

MONTHLY GROSS PERFORMANCE REPORT

BOSTON RETIREMENT SYSTEM

April 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	6,234,493,799	100.0	100.0	-4.4	-4.8	-7.8	-2.0	7.7	7.4	7.5	7.8	Aug-94
Allocation Index				-4.5	-4.5	-7.5	-1.5	7.8	7.5	7.3		
Policy Index				-4.7	-4.7	-7.8	-1.1	8.1	7.9	7.8		
PRIT Core Fund/Teachers*	2,141,289,388	34.3		-4.2	-3.7	-6.5	4.2	10.7	9.8	9.4	9.8	Jul-10
Total Equity	2,938,273,280	47.1	49.0	-7.8	-9.4	-14.2	-10.3	7.9	8.2	9.1	9.2	Dec-10
MSCI AC World Index (Net)				-8.0	-8.4	-12.9	-5.4	9.4	9.5	9.2	8.9	
Large Cap Comp	1,063,018,040	17.1	18.0	-9.4	-9.1	-14.3	-5.9	13.8	14.0	14.3	10.4	Dec-04
Rhumblin Advisors	273,660,045	4.4		-8.7	-8.2	-12.9	0.2	13.8	13.6	13.6	10.4	Aug-94
DE Shaw Core Enhanced	352,193,804	5.6		-8.7	-8.2	-12.2	-0.4	14.4	14.2	14.2	14.4	Oct-09
S&P 500 Index				-8.7	-8.2	-12.9	0.2	13.8	13.7	13.7	13.7	
Aristotle Value	155,913,284	2.5		-5.3	-7.5	-12.0	-2.8				13.3	Nov-19
Columbia Threadneedle	184,341,674	3.0		-6.1	-3.5	-3.6	3.4	13.1	12.3	13.6	10.2	Jan-97
Russell 1000 Value Index				-5.6	-4.1	-6.3	1.3	9.6	9.1	11.2	8.5	
Zevenbergen Capital	96,553,857	1.5		-23.4	-24.1	-38.3	-41.7	10.7	16.4	15.5	12.2	Aug-94
Russell 1000 Growth Index				-12.1	-12.5	-20.0	-5.3	16.7	17.3	15.6	10.6	
Small Cap Comp	419,986,603	6.7	6.0	-9.0	-8.7	-15.2	-12.8	8.8	10.3	11.5	9.8	Dec-04
Westfield Capital Management	119,334,397	1.9		-10.5	-11.3	-20.5	-15.6	11.6	13.1	12.6	11.4	Sep-03
Russell 2000 Growth Index				-12.3	-11.5	-23.3	-26.4	4.1	7.1	9.9	8.7	
Bernzott	120,609,335	1.9		-9.0	-8.8	-13.2	-14.3	7.4	10.2		10.9	Nov-15
Russell 2000 Value Index				-7.8	-4.4	-10.0	-6.6	8.4	6.7		9.3	
Aristotle Small Cap	179,773,530	2.9		-7.9	-6.7	-12.8	-9.5	6.9	7.4		9.6	Nov-15
Russell 2000 Index				-9.9	-7.8	-16.7	-16.9	6.7	7.2		9.0	

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	1,455,268,637	23.3	25.0	-6.2	-9.9	-13.8	-12.7	3.0	3.4	4.5	5.8	Aug-94
International Equity	999,331,809	16.0	17.0	-6.5	-8.9	-13.0	-8.9	3.6	3.8	5.4	5.1	Dec-10
Todd	296,981,176	4.8		-7.3	-12.1	-12.0	-11.0	6.2	5.9		6.7	Apr-16
<i>MSCI ACWI ex USA</i>				-6.3	-8.0	-11.4	-10.3	4.3	4.9		6.5	
Panagora Asset Management	301,053,963	4.8		-5.7	-7.2	-11.2	-6.6	4.5	4.0	6.7	5.8	Aug-94
Walter Scott International Equity	273,346,183	4.4		-6.7	-8.8	-17.6	-9.6				2.2	Oct-20
<i>MSCI EAFE (Net)</i>				-6.5	-7.5	-12.0	-8.1				8.4	
Segall Bryant Hamill	127,731,747	2.0		-6.1	-5.1	-8.5	-7.6	2.8			-1.0	Nov-17
<i>MSCI EAFE Small Cap (Net)</i>				-6.9	-8.1	-14.8	-13.7	4.9			2.7	
Emerging Markets	455,936,828	7.3	8.0	-5.6	-12.3	-15.6	-20.2	1.7	2.4	2.4	2.5	Dec-10
ABS Emerging Markets Strategic Portfolio	96,381,650	1.5		-6.4	-11.8	-15.7					-16.1	Nov-21
Columbia Emerging Markets Equity	103,380,924	1.7		-7.5	-20.8	-24.2					-30.9	Aug-21
Polunin	122,338,527	2.0		-5.8	-13.0	-16.3	-20.9	5.2	4.6		6.2	Oct-13
<i>MSCI Emerging Markets (Net)</i>				-5.6	-10.5	-12.1	-18.3	2.2	4.3		3.3	
Lazard	133,835,728	2.1		-3.4	-4.8	-7.6	-6.8	6.0	2.3		3.3	Oct-13
<i>MSCI Emerging Markets Small Cap (Net)</i>				-5.0	-4.9	-9.1	-5.5	9.9	6.5		5.0	
Total Fixed Income	1,589,533,390	25.5	25.0	-2.5	-5.2	-6.7	-5.1	2.6	3.0	3.1	3.7	Dec-10
Core Fixed Income	1,024,281,780	16.4	16.0	-2.3	-5.0	-6.5	-5.1	2.5	2.6	2.8	4.3	Dec-04
AFL-CIO H.I.T.	45,428,371	0.7		-3.1	-7.3	-8.8					-9.0	Dec-21
BlackRock SIO	355,695,400	5.7		-0.5	-2.2	-3.1	-2.4	3.6	3.6		3.4	Aug-15
Wells Asset Management	312,735,998	5.0		-3.8	-7.6	-9.6	-8.6	1.0	1.6	2.4	4.3	May-05
<i>Blmbg. U.S. Aggregate Index</i>				-3.8	-7.5	-9.5	-8.5	0.4	1.2	1.7	3.3	
IR&M	310,422,011	5.0		-2.6	-5.0	-6.7	-4.1	3.0	2.7		3.0	Jul-15
<i>IR&M Custom Benchmark</i>				-2.7	-5.1	-6.8	-4.3	2.5	2.3		2.4	

- 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	565,251,610	9.1	9.0	-2.9	-5.6	-7.0	-5.1	2.7	3.3	3.3	4.0	Dec-10
High Yield Income	347,106,650	5.6	5.0	-1.6	-2.2	-2.9	1.5	5.4	5.4	5.9	6.8	Jan-06
Crescent Capital	115,394,755	1.9		-2.1	-3.4	-4.9	-1.4	4.0	3.9		4.8	May-15
<i>50/50 S&P/LSTA Leveraged Loan/Bloomberg High Yield</i>				-1.7	-3.0	-4.1	-1.2	3.3	3.8		4.1	
Polen Capital	98,921,401	1.6		-1.6	-2.0	-2.5	2.5	5.4	6.0		6.4	May-15
<i>75% BC HY 25% S&P Leverage Loan</i>				-2.6	-4.3	-6.2	-3.2	3.1	3.8		4.2	
GoldenTree Multi Sector Opp Credit	131,799,189	2.1		-1.3	-1.2	-1.5	3.3	6.7	6.2		6.4	Dec-16
<i>Blended Index</i>				-1.4	-2.4	-3.3	-0.8	3.5	3.8		4.2	
<i>Morningstar LSTA US Leveraged Loan</i>				0.2	-0.2	0.1	3.0	3.7	4.0		4.2	
Emerging Market Debt	218,144,960	3.5	4.0	-4.9	-10.8	-13.1	-14.4	-1.7	-0.1	-1.0	-0.5	Nov-11
Aberdeen EMD Plus	218,144,646	3.5		-4.9	-10.8	-13.1	-14.4	-1.7			0.9	Dec-18
<i>JP Morgan EMBI Global Diversified</i>				-5.6	-12.6	-15.1	-14.5	-2.0			0.7	
Total Alternative Assets	1,616,058,084	25.9	26.0	-0.1	5.1	4.7	22.5	12.1	10.2	8.9	9.1	Dec-10
Hedge Fund Composite	299,589,729	4.8	5.0	-0.4	-1.2	-3.1	1.4	6.3	4.3	3.8	3.7	Nov-04
EnTrust Peruvian Bonds	4,619,498	0.1		-0.2	-0.5	-0.7	-0.6	-2.2			-2.8	Jan-18
Blackstone	142,262,234	2.3		0.0	1.5	0.4	4.0	6.2			5.7	Feb-18
Grosvenor	151,718,208	2.4		-0.7	-3.7	-6.3	-0.9	6.9	5.3		4.8	Jul-13
<i>HFRI Fund of Funds Composite Index</i>				-1.2	-1.4	-3.9	-2.1	5.1	4.3		3.8	
Hedge Fund Transition Account	989,790	0.0	0.0									
Real Estate Composite	628,863,058	10.1	10.0	0.0	7.6	7.6	23.1	10.7	10.0	10.8	8.1	Sep-04
Private Equity & Debt	687,605,297	11.0	11.0	0.0	5.7	5.7	34.0	16.5	14.3	10.8	9.5	Jun-04
Cash	90,629,045	1.5	0.0	0.0	0.0	0.0	0.7	0.9	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



Boston Retirement System

TOTAL FUND PERFORMANCE DETAIL

Private Markets Summary Quarter Ending December 31, 2021						
	Committed Capital	Cumulative Distributions	Paid in Capital	QTR	1 Year	Valuation
Private Equity & Debt IRR	\$1,348,804,562	\$745,391,870	\$952,527,647	5.7%	34.0%	\$687,605,297
Private Equity	\$830,826,061	\$554,705,812	\$626,401,586			\$371,058,025
Private Debt	\$517,978,501	\$190,686,058	\$326,126,061			\$316,547,272
Real Estate IRR	\$1,140,701,507	\$883,461,366	\$942,341,323	7.6%	23.1%	\$628,863,058



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



