

FLASH REPORT (GROSS)

Boston Retirement System

March 31, 2021

Mike Manning, CFA, CAIA, Managing Partner

Will Forde, CFA, CAIA, Principal

Kiley Fischer, Analyst



BOSTON | ATLANTA | CHARLOTTE | CHICAGO | DETROIT | LAS VEGAS | PORTLAND | SAN FRANCISCO

CALENDAR YEAR INDEX PERFORMANCE

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Mar	YTD
S&P 500	2.1%	16.0%	32.4%	13.7%	1.4%	12.0%	21.8%	-4.4%	31.5%	18.4%	4.4%	6.2%
Russell 1000	1.5%	16.4%	33.1%	13.2%	0.9%	12.1%	21.7%	-4.8%	31.4%	21.0%	3.8%	5.9%
Russell 2000	-4.2%	16.3%	38.8%	4.9%	-4.4%	21.3%	14.6%	-11.0%	25.5%	20.0%	1.0%	12.7%
Russell 2500	-2.5%	17.9%	36.8%	7.1%	-2.9%	17.6%	16.8%	-10.0%	27.8%	20.0%	1.6%	10.9%
MSCI EAFE	-12.1%	17.3%	22.8%	-4.9%	-0.8%	1.0%	25.0%	-13.8%	22.0%	7.8%	2.3%	3.5%
MSCI EM	-18.4%	18.2%	-2.6%	-2.2%	-14.9%	11.2%	37.3%	-14.6%	18.4%	18.3%	-1.5%	2.3%
MSCI ACWI	-7.3%	16.1%	22.8%	4.2%	-2.4%	7.9%	24.0%	-9.4%	26.6%	16.3%	2.7%	4.6%
Private Equity	9.5%	12.6%	22.3%	14.6%	10.4%	10.3%	21.0%	13.1%	17.2%	13.0%*	-	-
BC TIPS	13.6%	7.0%	-8.6%	3.6%	-1.4%	4.7%	3.0%	-1.3%	8.4%	11.0%	-0.2%	-1.5%
BC Municipal	10.7%	6.8%	-2.6%	9.1%	3.3%	0.2%	5.4%	1.3%	7.5%	5.2%	0.6%	-0.4%
BC Muni High Yield	9.2%	18.1%	-5.5%	13.8%	1.8%	3.0%	9.7%	4.8%	10.7%	4.9%	1.1%	2.1%
BC US Corporate HY	5.0%	15.8%	7.4%	2.5%	-4.5%	17.1%	7.5%	-2.1%	14.3%	7.1%	0.1%	0.8%
BC US Agg Bond	7.8%	4.2%	-2.0%	6.0%	0.5%	2.6%	3.5%	0.0%	8.7%	7.5%	-1.2%	-3.4%
BC Global Agg	5.6%	4.3%	-2.6%	0.6%	-3.2%	2.1%	7.4%	-1.2%	6.8%	9.2%	-1.9%	-4.5%
BC Long Treasuries	29.9%	3.6%	-12.7%	25.1%	-1.2%	1.3%	8.5%	-1.8%	14.8%	17.7%	-5.0%	-13.5%
BC US Long Credit	17.1%	12.7%	-6.6%	16.4%	-4.6%	10.2%	12.2%	-6.8%	23.4%	13.3%	-2.7%	-8.4%
BC US STRIPS 20+ Yr	58.5%	3.0%	-21.0%	46.4%	-3.7%	1.4%	13.7%	-4.1%	20.9%	24.0%	-6.9%	-18.5%
JPM GBI-EM Global Div	-1.8%	16.8%	-9.0%	-5.7%	-14.9%	9.9%	15.2%	-6.2%	13.5%	2.7%	-3.1%	-6.7%
JPM EMBI Glob Div	7.3%	17.4%	-5.3%	7.4%	1.2%	10.2%	10.3%	-4.3%	15.0%	5.3%	-1.0%	-4.5%
CS Hedge Fund	-2.5%	7.7%	9.7%	4.1%	-0.7%	1.2%	7.1%	-3.2%	9.3%	6.4%	-	2.1%
BBG Commodity	-13.3%	-1.1%	-9.5%	-17.0%	-24.7%	11.8%	1.7%	-11.2%	7.7%	-3.1%	-2.1%	6.9%
Alerian MLP	13.9%	4.8%	27.6%	4.8%	-32.6%	18.3%	-6.5%	-12.4%	6.6%	-28.7%	6.9%	22.0%
FTSE NAREIT Equity REITs	8.3%	18.1%	2.5%	30.1%	3.2%	8.5%	5.2%	-4.6%	26.0%	-8.0%	4.6%	8.9%

Source: FactSet, Barclays, Thomson One

*Private Equity return represents calendar year pooled IRR and is subject to a one quarter lag



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	6,242,083,573	100.0	100.0	1.9	3.8	34.9	8.6	10.1	7.9	8.1	Aug-94
Allocation Index				2.1	3.8	33.4	8.9	10.0	7.6	--	Aug-94
Policy Index				2.3	3.6	33.1	9.6	10.6	8.0	--	Aug-94
PRIT Core Fund/Teachers*	2,028,021,466	32.5		3.2	4.4	30.4	10.2	10.9	9.0	10.2	Jul-10
Total Equity	3,306,578,153	53.0	48.0	2.2	6.0	63.7	11.3	13.8	--	--	Dec-04
MSCI ACWI				2.7	4.6	54.6	12.1	13.2	9.1	7.8	Dec-04
Large Cap Comp	1,218,774,228	19.5	17.0	2.5	5.6	67.6	19.3	18.9	15.3	11.2	Dec-04
Rhumblin Advisors	303,331,132	4.9		4.4	6.2	56.2	16.8	16.3	13.9	10.6	Aug-94
DE Shaw Core Enhanced	405,495,995	6.5		4.8	6.2	58.8	17.8	17.3	14.8	15.3	Oct-09
Russell 1000				3.8	5.9	60.6	17.3	16.7	14.0	14.7	Oct-09
Aristotle Value	177,391,971	2.8		3.4	9.9	66.2	--	--	--	23.7	Nov-19
Columbia Threadneedle	172,611,064	2.8		6.4	14.9	73.7	13.5	15.8	13.1	10.3	Jan-97
Russell 1000 Value				5.9	11.3	56.1	11.0	11.7	11.0	8.6	Jan-97
Zevenbergen Capital	159,547,260	2.6		-10.2	-8.1	108.8	40.7	34.8	20.9	14.8	Aug-94
Russell 1000 Growth				1.7	0.9	62.7	22.8	21.0	16.6	11.1	Aug-94
Small Cap Comp	490,876,908	7.9	6.0	2.2	9.3	88.7	15.4	18.0	13.0	11.2	Dec-04
Westfield Capital Management	135,054,686	2.2		0.2	4.1	87.7	19.4	21.0	14.3	12.8	Sep-03
Russell 2000 Growth				-3.1	4.9	90.2	17.2	18.6	13.0	11.0	Sep-03
Bernzott	161,338,381	2.6		2.7	10.5	90.4	15.4	18.2	--	15.7	Nov-15
Russell 2000 Value				5.2	21.2	97.1	11.6	13.6	10.1	12.3	Nov-15
Aristotle Small Cap	194,310,545	3.1		3.1	12.2	86.8	11.7	14.7	--	13.1	Nov-15
Russell 2000				1.0	12.7	94.8	14.8	16.4	11.7	14.3	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	1,596,927,017	25.6	25.0	2.0	5.4	53.4	4.4	9.1	4.8	6.5	Aug-94
International Equity	1,069,598,154	17.1	17.0	2.8	5.1	49.1	4.2	8.2	5.2	6.3	Dec-10
Todd	329,064,864	5.3		1.8	9.0	63.3	8.3	10.2	--	10.2	Apr-16
MSCI ACWI ex USA				1.3	3.5	49.4	6.5	9.8	4.9	9.8	Apr-16
Panagora Asset Management	313,278,166	5.0		3.3	5.2	49.1	4.4	8.2	6.5	6.1	Aug-94
Walter Scott International Equity	294,059,815	4.7		2.4	-0.5	--	--	--	--	10.5	Oct-20
MSCI EAFE				2.3	3.5	44.6	6.0	8.8	5.5	20.1	Oct-20
Segall Bryant Hamill	132,964,829	2.1		5.2	8.0	56.1	-1.5	--	--	-0.4	Nov-17
MSCI EAFE Small Cap				2.2	4.5	62.0	6.3	10.5	8.0	6.9	Nov-17
Emerging Markets	527,328,863	8.4	8.0	0.3	6.1	63.1	4.9	10.7	3.9	4.6	Dec-10
Vontobel	129,577,324	2.1		-1.9	2.3	55.7	7.4	10.9	6.9	10.7	Oct-05
Polunin	145,701,746	2.3		-0.7	4.1	77.1	7.7	13.9	--	9.5	Oct-13
SSgA Emerging Markets	114,899,281	1.8		0.8	8.5	53.7	3.3	10.2	--	4.2	Oct-13
MSCI Emerging Markets				-1.5	2.3	58.4	6.5	12.1	3.7	6.3	Oct-13
Lazard	137,150,511	2.2		3.3	10.2	64.5	0.7	7.3	--	4.2	Oct-13
MSCI Emerging Markets Small Cap				1.5	7.7	87.1	5.2	9.6	3.3	5.7	Oct-13
Total Fixed Income	1,537,342,960	24.6	26.0	-0.4	-1.4	7.9	5.3	4.3	4.3	4.9	Dec-04
Core Fixed Income	951,163,643	15.2	16.0	-0.4	-1.4	7.9	5.3	4.3	4.3	4.9	Dec-04
Wells Asset Management	315,373,004	5.1		-0.9	-3.2	3.3	5.4	3.7	4.3	5.1	May-05
BlackRock SIO	315,577,034	5.1		-0.2	0.4	14.8	5.4	5.4	--	4.5	Aug-15
BBgBarc US Aggregate TR				-1.2	-3.4	0.7	4.7	3.1	3.4	3.3	Aug-15
IR&M	320,213,605	5.1		-0.1	-1.1	6.6	5.3	3.8	--	4.1	Jul-15
IR&M Custom Benchmark				-0.4	-1.3	5.1	4.9	3.2	3.5	3.4	Jul-15

- IR&M Custom Benchmark reflects BC Agg since inception through 04/30/2017, as of 05/01/2017 forward it reflects 40% BC Agg/60% BC US 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	586,179,317	9.4	10.0	-0.2	0.0	24.7	4.8	6.6	4.5	--	
High Yield Income	361,407,889	5.8	6.0	0.7	3.0	28.1	6.4	7.7	6.6	7.1	Jan-06
Crescent Capital	117,171,057	1.9		0.3	1.2	21.8	6.0	6.5	--	5.7	May-15
50/50 S&P/LSTA Leveraged Loan/BBgBarc High Yield				0.1	1.3	22.2	5.5	6.7	5.4	5.0	May-15
DDJ	117,025,281	1.9		0.9	3.2	31.6	6.2	9.7	--	7.0	May-15
75% BC HY 25% S&P Leverage Loan				0.1	1.1	23.0	6.2	7.4	--	5.4	May-15
GoldenTree Multi Sector Opp Credit	126,188,378	2.0		1.0	4.4	31.7	6.9	--	--	7.0	Dec-16
Blended Index				0.2	1.8	20.6	5.3	--	--	5.3	Dec-16
S&P/LSTA Leveraged Loan TR				0.0	1.8	20.7	4.1	5.3	4.3	4.4	Dec-16
Emerging Market Debt	224,771,428	3.6	4.0	-1.7	-4.5	19.5	1.9	4.6	--	0.8	Nov-11
Aberdeen EMD Plus	224,771,115	3.6		-1.7	-4.5	19.5	--	--	--	7.2	Dec-18
JP Morgan EMBI Global Diversified				-1.0	-4.5	16.0	4.0	5.1	5.6	7.0	Dec-18
Total Alternative Assets	1,333,562,322	21.4	26.0								
Hedge Fund Composite	291,265,274	4.7	5.0	0.5	0.8	19.3	5.3	4.9	3.3	3.7	Nov-04
EnTrust Peruvian Bonds	4,682,144	0.1		-0.2	-0.5	0.2	-3.5	--	--	-3.4	Jan-18
Blackstone	136,130,910	2.2		0.4	2.1	15.6	6.2	--	--	5.9	Feb-18
Grosvenor	149,234,851	2.4		0.7	-0.4	24.2	6.4	6.8	--	5.2	Jul-13
HFRI Fund of Funds Composite Index				-0.1	2.0	24.0	5.5	5.6	3.4	4.3	Jul-13
Hedge Fund Transition Account	1,217,369	0.0									
Real Estate Composite	512,205,271	8.2	10.0	1.8	1.8	1.7	6.2	7.2	10.0	--	
Private Equity & Debt	530,091,777	8.5	11.0	8.2	8.2	9.0	8.8	8.5	8.2	--	
Cash	64,600,138	1.0	0.0	0.0	0.0	0.1	0.9	0.5	0.3	1.1	Oct-04

- Real Estate and Private Equity & Debt report on a quarterly basis, valuations are as of 12/31/2020.
- 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.

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

Private Markets Summary						
Quarter Ending December 31, 2020						
	Committed Capital	Cumulative Distribution	Contributed Capital	QTR	Last Year	Valuation
Private Equity & Debt IRR	\$1,226,045,043	\$631,431,955	\$856,973,532	8.2%	9.0%	\$530,091,777
Private Equity	\$769,066,542	\$481,747,533	\$533,371,472			\$251,842,018
Private Debt	\$456,978,501	\$149,684,422	\$323,260,260			\$278,249,759
Real Estate IRR	\$1,037,705,453	\$812,718,387	\$871,419,205	1.8%	1.7%	\$512,205,271



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.

