

MONTHLY GROSS PERFORMANCE REPORT

BOSTON RETIREMENT SYSTEM

MARCH 31, 2022

Mike Manning, CFA, CAIA, Managing Partner

Will Forde, CFA, CAIA, Partner

Kiley Fischer, Analyst



Boston Retirement System

TOTAL FUND PERFORMANCE DETAIL (GROSS)

	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Fund	6,529,638,556	100.0	100.0	1.2	-3.7	5.0	10.0	8.6	7.9	8.0	Aug-94
Allocation Index				1.2	-3.2	5.5	10.0	8.7	7.8	--	Aug-94
Policy Index				1.3	-3.3	6.0	10.5	9.2	8.3	--	Aug-94
PRIT Core Fund/Teachers*	2,251,933,173	34.5		1.7	-2.2	12.0	13.0	11.1	9.9	10.3	Jul-10
Total Equity	3,192,350,591	48.9	49.0	1.0	-6.8	1.4	12.2	10.4	9.9	--	Dec-04
MSCI ACWI				2.2	-5.4	7.3	13.8	11.6	10.0	7.8	Dec-04
Large Cap Comp	1,172,849,795	18.0	18.0	2.5	-5.5	8.7	19.4	16.5	15.4	11.0	Dec-04
Rhumblin Advisors	299,775,416	4.6		3.7	-4.6	15.6	18.9	16.0	14.6	10.8	Aug-94
DE Shaw Core Enhanced	385,590,443	5.9		3.8	-3.8	14.9	19.5	16.5	15.1	15.3	Oct-09
S&P 500				3.7	-4.6	15.6	18.9	16.0	14.6	14.6	Oct-09
Aristotle Value	164,656,826	2.5		0.9	-7.1	6.6	--	--	--	16.3	Nov-19
Columbia Threadneedle	196,356,984	3.0		1.1	2.6	14.2	17.8	13.9	13.9	10.5	Jan-97
Russell 1000 Value				2.8	-0.7	11.7	13.0	10.3	11.7	8.8	Jan-97
Zevenbergen Capital	126,068,850	1.9		0.1	-19.5	-20.4	23.2	23.7	18.4	13.3	Aug-94
Russell 1000 Growth				3.9	-9.0	15.0	23.6	20.9	17.0	11.2	Aug-94
Small Cap Comp	461,309,215	7.1	6.0	0.5	-7.0	-0.7	13.8	12.9	12.4	10.4	Dec-04
Westfield Capital Management	133,323,774	2.0		0.5	-11.2	-0.3	17.6	16.0	13.8	12.1	Sep-03
Russell 2000 Growth				0.5	-12.6	-14.3	9.9	10.3	11.2	9.5	Sep-03
Bernzott	132,479,861	2.0		0.5	-4.8	-2.6	11.8	12.7	--	12.6	Nov-15
Russell 2000 Value				2.0	-2.4	3.3	12.7	8.6	10.5	10.8	Nov-15
Aristotle Small Cap	195,236,241	3.0		0.4	-5.5	0.9	11.6	9.7	--	11.1	Nov-15
Russell 2000				1.2	-7.5	-5.8	11.7	9.7	11.0	10.9	Nov-15

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



Boston Retirement System

TOTAL FUND PERFORMANCE DETAIL (GROSS)

	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Non-US Equity	1,558,191,580	23.9	25.0	0.1	-7.7	-3.2	6.2	5.3	5.1	6.1	Aug-94
International Equity	1,068,929,222	16.4	17.0	0.5	-6.9	0.6	7.1	5.8	6.0	5.8	Dec-10
Todd	320,200,212	4.9		0.2	-5.2	-2.0	10.3	7.8	--	8.1	Apr-16
MSCI ACWI ex USA				0.2	-5.4	-1.5	7.5	6.8	5.6	7.8	Apr-16
Panagora Asset Management	319,387,752	4.9		0.8	-5.8	2.2	7.1	5.7	7.3	6.0	Aug-94
Walter Scott International Equity	292,992,404	4.5		0.6	-11.7	0.4	--	--	--	7.2	Oct-20
MSCI EAFE				0.6	-5.9	1.2	7.8	6.7	6.3	13.9	Oct-20
Segall Bryant Hamill	136,122,163	2.1		-0.1	-2.6	3.2	5.7	--	--	0.4	Nov-17
MSCI EAFE Small Cap				0.0	-8.5	-3.6	8.5	7.4	8.3	4.4	Nov-17
Emerging Markets	489,262,358	7.5	8.0	-0.6	-9.4	-10.9	4.5	4.4	3.1	3.1	Dec-10
ABS Emerging Markets Strategic Portfolio	107,777,918	1.7		2.3	-5.7	--	--	--	--	-6.1	Nov-21
Columbia Emerging Markets Equity	111,718,095	1.7		-4.9	-18.1	--	--	--	--	--	Aug-21
Polunin	129,967,120	2.0		-2.6	-11.2	-10.0	7.2	6.4	--	7.0	Oct-13
MSCI Emerging Markets				-2.3	-7.0	-11.4	4.9	6.0	3.4	4.1	Oct-13
Lazard	139,799,225	2.1		2.7	-3.5	1.9	7.6	3.8	--	3.9	Oct-13
MSCI Emerging Markets Small Cap				2.7	-4.3	5.5	11.9	7.8	5.3	5.7	Oct-13
Total Fixed Income	1,652,911,322	25.3	25.0	-1.2	-4.3	-1.5	3.7	3.7	3.5	3.9	Dec-10
Core Fixed Income	1,048,296,029	16.1	16.0	-1.9	-4.3	-2.0	3.4	3.2	3.2	4.4	Dec-04
AFL-CIO H.I.T.	46,903,099	0.7		-3.3	-5.9	--	--	--	--	-6.1	Dec-21
BlackRock SIO	357,470,988	5.5		-0.7	-2.7	-1.5	4.1	3.8	--	3.6	Aug-15
Wells Asset Management	325,068,202	5.0		-2.8	-6.0	-4.2	2.3	2.6	2.9	4.6	May-05
Bloomberg US Aggregate TR				-2.8	-5.9	-4.2	1.7	2.1	2.2	3.6	May-05
IR&M	318,853,741	4.9		-2.2	-4.1	-0.3	4.0	3.5	--	3.4	Jul-15
IR&M Custom Benchmark				-2.3	-4.3	-0.6	3.5	3.0	2.7	2.8	Jul-15

- 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.

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



Boston Retirement System

TOTAL FUND PERFORMANCE DETAIL (GROSS)

	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Value Added Fixed Income	604,615,293	9.3	9.0	0.0	-4.2	-0.6	4.1	4.2	3.7	--	
High Yield Income	375,121,325	5.7	5.0	0.1	-1.3	4.2	6.5	6.0	6.2	6.9	Jan-06
Crescent Capital	117,923,476	1.8		-0.5	-2.9	1.6	5.1	4.6	--	5.1	May-15
<i>50/50 S&P/LSTA Leveraged Loan/Bloomberg High Yield</i>				-0.5	-2.5	1.3	4.4	4.4	5.0	4.4	May-15
Polen Capital	122,570,921	1.9		-0.1	-1.1	5.0	6.7	6.7	--	6.7	May-15
<i>75% BC HY 25% S&P Leverage Loan</i>				-0.8	-3.7	0.3	4.5	4.5	--	4.7	May-15
GoldenTree Multi Sector Opp Credit	133,596,710	2.0		0.8	-0.1	5.9	7.8	6.7	--	6.8	Dec-16
<i>Blended Index</i>				-0.4	-2.0	1.3	4.4	4.2	--	4.6	Dec-16
<i>S&P/LSTA Leveraged Loan TR</i>				0.0	-0.1	3.3	4.2	4.0	4.3	4.2	Dec-16
Emerging Market Debt	229,493,969	3.5	4.0	-0.2	-8.5	-7.6	0.1	1.2	-0.5	0.0	Nov-11
Aberdeen EMD Plus	229,493,655	3.5		-0.2	-8.5	-7.6	0.1	--	--	2.5	Dec-18
<i>JP Morgan EMBI Global Diversified</i>				-0.9	-10.0	-7.4	0.0	1.7	3.7	2.5	Dec-18
Total Alternative Assets	1,599,023,554	24.5	26.0								
Hedge Fund Composite	300,652,091	4.6	5.0	-0.8	-2.8	3.8	6.6	4.5	3.8	3.7	Nov-04
EnTrust Peruvian Bonds	4,634,765	0.1		-0.1	-0.4	-0.6	-2.2	--	--	-2.8	Jan-18
Blackstone	142,284,545	2.2		1.2	0.3	5.7	6.4	--	--	5.8	Feb-18
Grosvenor	152,685,978	2.3		-2.6	-5.7	2.3	7.4	5.5	--	4.9	Jul-13
<i>HFRI Fund of Funds Composite Index</i>				0.6	-2.6	1.3	5.9	4.6	3.9	3.9	Jul-13
Hedge Fund Transition Account	1,046,802	0.0									
Real Estate Composite	607,231,547	9.3	10.0	5.2	5.2	20.3	9.8	9.5	10.5	--	
Private Equity & Debt	691,139,916	10.6	11.0	5.7	5.7	34.0	16.5	14.3	10.8	--	
Cash	85,353,089	1.3	0.0	0.0	0.0	0.7	1.0	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

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



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





PROPRIETARY & CONFIDENTIAL