



NEPC, LLC

YOU DEMAND MORE. *So do we.*SM

Boston Retirement System

May Flash Report (Gross)

Mike Manning
Will Forde

255 State Street, Boston, MA 02109 | TEL: 617.374.1300 | FAX: 617.374.1313 | www.nepc.com

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

Index Performance Summary as of 05/31/2017

	2009	2010	2011	2012	2013	2014	2015	2016	Q1	April	May	YTD
EM Equity	78.5%	18.9%	-18.4%	18.2%	-2.6%	-2.2%	-14.9%	11.2%	11.4%	2.2%	3.0%	17.3%
Int'l Developed Equity	31.8%	7.8%	-12.1%	17.3%	22.8%	-4.9%	-0.8%	1.0%	7.2%	2.5%	3.7%	14.0%
EM Local Credit	22.0%	15.7%	-1.8%	16.8%	-9.0%	-5.7%	-14.9%	9.9%	6.5%	1.2%	2.0%	9.9%
US Large Cap	26.5%	15.1%	2.1%	16.0%	32.4%	13.7%	1.4%	12.0%	6.1%	1.0%	1.4%	8.7%
US Long Treasuries	-12.9%	9.4%	29.9%	3.6%	-12.7%	25.1%	-1.2%	1.3%	1.4%	1.5%	2.0%	5.0%
US High Yield	58.2%	15.1%	5.0%	15.8%	7.4%	2.5%	-4.5%	17.1%	2.7%	1.2%	0.9%	4.8%
Global Credit	-6.5%	-5.3%	-5.3%	-4.1%	2.7%	-0.6%	3.3%	2.1%	1.8%	1.1%	1.5%	4.5%
US Small/Mid Cap	34.4%	26.7%	-2.5%	17.9%	36.8%	7.1%	-2.9%	17.6%	3.8%	0.8%	-1.1%	3.4%
US Credit	5.9%	6.5%	7.8%	4.2%	-2.0%	6.0%	0.5%	2.6%	0.8%	0.8%	0.8%	2.4%
Commodities	18.9%	16.8%	-13.3%	-1.1%	-9.5%	-17.0%	-24.7%	11.8%	-2.3%	-1.5%	-1.4%	-5.4%

Source: Bloomberg, Barclays, S&P, Russell, MSCI, JP Morgan, Credit Suisse

S&P 500 = US Large Cap
 Russell 2500 = US Small/Mid Cap
 MSCI EAFE = International Developed Equity
 MSCI EM = Emerging Market Equity
 Barclays Agg = US Credit
 Barclays Long Treasury = US Long Treasuries
 Barclays High Yield = US HY
 Barclays Global Agg = Global Credit
 GBI-EM Global Diversified = EM Local Credit
 Bloomberg Commodity = Commodities



NEPC, LLC

Boston Retirement System

Total Fund Performance Detail (Gross)

	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	3 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Return (%)	Since
Total Composite*	4,548,057,106	100.0	100.0	1.3	3.9	8.1	13.8	5.4	8.9	5.0	7.9	Aug-94
Allocation Index				1.2	3.6	7.3	13.4	5.1	8.4	4.5	--	Aug-94
Policy Index				1.3	3.8	7.4	13.8	5.6	8.8	5.0	--	Aug-94
PRIT Core Fund/Teachers*	1,543,854,050	33.9		1.4	4.3	7.7	13.2	6.7	10.3	--	10.0	Jul-10
Total Equity	2,489,128,532	54.7	52.0	2.0	6.0	13.0	20.5	6.2	12.6	--	--	
Large Cap Comp	945,467,291	20.8	19.0	1.6	3.3	10.1	20.1	10.8	16.8	7.7	9.0	Dec-04
Rhumblin Advisors	119,926,767	2.6		1.4	2.6	8.6	17.4	10.1	15.3	7.0	9.7	Aug-94
DE Shaw Core Enhanced	212,072,060	4.7		1.4	2.8	8.9	18.1	10.6	16.0	--	14.5	Oct-09
JP Morgan 130/30	173,162,822	3.8		0.9	2.5	9.5	19.8	10.7	17.3	--	14.5	Oct-09
S&P 500				1.4	2.6	8.7	17.5	10.1	15.4	6.9	13.7	Oct-09
DE Shaw 130/30	185,796,086	4.1		1.8	3.3	10.3	20.3	12.0	17.1	--	16.0	Oct-09
Russell 1000				1.3	2.4	8.5	17.5	9.8	15.4	7.0	13.8	Oct-09
J&W Seligman	113,871,118	2.5		-0.2	-0.3	3.8	20.3	8.5	16.9	7.8	9.6	Jan-97
Russell 1000 Value				-0.1	-1.3	3.0	14.7	7.7	14.7	5.1	8.3	Jan-97
Zeavenbergen Capital	85,879,788	1.9		4.2	9.2	22.2	30.2	10.7	18.4	10.4	11.4	Aug-94
Intech	54,758,650	1.2		3.9	7.7	16.3	20.2	12.4	15.9	8.4	9.0	Oct-06
Russell 1000 Growth				2.6	6.2	14.3	20.3	11.9	16.0	8.8	9.7	Oct-06
Small Cap Comp	301,472,241	6.6	6.0	-0.4	2.6	9.6	20.0	7.4	14.4	8.3	9.5	Dec-04
Westfield Capital Management	119,824,495	2.6		0.2	3.8	13.1	18.7	6.7	14.2	9.5	10.7	Sep-03
Russell 2000 Growth				-0.9	2.1	6.3	19.7	8.6	14.4	7.4	9.1	Sep-03
Bernzott	89,584,964	2.0		-0.7	1.8	8.4	18.7	--	--	--	12.0	Nov-15
Russell 2000 Value				-3.1	-3.6	-2.9	21.0	7.3	13.7	5.3	14.9	Nov-15
Aristotle	92,054,795	2.0		-1.1	1.8	6.4	23.1	--	--	--	15.2	Nov-15
Russell 2000				-2.0	-0.8	1.5	20.4	8.0	14.0	6.4	12.6	Nov-15
Total Non-US Equity	1,242,188,999	27.3	27.0	2.9	9.0	16.1	21.0	2.5	8.9	2.1	6.5	Aug-94
International Equity	812,294,446	17.9	19.0	3.2	9.3	14.7	18.0	1.9	10.5	--	6.6	Dec-10
Todd	242,429,048	5.3		2.4	7.1	13.1	13.0	--	--	--	11.8	Apr-16
MSCI ACWI ex USA Gross				3.3	8.4	14.1	18.8	1.7	8.9	1.6	17.0	Apr-16
Panagora Asset Management	310,855,557	6.8		3.2	8.5	13.8	18.5	4.2	12.7	3.3	6.3	Aug-94
Fisher	258,508,419	5.7		4.2	12.4	17.5	22.6	3.9	10.8	3.2	5.0	Feb-06
MSCI EAFE				3.7	9.2	14.0	16.4	1.5	10.2	1.1	3.4	Feb-06

- DE Shaw 130/30 and DE Shaw Core Enhanced are preliminary.

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 (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Return (%)	Since
Emerging Markets	429,894,553	9.5	8.0	2.4	8.6	18.8	27.0	3.9	5.3	--	2.9	Dec-10
Vontobel	96,346,133	2.1		4.3	12.3	21.5	18.0	4.4	6.4	7.2	11.2	Oct-05
Polunin	104,158,302	2.3		0.8	4.3	16.8	35.4	6.8	--	--	8.3	Oct-13
SSgA Emerging Markets	125,046,437	2.7		2.0	7.6	17.2	28.3	0.3	--	--	1.2	Oct-13
MSCI Emerging Markets				3.0	7.9	17.3	27.4	1.6	4.5	2.3	2.8	Oct-13
Lazard	104,343,682	2.3		2.7	11.1	20.4	26.3	5.2	--	--	5.5	Oct-13
MSCI Emerging Markets Small Cap				0.7	4.5	15.1	19.1	1.1	5.6	2.5	3.2	Oct-13
Total Fixed Income	1,038,443,413	22.8	24.0									
Core Fixed Income	461,069,759	10.1	11.0	0.7	1.4	2.5	3.6	3.1	2.9	5.3	5.0	Dec-04
Wells Asset Management	97,422,815	2.1		0.6	1.4	2.4	2.2	3.0	3.1	5.8	5.5	May-05
BlackRock SIO	158,487,881	3.5		0.5	0.9	2.4	6.2	--	--	--	3.1	Aug-15
IR&M	205,159,063	4.5		0.9	1.7	2.6	2.3	--	--	--	3.9	Jul-15
IR&M Custom Benchmark				0.4	1.2	2.0	1.3	2.4	2.2	4.4	2.8	Jul-15
Value Added Fixed Income	577,373,654	12.7	13.0	0.9	2.7	5.7	11.4	2.5	3.8	--	--	
High Yield Income	381,267,086	8.4	9.0	0.6	1.9	4.4	11.8	5.1	6.7	7.2	7.4	Jan-06
Crescent Capital	129,991,821	2.9		0.5	1.4	3.5	10.4	--	--	--	6.8	May-15
50/50 S&P/LSTA Leveraged Loan/BBgBarc High Yield				0.6	1.3	3.4	10.5	4.2	6.0	6.0	5.0	May-15
DDJ	140,987,902	3.1		1.2	3.3	7.3	19.1	--	--	--	7.7	May-15
75% BC HY 25% S&P Leverage Loan				0.7	1.6	4.1	12.0	--	--	--	5.5	May-15
GoldenTree Multi Spec Opp Credit	108,437,800	2.4		0.0	1.1	2.7	--	--	--	--	3.6	Dec-16
3-Month LIBOR + 7%				0.7	2.0	3.3	8.0	7.6	7.5	8.1	4.0	Dec-16
S&P/LSTA U.S. Leveraged Loan				0.4	0.9	2.0	7.5	3.6	4.7	4.5	3.1	Dec-16
Emerging Market Debt	173,444,711	3.8	4.0	1.5	4.3	8.8	11.5	-2.8	-0.2	--	-0.6	Nov-11
Loomis Sayles Emerging Debt & Currencies	173,444,711	3.8		1.5	4.3	8.8	11.5	-2.8	-0.2	--	-0.6	Nov-11
Custom EMD				1.4	4.2	8.2	11.0	-3.1	0.1	3.8	-0.6	Nov-11
Global Fixed Income	22,661,857	0.5	0.0	1.6	3.1	5.3	3.1	0.7	1.6	4.7	5.3	Jul-95
Loomis Sayles	22,661,857	0.5		1.6	3.1	5.3	3.1	0.7	1.6	4.7	6.0	Nov-99
Citi WGBI				1.7	3.2	4.6	-0.5	-0.7	-0.2	3.4	4.3	Nov-99

- Golden Tree Multi Spec Opps Credit reflects April estimated value.

- IR&M Custom Benchmark reflects BC Agg since inception through 04/30/2017, as of 05/01/2017 forward it reflects 60% BC Agg/40% BC US TIPS.

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



NEPC, LLC

May 31, 2017

Boston Retirement System

Total Fund Performance Detail (Gross)

	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	3 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Return (%)	Since
Total Alternative Assets	986,757,304	21.7	24.0									
Hedge Fund Composite	329,418,900	7.2	7.0	0.0	0.2	1.4	4.2	-0.4	3.6	1.6	3.4	Nov-04
Mesirow Absolute Return Class J	60,531,339	1.3		-0.6	0.4	0.9	2.8	-1.9	2.5	0.7	3.1	Nov-04
GAM	53,398,235	1.2		0.0	-0.2	1.6	4.0	0.6	4.2	--	0.6	Nov-07
Permal	73,869,892	1.6		0.1	-0.2	0.7	5.6	0.1	4.5	--	4.1	Nov-07
Entrust	65,584,943	1.4		0.2	0.5	1.6	2.1	-2.7	2.2	--	1.7	Apr-12
Grosvenor	75,871,404	1.7		0.2	0.7	2.3	6.9	2.0	--	--	4.0	Jul-13
<i>HFRI Fund of Funds Composite Index</i>				0.3	1.3	3.3	6.0	1.9	3.8	0.9	3.1	Jul-13
Real Estate Composite	429,791,903	9.5	10.0	0.0	1.1	1.1	7.4	11.3	11.4	3.7	--	
Private Equity	227,546,501	5.0	7.0	0.0	1.4	1.4	3.0	7.0	7.3	6.0	--	
Cash	33,727,858	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.3	Oct-04

- PE & RE report on a quarterly basis. Real Estate and Private Equity valuations are as of 12/31/2016.
- Mesirow Absolute Return Class J market value is estimated.
- Entrust market value and return is preliminary.
- Cash value is preliminary.

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



NEPC, LLC

May 31, 2017

PE/RE Summary

Quarter Ending December 31, 2016

Target Weight	Weight in Fund		Committed Capital	Cumulative Distribution	Contributed Capital	QTR	Last Year	Valuation
7.0%	5.1%	Private Equity IRR	\$677,456,812	\$473,861,452	\$529,285,687	1.4%	3.0%	\$227,546,501
10.0%	9.7%	Real Estate IRR	\$808,557,801	\$634,864,296	\$738,613,386	1.1%	7.4%	\$429,791,903

Information Disclaimer and Reporting Methodology

Information Disclaimer

- Past performance is no guarantee of future results.
- All investments carry some level of risk. Diversification and other asset allocation techniques are not guaranteed to ensure profit or protect against losses.
- NEPC's source for portfolio pricing, calculation of accruals, and transaction information is the plan's custodian bank. Information on market indices and security characteristics is received from other sources external to NEPC. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.
- Some index returns displayed in this report or used in calculation of a policy, allocation or custom benchmark may be preliminary and subject to change.
- This report is provided as a management aid for the client's internal use only. Information contained in this report does not constitute 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.

Reporting Methodology

- The client's custodian bank is NEPC's preferred data source unless otherwise directed. NEPC generally reconciles custodian data to manager data. If the custodian cannot provide accurate data, manager data may be used.
- Trailing time period returns are determined by geometrically linking the holding period returns, from the first full month after inception to the report date. Rates of return are annualized when the time period is longer than a year. Performance is presented gross and/or net of manager fees as indicated on each page.
- For managers funded in the middle of a month, the "since inception" return will start with the first full month, although actual inception dates and cash flows are taken into account in all Composite calculations.
- This report may contain forward-looking statements that are based on NEPC's estimates, opinions and beliefs, but NEPC cannot guarantee that any plan will achieve its targeted return or meet other goals.