2022

Mike Manning, CFA, CAIA, Managing Partner

Will Forde, CFA, CAIA, Partner

Kiley Fischer, Analyst



TOTAL FUND PERFORMANCE DETAIL (GROSS)

	Allocation			Performance (%)								
	Market Value (\$)	% of Portfolio	Policy(%)	1 Mo (%)	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Fund	5,975,981,668	100.0	100.0	-4.0	-8.2	-11.4	-8.1	6.0	6.1	7.3	7.6	Aug-94
Allocation Index				-4.0	-8.2	-11.1	-7.7	6.0	6.2	7.1		
Policy Index				-4.4	-8.8	-11.6	-7.8	6.1	6.6	7.4		
PRIT Core Fund/Teachers*	2,016,299,519	33.7		-4.6	-9.1	-11.3	-4.9	8.2	8.1	9.0	9.2	Jul-10
Total Equity	2,691,660,478	45.0	49.0	-8.8	-15.5	-21.4	-19.4	4.9	5.7	8.7	8.2	Dec-10
MSCI AC World Index (Net)				-8.4	-15.7	-20.2	-15.8	6.2	7.0	8.8	8.0	
Large Cap Comp	960,806,200	16.1	18.0	-9.2	-18.1	-22.5	-17.2	10.1	11.2	13.6	9.6	Dec-04
Rhumblin Advisors	251,539,683	4.2		-8.2	-16.1	-19.9	-10.6	10.6	11.3	12.9	10.0	Aug-94
DE Shaw Core Enhanced	322,154,779	5.4		-8.6	-16.4	-19.6	-11.2	11.0	11.8	13.4	13.4	Oct-09
S&P 500 Index				-8.3	-16.1	-20.0	-10.6	10.6	11.3	13.0	12.7	
Aristotle Value	144,253,823	2.4		-10.1	-12.4	-18.6	-12.1				9.2	Nov-19
Columbia Threadneedle	168,569,342	2.8		-10.4	-14.2	-11.8	-6.6	10.6	10.0	13.1	9.7	Jan-97
Russell 1000 Value Index				-8.7	-12.2	-12.9	-6.8	6.9	7.2	10.5	8.1	
Zevenbergen Capital	73,945,827	1.2		-10.5	-41.3	-52.8	-57.3	-0.1	8.8	13.6	11.0	Aug-94
Russell 1000 Growth Index				-7.9	-20.9	-28.1	-18.8	12.6	14.3	14.8	10.2	
Small Cap Comp	387,478,769	6.5	6.0	-7.9	-15.9	-21.7	-19.4	6.2	8.2	11.2	9.2	Dec-04
Westfield Capital Management	107,373,897	1.8		-8.0	-19.2	-28.2	-24.2	8.0	10.4	12.3	10.7	Sep-03
Russell 2000 Growth Index				-6.2	-19.3	-29.5	-33.4	1.4	4.8	9.3	8.1	
Bernzott	108,906,817	1.8		-9.8	-17.8	-21.6	-20.9	4.3	7.8		8.9	Nov-15
Russell 2000 Value Index				-9.9	-15.3	-17.3	-16.3	6.2	4.9		7.7	
Aristotle Small Cap	170,928,681	2.9		-6.6	-12.5	-17.1	-14.9	5.3	5.9		8.5	Nov-15
Russell 2000 Index				-8.2	-17.2	-23.4	-25.2	4.2	5.2		7.4	

Note: Returns are gross of manager fees except for hedge funds and private equity which are net of fees.



TOTAL FUND PERFORMANCE DETAIL (GROSS)

	Allocation			Performance (%)								
	Market Value (\$)	% of Portfolio	Policy(%)	1 Mo (%)	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Non-US Equity	1,343,375,508	22.5	25.0	-8.7	-13.5	-20.5	-21.0	0.4	0.9	4.3	5.5	Aug-94
International Equity	921,281,771	15.4	17.0	-9.3	-13.8	-19.7	-17.6	1.1	1.4	5.3	4.3	Dec-10
Todd	280,253,089	4.7		-10.0	-12.5	-17.0	-16.2	4.2	3.9		5.5	Apr-16
<i>MSCI ACWI ex USA</i>				-8.6	-13.7	-18.4	-19.4	1.4	2.5		5.0	
Panagora Asset Management	275,711,277	4.6		-9.2	-13.7	-18.7	-16.6	1.6	1.5	6.2	5.4	Aug-94
Walter Scott International Equity	249,411,292	4.2		-8.0	-14.7	-24.7	-20.6				-3.1	Oct-20
<i>MSCI EAFE (Net)</i>				-9.3	-14.5	-19.6	-17.8				2.2	
Segall Bryant Hamill	115,689,032	1.9		-10.4	-14.8	-17.0	-17.0	0.6			-3.0	Nov-17
<i>MSCI EAFE Small Cap (Net)</i>				-11.0	-17.7	-24.7	-24.0	1.1			-0.1	
Emerging Markets	422,093,737	7.1	8.0	-7.4	-13.0	-22.2	-27.9	-1.1	-0.1	2.3	1.7	Dec-10
ABS Emerging Markets Strategic Portfolio	90,159,591	1.5		-6.0	-12.5	-21.1					-21.5	Nov-21
Columbia Emerging Markets Equity	96,711,187	1.6		-6.7	-13.4	-29.1					-35.3	Aug-21
Polunin	116,734,595	2.0		-5.6	-10.0	-20.0	-23.9	2.8	3.0		5.5	Oct-13
<i>MSCI Emerging Markets (Net)</i>				-6.6	-11.4	-17.6	-25.3	0.6	2.2		2.5	
Lazard	118,488,364	2.0		-10.7	-14.4	-18.2	-22.3	2.0	-1.0		1.8	Oct-13
<i>MSCI Emerging Markets Small Cap (Net)</i>				-10.5	-16.4	-20.0	-20.7	5.8	3.5		3.4	
Total Fixed Income	1,534,158,906	25.7	25.0	-3.2	-5.9	-9.9	-9.5	0.7	2.1	2.7	3.3	Dec-10
Core Fixed Income	1,007,264,403	16.9	16.0	-1.8	-3.9	-8.0	-7.5	1.1	2.2	2.5	4.2	Dec-04
AFL-CIO H.I.T.	44,947,075	0.8		-1.4	-4.1	-9.7					-10.0	Dec-21
BlackRock SIO	347,999,661	5.8		-1.9	-2.5	-5.1	-5.1	2.2	3.0		3.0	Aug-15
Wells Asset Management	309,165,463	5.2		-1.6	-4.9	-10.6	-10.5	-0.4	1.3	2.1	4.2	May-05
<i>Blmbg. U.S. Aggregate Index</i>				-1.6	-4.7	-10.3	-10.3	-0.9	0.9	1.5	3.2	
IR&M	305,152,204	5.1		-1.8	-4.3	-8.3	-6.7	1.6	2.3		2.6	Jul-15
<i>IR&M Custom Benchmark</i>				-1.9	-4.2	-8.3	-6.7	1.2	2.0		2.1	

- IR&M Custom Benchmark reflects Bloomberg Agg since inception through 04/30/2017, from 05/01/2017 to 9/30/2021 reflects 40% Bloomberg Agg/60% Bloomberg Intermediate TIPS and as of 10/1/2021 reflects 60% Bloomberg Agg/40% Bloomberg Intermediate TIPS.



TOTAL FUND PERFORMANCE DETAIL (GROSS)

	Allocation			Performance (%)								
	Market Value (\$)	% of Portfolio	Policy(%)	1 Mo (%)	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Value Added Fixed Income	526,894,503	8.8	9.0	-5.8	-9.5	-13.3	-13.1	-0.2	1.7	2.6	3.3	Dec-10
High Yield Income	326,044,363	5.5	5.0	-4.7	-7.6	-8.8	-6.6	3.1	3.9	5.1	6.3	Jan-06
Crescent Capital	108,126,666	1.8		-4.7	-8.1	-10.8	-9.4	1.4	2.5		3.7	May-15
<i>50/50 S&P/LSTA Leveraged Loan/Bloomberg High Yield</i>				-4.4	-7.1	-9.4	-7.9	1.2	2.5		3.2	
Polen Capital	93,566,661	1.6		-3.9	-6.9	-7.8	-5.3	3.8	4.5		5.4	May-15
<i>75% BC HY 25% S&P Leverage Loan</i>				-5.6	-8.5	-11.8	-10.4	0.7	2.3		3.2	
GoldenTree Multi Sector Opp Credit	123,367,204	2.1		-5.3	-7.6	-7.8	-5.1	4.2	4.7		5.0	Dec-16
<i>Blended Index</i>				-3.7	-6.4	-8.2	-7.0	1.5	2.6		3.2	
<i>S&P/LSTA Leveraged Loan Index</i>				-2.2	-4.5	-4.6	-2.8	2.1	2.9		3.2	
Emerging Market Debt	200,850,140	3.4	4.0	-7.4	-12.5	-20.0	-22.4	-5.5	-2.0	-1.6	-1.2	Nov-11
Aberdeen EMD Plus	200,849,826	3.4		-7.4	-12.5	-20.0	-22.4	-5.5			-1.4	Dec-18
<i>JP Morgan EMBI Global Diversified</i>				-6.2	-11.4	-20.3	-21.2	-5.2			-1.1	
Total Alternative Assets	1,654,012,727	27.7	26.0	3.8	3.5	8.4	20.5	12.8	10.7	9.1	9.3	Dec-10
Hedge Fund Composite	295,897,551	5.0	5.0	-0.1	-1.6	-4.3	-1.0	5.6	4.1	3.9	3.6	Nov-04
EnTrust Peruvian Bonds	4,604,316	0.1		-0.1	-0.4	-1.0	-0.5	-2.3			-2.7	Jan-18
Blackstone	143,202,908	2.4		0.8	0.7	1.0	3.1	5.9			5.7	Feb-18
Grosvenor	147,120,074	2.5		-0.9	-3.7	-9.1	-4.7	5.7	4.7		4.3	Jul-13
<i>HFRI Fund of Funds Composite Index</i>				-1.3	-4.0	-6.6	-5.5	3.9	3.6		3.4	
Hedge Fund Transition Account	970,254	0.0	0.0									
Real Estate Composite	656,405,503	11.0	10.0	5.7	5.7	13.7	27.8	12.0	10.9	11.1	8.3	Sep-04
Private Equity & Debt	701,709,673	11.7	11.0	3.8	3.8	9.8	25.3	17.1	14.7	10.5	9.7	Jun-04
Cash	96,149,557	1.6	0.0	0.0	0.0	0.0	0.7	0.8	0.7	0.3	1.1	Oct-04

- Real Estate and Private Equity & Debt report on a quarterly basis, and are lagged one quarter.
- The Hedge Fund Transition Account is an estimation of the total values redeemed from the hedge fund portfolio and is subject to change.
- The Blended Index Benchmark consists of 30% ML HY II/ 30% S&P LSTA / 25% HFRI RV FI/ 15% BAML ABS.
- DDJ is now Polen Capital



PRIVATE MARKETS PERFORMANCE DETAIL

Private Markets Summary
As of March 31, 2022

	Committed Capital	Cumulative Distribution	Contributed Capital	QTR	1 Year	Valuation
Private Equity & Debt IRR	\$1,380,704,379	\$770,809,864	\$965,950,074	3.8%	25.3%	\$701,709,673
Private Equity	\$862,725,878	\$570,348,778	\$639,460,617			\$382,045,060
Private Debt	\$517,978,501	\$200,461,086	\$326,489,457			\$319,664,613
Real Estate IRR	\$1,140,408,476	\$904,450,070	\$955,291,555	5.7%	27.8%	\$656,405,503

- Private markets are reported quarterly and are lagged one quarter. Data is as of March 31, 2022.



DISCLAIMERS & DISCLOSURES

Past performance is no guarantee of future results.

Returns for pooled funds, e.g. mutual funds and collective investment trusts, are collected from third parties; they are not generally calculated by NEPC. Returns for separate accounts, with some exceptions, are calculated by NEPC. Returns are reported net of manager fees unless otherwise noted.

A “since inception” return, if reported, begins with the first full month after funding, although actual inception dates (e.g. the middle of a month) and the timing of cash flows are taken into account in Composite return calculations.

NEPC’s preferred data source is the plan’s custodian bank or record-keeper. If data cannot be obtained from one of the preferred data sources, data provided by investment managers may be used. Information on market indices and security characteristics is received from additional providers. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within. In addition, some index returns displayed in this report or used in calculation of a policy index, allocation index or other custom benchmark may be preliminary and subject to change.

All investments carry some level of risk. Diversification and other asset allocation techniques are not guaranteed to ensure profit or protect against losses.

The opinions presented herein represent the good faith views of NEPC as of the date of this presentation and are subject to change at any time. Neither fund performance nor universe rankings contained in this report should be considered a recommendation by NEPC.

This report may contain confidential or proprietary information and may not be copied or redistributed to any party not legally entitled to receive it.

Source of private fund performance benchmark data: Cambridge Associates, via Refinitiv



