FLASH REPORT (GROSS)

Boston Retirement System

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

CALENDAR YEAR INDEX PERFORMANCE

	2010	2011	2012	2013	2014	2015	2016	2017	Q1	April	May	June	Q2	YTD
US Large Cap	15.1%	2.1%	16.0%	32.4%	13.7%	1.4%	12.0%	21.8%	-0.8%	0.4%	2.4%	0.6%	3.4%	2.6%
US Small/Mid Cap	26.7%	-2.5%	17.9%	36.8%	7.1%	-2.9%	17.6%	16.8%	-0.2%	0.2%	4.7%	0.7%	5.7%	5.5%
Int'l Developed Equity	7.8%	-12.1%	17.3%	22.8%	-4.9%	-0.8%	1.0%	25.0%	-1.5%	2.3%	-2.2%	-1.2%	-1.2%	-2.7%
Emerging Market Equity	18.9%	-18.4%	18.2%	-2.6%	-2.2%	-14.9%	11.2%	37.3%	1.4%	-0.4%	-3.5%	-4.2%	-8.0%	-6.7%
US Aggregate	6.5%	7.8%	4.2%	-2.0%	6.0%	0.5%	2.6%	3.5%	-1.5%	-0.7%	0.7%	-0.1%	-0.2%	-1.6%
US High Yield	15.1%	5.0%	15.8%	7.4%	2.5%	-4.5%	17.1%	7.5%	-0.9%	0.7%	0.0%	0.4%	1.0%	0.2%
US Long Treasuries	9.4%	29.9%	3.6%	-12.7%	25.1%	-1.2%	1.3%	8.5%	-3.3%	-1.9%	2.1%	0.2%	0.3%	-3.0%
EM Local Credit	15.7%	-1.8%	16.8%	-9.0%	-5.7%	-14.9%	9.9%	15.2%	4.4%	-3.0%	-5.0%	-2.9%	-10.4%	-6.4%
Global Credit	-5.3%	-5.3%	-4.1%	2.7%	-0.6%	3.3%	2.1%	7.4%	1.4%	-1.6%	-0.8%	-0.4%	-2.8%	-1.4%
Commodities	16.8%	-13.3%	-1.1%	-9.5%	-17.0%	-24.7%	11.8%	1.7%	-0.4%	2.6%	1.4%	-3.5%	0.4%	0.0%
BC TIPS	11.4%	6.3%	13.6%	7.0%	-8.6%	3.6%	-1.4%	4.7%	3.0%	-0.8%	-0.1%	0.4%	0.4%	0.8%

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

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

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 (%)	Inception (%)	Inception Date
Total Composite*	**4,874,204,143**	**100.0**	**100.0**	**-0.9**	**-0.4**	**0.0**	**8.1**	**7.0**	**7.8**	**6.2**	**7.9**	**Aug-94**
Allocation Index				*-0.3*	*0.3*	*0.4*	*8.4*	*6.9*	*7.6*	*5.9*	*--*	*Aug-94*
Policy Index				*-0.1*	*0.4*	*0.9*	*8.5*	*7.3*	*7.9*	*6.3*	*--*	*Aug-94*
PRIT Core Fund/Teachers*	1,628,881,996	33.4		0.6	1.1	1.7	10.0	8.4	9.3	--	10.0	Jul-10
Total Equity	**2,813,058,127**	**57.7**	**52.0**	**-1.4**	**-0.2**	**-0.3**	**11.5**	**8.9**	**10.2**	**--**	**--**	
Large Cap Comp	**985,058,828**	**20.2**	**17.0**	**0.4**	**4.4**	**4.0**	**17.3**	**13.0**	**14.8**	**11.0**	**9.6**	**Dec-04**
Rhumbline Advisors	112,527,569	2.3		0.6	3.5	2.6	14.3	11.9	13.3	10.2	9.9	Aug-94
DE Shaw Core Enhanced	193,732,473	4.0		0.6	3.9	2.9	15.5	12.6	14.0	--	14.5	Oct-09
JP Morgan 130/30	197,450,143	4.1		0.1	3.6	2.0	14.3	11.0	14.2	--	14.4	Oct-09
S&P 500				*0.6*	*3.4*	*2.6*	*14.4*	*11.9*	*13.4*	*10.2*	*13.8*	*Oct-09*
DE Shaw 130/30	215,650,683	4.4		-0.1	3.4	2.3	17.3	14.2	15.2	--	15.9	Oct-09
Russell 1000				*0.6*	*3.6*	*2.9*	*14.5*	*11.6*	*13.4*	*10.2*	*13.8*	*Oct-09*
Columbia Threadneedle	107,462,266	2.2		-0.2	2.5	-0.6	14.8	11.1	13.0	10.8	9.9	Jan-97
Russell 1000 Value				*0.2*	*1.2*	*-1.7*	*6.8*	*8.3*	*10.3*	*8.5*	*8.3*	*Jan-97*
Zevenbergen Capital	91,826,591	1.9		2.6	14.4	24.7	34.4	17.2	19.5	14.4	12.4	Aug-94
Intech	66,409,103	1.4		-0.5	3.0	6.4	22.3	15.1	16.5	11.5	9.9	Oct-06
Russell 1000 Growth				*1.0*	*5.8*	*7.3*	*22.5*	*15.0*	*16.4*	*11.8*	*10.7*	*Oct-06*
Small Cap Comp	**374,552,695**	**7.7**	**6.0**	**0.6**	**5.9**	**8.0**	**22.3**	**11.9**	**13.3**	**11.8**	**10.5**	**Dec-04**
Westfield Capital Management	152,964,578	3.1		-0.1	5.4	9.9	26.1	11.2	14.0	11.7	11.7	Sep-03
Russell 2000 Growth				*0.8*	*7.2*	*9.7*	*21.9*	*10.6*	*13.6*	*11.2*	*10.1*	*Sep-03*
Bernzott	112,492,540	2.3		0.9	5.4	6.8	24.2	--	--	--	16.7	Nov-15
Russell 2000 Value				*0.6*	*8.3*	*5.4*	*13.1*	*11.2*	*11.2*	*9.9*	*15.2*	*Nov-15*
Aristotle	109,082,493	2.2		1.3	7.2	6.5	15.7	--	--	--	16.3	Nov-15
Russell 2000				*0.7*	*7.8*	*7.7*	*17.6*	*11.0*	*12.5*	*10.6*	*15.5*	*Nov-15*

- J&W Seligman is now named Columbia Threadneedle.

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

TOTAL FUND PERFORMANCE DETAIL (GROSS)

	Market Value ($)	% of Portfolio	Policy %	1 Mo (%)	3 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Non-US Equity	**1,453,446,604**	**29.8**	**29.0**	**-3.0**	**-4.5**	**-4.9**	**5.5**	**5.2**	**6.2**	**3.5**	**6.5**	**Aug-94**
International Equity	**1,005,399,934**	**20.6**	**21.0**	**-2.2**	**-2.7**	**-3.6**	**6.4**	**4.8**	**6.5**	**--**	**6.6**	**Dec-10**
Todd	263,259,412	5.4		-2.2	-2.1	-1.5	9.0	--	--	--	10.7	Apr-16
MSCI ACWI ex USA Gross				*-1.8*	*-2.4*	*-3.4*	*7.8*	*5.6*	*6.5*	*3.0*	*12.3*	*Apr-16*
Panagora Asset Management	329,006,052	6.7		-2.2	-2.0	-3.5	5.3	6.3	8.1	4.9	6.2	Aug-94
Fisher	277,295,532	5.7		-1.2	-2.8	-3.7	5.7	6.1	7.4	4.0	5.0	Feb-06
MSCI EAFE				*-1.2*	*-1.2*	*-2.7*	*6.8*	*4.9*	*6.4*	*2.8*	*3.6*	*Feb-06*
Segall Bryant Hamill	135,432,562	2.8		-4.0	-5.1	-7.1	--	--	--	--	-1.1	Nov-17
MSCI EAFE Small Cap				*-1.9*	*-1.6*	*-1.3*	*12.4*	*10.1*	*11.3*	*6.8*	*2.9*	*Nov-17*
Emerging Markets	**448,046,670**	**9.2**	**8.0**	**-4.8**	**-8.4**	**-7.8**	**3.2**	**5.9**	**5.1**	**--**	**3.2**	**Dec-10**
Vontobel	99,901,814	2.0		-2.2	-6.8	-6.5	3.1	5.7	4.8	6.8	10.6	Oct-05
Polunin	109,954,875	2.3		-5.8	-8.4	-9.3	4.9	7.6	--	--	8.0	Oct-13
SSgA Emerging Markets	136,384,570	2.8		-4.6	-7.9	-5.5	6.9	5.5	--	--	2.7	Oct-13
MSCI Emerging Markets				*-4.2*	*-8.0*	*-6.7*	*8.2*	*5.6*	*5.0*	*2.3*	*4.0*	*Oct-13*
Lazard	101,805,411	2.1		-6.2	-10.4	-10.2	-3.0	4.9	--	--	3.8	Oct-13
MSCI Emerging Markets Small Cap				*-6.6*	*-8.6*	*-8.5*	*5.6*	*2.5*	*4.3*	*4.4*	*3.8*	*Oct-13*
Total Fixed Income	**1,078,603,877**	**22.1**	**22.0**									
Core Fixed Income	**554,083,800**	**11.4**	**12.0**	**0.0**	**-0.1**	**-0.6**	**1.2**	**2.6**	**3.1**	**4.7**	**4.7**	**Dec-04**
Wells Asset Management	116,718,687	2.4		-0.1	-0.1	-1.5	-0.2	2.0	2.8	5.1	5.0	May-05
BlackRock SIO	172,306,248	3.5		-0.2	-0.6	-0.2	2.5	--	--	--	2.9	Aug-15
BBgBarc US Aggregate TR				*-0.1*	*-0.2*	*-1.6*	*-0.4*	*1.7*	*2.3*	*3.7*	*1.5*	*Aug-15*
IR&M	265,058,865	5.4		0.1	0.3	-0.5	0.8	2.6	--	--	2.6	Jul-15
IR&M Custom Benchmark				*0.2*	*0.4*	*-0.7*	*1.1*	*1.9*	*2.4*	*3.8*	*1.9*	*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 (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Value Added Fixed Income	**524,520,077**	**10.8**	**10.0**	**-0.6**	**-2.6**	**-1.4**	**2.1**	**4.7**	**3.3**	**--**	**--**	
High Yield Income	**332,984,151**	**6.8**	**6.0**	**0.3**	**0.4**	**1.7**	**4.9**	**6.1**	**5.7**	**7.7**	**7.2**	**Jan-06**
Crescent Capital	100,283,012	2.1		0.2	0.7	0.2	2.3	5.4	--	--	5.2	May-15
50/50 S&P/LSTA Leveraged Loan/BBgBarc High Yield				*0.3*	*0.9*	*1.2*	*3.5*	*4.9*	*4.8*	*6.7*	*4.4*	*May-15*
DDJ	98,555,097	2.0		0.2	-0.6	1.6	5.8	8.2	--	--	7.0	May-15
75% BC HY 25% S&P Leverage Loan				*0.3*	*0.9*	*0.7*	*3.1*	*5.2*	*--*	*--*	*4.6*	*May-15*
GoldenTree Multi Spec Opp Credit	132,355,178	2.7		0.4	1.1	2.8	6.2	--	--	--	6.8	Dec-16
3-Month LIBOR + 7%				*0.8*	*2.3*	*4.5*	*8.9*	*8.2*	*7.8*	*7.8*	*8.7*	*Dec-16*
S&P/LSTA Leveraged Loan TR				*0.1*	*0.7*	*2.2*	*4.4*	*4.2*	*4.0*	*5.2*	*4.7*	*Dec-16*
Emerging Market Debt	**168,646,548**	**3.5**	**4.0**	**-2.4**	**-8.0**	**-6.8**	**-2.8**	**1.5**	**-1.8**	**--**	**-0.9**	**Nov-11**
Loomis Sayles Emerging Debt & Currencies	168,646,548	3.5		-2.4	-8.0	-6.8	-2.8	1.5	-1.8	--	-0.9	Nov-11
Custom EMD				*-1.9*	*-7.0*	*-5.8*	*-2.3*	*1.4*	*-1.7*	*2.4*	*-0.8*	*Nov-11*
Global Fixed Income	**22,889,378**	**0.5**	**0.0**	**-0.7**	**-3.3**	**-1.8**	**1.4**	**3.3**	**2.1**	**3.6**	**5.1**	**Jul-95**
Loomis Sayles	22,889,378	0.5		-0.7	-3.3	-1.8	1.4	3.3	2.1	3.7	5.7	Nov-99
Citi WGBI				*-0.3*	*-3.4*	*-0.9*	*1.9*	*2.8*	*1.1*	*2.1*	*4.1*	*Nov-99*
Total Alternative Assets	**933,671,636**	**19.2**	**26.0**									
Hedge Fund Composite	**237,757,166**	**4.9**	**5.0**	**0.1**	**0.9**	**0.5**	**3.0**	**-0.3**	**2.2**	**2.0**	**3.3**	**Nov-04**
Permal	74,094,581	1.5		0.7	0.1	-2.5	0.0	0.2	2.0	4.0	3.7	Nov-07
EnTrust Peruvian Bonds	5,248,661	0.1		-0.3	-0.7	-1.3	--	--	--	--	-1.3	Jan-18
Blackstone	75,590,365	1.6		-0.2	1.2	--	--	--	--	--	--	Jan-18
Grosvenor	81,287,508	1.7		-0.2	1.5	3.2	7.3	3.1	4.6	--	4.6	Jul-13
HFRI Fund of Funds Composite Index				*-0.5*	*0.4*	*0.7*	*5.1*	*1.9*	*3.5*	*1.4*	*3.5*	*Jul-13*
Hedge Fund Transition Account	1,473,534	0.0										
Real Estate Composite	**429,235,919**	**8.8**	**10.0**	**0.0**	**0.0**	**2.1**	**7.4**	**9.4**	**10.8**	**3.5**	**--**	
Private Equity & Debt	**266,678,551**	**5.5**	**11.0**	**0.0**	**0.0**	**3.2**	**10.7**	**7.1**	**8.2**	**5.9**	**--**	
Cash	**48,870,504**	**1.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.2**	**1.2**	**Oct-04**

- Real Estate and Private Equity & Debt report on a quarterly basis, valuations are as of 12/31/2017.
- EnTrust Peruvian Bonds and Grosvenor are preliminary.
- The Hedge Fund Transition Account is an estimation of the total values redeemed from the hedge fund portfolio and is subject to change.

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

PE/RE Summary

Quarter Ending December 31, 2017

Target Weight	Weight in Fund		Committed Capital	Cumulative Distribution	Contributed Capital	QTR	Last Year	Valuation
11.0%	5.5%	Private Equity & Debt IRR	$793,775,931	$518,668,274	$582,737,648	3.2%	12.8%	$266,678,551
10.0%	8.8%	Real Estate IRR	$840,872,974	$683,146,165	$745,587,447	2.1%	9.0%	$429,235,919

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- 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.
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