



# MONTHLY GROSS PERFORMANCE REPORT

BOSTON RETIREMENT SYSTEM

MAY 31, 2021

Mike Manning, CFA, CAIA, Managing Partner  
Will Forde, CFA, CAIA, Principal  
Kiley Fischer, Analyst



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# CALENDAR YEAR INDEX PERFORMANCE

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	May	YTD
<b>S&amp;P 500</b>	2.1%	16.0%	32.4%	13.7%	1.4%	12.0%	21.8%	-4.4%	31.5%	18.4%	0.7%	12.6%
<b>Russell 1000</b>	1.5%	16.4%	33.1%	13.2%	0.9%	12.1%	21.7%	-4.8%	31.4%	21.0%	0.5%	12.1%
<b>Russell 2000</b>	-4.2%	16.3%	38.8%	4.9%	-4.4%	21.3%	14.6%	-11.0%	25.5%	20.0%	0.2%	15.3%
<b>Russell 2500</b>	-2.5%	17.9%	36.8%	7.1%	-2.9%	17.6%	16.8%	-10.0%	27.8%	20.0%	0.2%	15.6%
<b>MSCI EAFE</b>	-12.1%	17.3%	22.8%	-4.9%	-0.8%	1.0%	25.0%	-13.8%	22.0%	7.8%	3.3%	10.1%
<b>MSCI EM</b>	-18.4%	18.2%	-2.6%	-2.2%	-14.9%	11.2%	37.3%	-14.6%	18.4%	18.3%	2.3%	7.3%
<b>MSCI ACWI</b>	-7.3%	16.1%	22.8%	4.2%	-2.4%	7.9%	24.0%	-9.4%	26.6%	16.3%	1.6%	10.8%
<b>Private Equity</b>	9.5%	12.6%	22.3%	14.6%	10.4%	10.3%	21.0%	13.1%	17.2%	38.2%	-	-
<b>BC TIPS</b>	13.6%	7.0%	-8.6%	3.6%	-1.4%	4.7%	3.0%	-1.3%	8.4%	11.0%	1.2%	1.1%
<b>BC Municipal</b>	10.7%	6.8%	-2.6%	9.1%	3.3%	0.2%	5.4%	1.3%	7.5%	5.2%	0.3%	0.8%
<b>BC Muni High Yield</b>	9.2%	18.1%	-5.5%	13.8%	1.8%	3.0%	9.7%	4.8%	10.7%	4.9%	1.1%	4.8%
<b>BC US Corporate HY</b>	5.0%	15.8%	7.4%	2.5%	-4.5%	17.1%	7.5%	-2.1%	14.3%	7.1%	0.3%	2.2%
<b>BC US Agg Bond</b>	7.8%	4.2%	-2.0%	6.0%	0.5%	2.6%	3.5%	0.0%	8.7%	7.5%	0.3%	-2.3%
<b>BC Global Agg</b>	5.6%	4.3%	-2.6%	0.6%	-3.2%	2.1%	7.4%	-1.2%	6.8%	9.2%	0.9%	-2.3%
<b>BC Long Treasuries</b>	29.9%	3.6%	-12.7%	25.1%	-1.2%	1.3%	8.5%	-1.8%	14.8%	17.7%	0.5%	-11.1%
<b>BC US Long Credit</b>	17.1%	12.7%	-6.6%	16.4%	-4.6%	10.2%	12.2%	-6.8%	23.4%	13.3%	1.0%	-5.8%
<b>BC US STRIPS 20+ Yr</b>	58.5%	3.0%	-21.0%	46.4%	-3.7%	1.4%	13.7%	-4.1%	20.9%	24.0%	0.6%	-15.4%
<b>JPM GBI-EM Global Div</b>	-1.8%	16.8%	-9.0%	-5.7%	-14.9%	9.9%	15.2%	-6.2%	13.5%	2.7%	2.5%	-2.2%
<b>JPM EMBI Glob Div</b>	7.3%	17.4%	-5.3%	7.4%	1.2%	10.2%	10.3%	-4.3%	15.0%	5.3%	1.1%	-1.4%
<b>CS Hedge Fund</b>	-2.5%	7.7%	9.7%	4.1%	-0.7%	1.2%	7.1%	-3.2%	9.3%	6.4%	-	5.5%
<b>BBG Commodity</b>	-13.3%	-1.1%	-9.5%	-17.0%	-24.7%	11.8%	1.7%	-11.2%	7.7%	-3.1%	2.7%	18.9%
<b>Alerian MLP</b>	13.9%	4.8%	27.6%	4.8%	-32.6%	18.3%	-6.5%	-12.4%	6.6%	-28.7%	7.6%	40.6%
<b>FTSE NAREIT Equity REITs</b>	8.3%	18.1%	2.5%	30.1%	3.2%	8.5%	5.2%	-4.6%	26.0%	-8.0%	1.0%	18.8%

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 (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Total Fund</b>	<b>6,457,607,709</b>	<b>100.0</b>	<b>100.0</b>	<b>0.9</b>	<b>5.4</b>	<b>7.3</b>	<b>27.1</b>	<b>9.7</b>	<b>10.5</b>	<b>8.0</b>	<b>8.2</b>	<b>Aug-94</b>
Allocation Index				1.1	5.5	7.3	26.8	9.8	10.5	7.8	--	Aug-94
Policy Index				1.0	5.3	6.7	25.9	10.5	11.0	8.1	--	Aug-94
PRIT Core Fund/Teachers*	2,072,100,484	32.1		1.0	7.0	8.3	26.6	11.3	11.5	9.2	10.4	Jul-10
<b>Total Equity</b>	<b>3,486,205,562</b>	<b>54.0</b>	<b>48.0</b>	<b>1.4</b>	<b>7.8</b>	<b>11.9</b>	<b>46.9</b>	<b>12.9</b>	<b>14.6</b>	<b>--</b>	<b>--</b>	<b>Dec-04</b>
MSCI ACWI				1.6	8.8	10.8	41.8	13.9	14.2	9.6	8.1	Dec-04
<b>Large Cap Comp</b>	<b>1,279,189,933</b>	<b>19.8</b>	<b>17.0</b>	<b>0.2</b>	<b>7.6</b>	<b>10.9</b>	<b>45.4</b>	<b>19.7</b>	<b>19.3</b>	<b>15.7</b>	<b>11.4</b>	<b>Dec-04</b>
Rhumblin Advisors	321,710,288	5.0		0.7	10.7	12.6	40.3	18.0	17.1	14.3	10.8	Aug-94
DE Shaw Core Enhanced	429,085,338	6.6		0.5	10.9	12.4	41.2	18.8	17.9	15.2	15.7	Oct-09
Russell 1000				0.5	9.9	12.1	42.7	18.4	17.5	14.4	15.0	Oct-09
Aristotle Value	186,604,368	2.9		1.2	8.8	15.7	47.7	--	--	--	25.0	Nov-19
Columbia Threadneedle	186,763,679	2.9		4.3	15.1	24.3	60.1	15.5	16.7	14.0	10.6	Jan-97
Russell 1000 Value				2.3	12.7	18.4	44.4	12.9	12.3	11.5	8.9	Jan-97
Zevenbergen Capital	154,596,169	2.4		-7.3	-12.8	-10.8	46.4	34.3	33.5	20.4	14.6	Aug-94
Russell 1000 Growth				-1.4	7.1	6.3	39.9	23.0	22.1	17.0	11.2	Aug-94
<b>Small Cap Comp</b>	<b>507,379,104</b>	<b>7.9</b>	<b>6.0</b>	<b>-0.4</b>	<b>5.7</b>	<b>13.1</b>	<b>54.1</b>	<b>14.7</b>	<b>17.6</b>	<b>13.2</b>	<b>11.3</b>	<b>Dec-04</b>
Westfield Capital Management	140,023,689	2.2		-2.0	3.9	7.9	47.0	18.7	20.5	14.2	12.9	Sep-03
Russell 2000 Growth				-2.9	-3.9	4.1	50.1	14.5	17.6	12.8	10.9	Sep-03
Bernzott	165,751,705	2.6		-0.7	5.7	13.6	59.0	14.8	17.6	--	15.8	Nov-15
Russell 2000 Value				3.1	10.7	27.5	79.4	10.7	13.8	10.6	12.9	Nov-15
Aristotle Small Cap	201,417,782	3.1		1.0	7.1	16.5	55.2	11.0	14.7	--	13.4	Nov-15
Russell 2000				0.2	3.3	15.3	64.6	13.1	16.0	11.9	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 (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Total Non-US Equity</b>	<b>1,699,636,525</b>	<b>26.3</b>	<b>25.0</b>	<b>2.9</b>	<b>8.6</b>	<b>12.3</b>	<b>45.8</b>	<b>7.2</b>	<b>10.3</b>	<b>5.2</b>	<b>6.7</b>	<b>Aug-94</b>
<b>International Equity</b>	<b>1,139,740,751</b>	<b>17.6</b>	<b>17.0</b>	<b>3.3</b>	<b>9.6</b>	<b>12.1</b>	<b>42.0</b>	<b>6.6</b>	<b>9.3</b>	<b>5.6</b>	<b>6.9</b>	<b>Dec-10</b>
Todd	344,822,338	5.3		2.7	6.9	14.3	52.1	9.9	11.1	--	10.9	Apr-16
MSCI ACWI ex USA				3.1	7.5	9.9	42.8	8.9	10.9	5.4	10.7	Apr-16
Panagora Asset Management	335,631,193	5.2		3.9	10.6	12.7	43.2	6.7	9.2	6.9	6.4	Aug-94
Walter Scott International Equity	315,130,344	4.9		3.4	9.7	6.6	--	--	--	--	18.5	Oct-20
MSCI EAFE				3.3	8.8	10.1	38.4	8.2	9.8	5.9	27.7	Oct-20
Segall Bryant Hamill	143,921,726	2.2		3.3	14.1	17.1	47.0	1.5	--	--	1.8	Nov-17
MSCI EAFE Small Cap				2.0	8.4	10.9	45.3	8.3	11.2	8.4	8.4	Nov-17
<b>Emerging Markets</b>	<b>559,895,774</b>	<b>8.7</b>	<b>8.0</b>	<b>2.1</b>	<b>6.6</b>	<b>12.7</b>	<b>54.3</b>	<b>8.4</b>	<b>12.3</b>	<b>4.4</b>	<b>5.1</b>	<b>Dec-10</b>
Vontobel	134,229,948	2.1		2.6	1.8	6.1	48.4	10.4	11.2	6.7	10.8	Oct-05
Polunin	157,133,384	2.4		0.8	7.2	12.5	65.2	11.6	16.5	--	10.4	Oct-13
SSgA Emerging Markets	119,710,550	1.9		1.2	5.0	13.0	49.9	5.9	11.8	--	4.7	Oct-13
MSCI Emerging Markets				2.3	3.3	7.3	51.0	9.6	13.9	4.1	6.8	Oct-13
Lazard	148,821,892	2.3		3.6	12.1	19.6	51.3	5.1	8.9	--	5.2	Oct-13
MSCI Emerging Markets Small Cap				2.5	10.4	17.0	74.4	9.0	11.9	4.1	6.8	Oct-13
<b>Total Fixed Income</b>	<b>1,563,625,144</b>	<b>24.2</b>	<b>26.0</b>									
<b>Core Fixed Income</b>	<b>962,919,248</b>	<b>14.9</b>	<b>16.0</b>	<b>0.4</b>	<b>0.9</b>	<b>-0.1</b>	<b>5.4</b>	<b>5.8</b>	<b>4.4</b>	<b>4.2</b>	<b>4.9</b>	<b>Dec-04</b>
Wells Asset Management	318,554,122	4.9		0.2	0.2	-2.2	0.9	5.7	3.8	4.1	5.2	May-05
BlackRock SIO	318,303,621	4.9		0.4	0.7	1.3	10.5	5.9	5.4	--	4.5	Aug-15
Bloomberg US Aggregate TR				0.3	-0.1	-2.3	-0.4	5.1	3.2	3.3	3.4	Aug-15
IR&M	326,061,504	5.0		0.7	1.8	0.7	5.4	5.9	4.0	--	4.3	Jul-15
IR&M Custom Benchmark				0.7	1.4	0.4	4.4	5.5	3.5	3.4	3.6	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 (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Value Added Fixed Income</b>	<b>600,705,896</b>	<b>9.3</b>	<b>10.0</b>	<b>0.9</b>	<b>2.3</b>	<b>2.5</b>	<b>18.4</b>	<b>6.4</b>	<b>6.7</b>	<b>4.5</b>	--	
<b>High Yield Income</b>	<b>367,185,577</b>	<b>5.7</b>	<b>6.0</b>	<b>0.7</b>	<b>2.4</b>	<b>4.7</b>	<b>21.2</b>	<b>6.9</b>	<b>7.5</b>	<b>6.6</b>	<b>7.2</b>	<b>Jan-06</b>
Crescent Capital	118,545,926	1.8		0.5	1.8	2.7	15.7	6.4	6.3	--	5.8	May-15
50/50 S&P/LSTA Leveraged Loan/Bloomberg High Yield				0.4	1.3	2.6	13.7	5.7	6.2	5.4	5.1	May-15
DDJ	118,656,845	1.8		0.4	2.3	4.6	25.4	7.0	9.1	--	7.1	May-15
75% BC HY 25% S&P Leverage Loan				0.4	1.4	2.4	14.4	6.4	6.8	--	5.5	May-15
GoldenTree Multi Sector Opp Credit	128,965,881	2.0		1.1	3.2	6.7	23.0	7.4	--	--	7.3	Dec-16
Blended Index				0.5	1.5	3.2	13.9	5.6	--	--	5.4	Dec-16
S&P/LSTA Leveraged Loan TR				0.6	1.1	2.9	12.5	4.3	4.9	4.3	4.5	Dec-16
<b>Emerging Market Debt</b>	<b>233,520,320</b>	<b>3.6</b>	<b>4.0</b>	<b>1.3</b>	<b>2.1</b>	<b>-0.8</b>	<b>14.1</b>	<b>5.3</b>	<b>5.3</b>	<b>--</b>	<b>1.2</b>	<b>Nov-11</b>
Aberdeen EMD Plus	233,520,006	3.6		1.3	2.1	-0.8	14.1	--	--	--	8.3	Dec-18
JP Morgan EMBI Global Diversified				1.1	2.3	-1.4	10.5	6.0	5.4	5.7	7.9	Dec-18
<b>Total Alternative Assets</b>	<b>1,339,305,793</b>	<b>20.7</b>	<b>26.0</b>									
<b>Hedge Fund Composite</b>	<b>297,008,745</b>	<b>4.6</b>	<b>5.0</b>	<b>0.0</b>	<b>2.6</b>	<b>2.8</b>	<b>16.8</b>	<b>5.8</b>	<b>4.9</b>	<b>3.5</b>	<b>3.8</b>	<b>Nov-04</b>
EnTrust Peruvian Bonds	4,657,737	0.1		-0.2	-0.6	-1.0	0.6	-3.5	--	--	-3.4	Jan-18
Blackstone	138,864,595	2.2		0.5	2.6	4.3	13.8	6.5	--	--	6.3	Feb-18
Grosvenor	152,280,027	2.4		-0.5	2.8	1.6	20.6	6.5	6.8	--	5.4	Jul-13
HFRI Fund of Funds Composite Index				0.2	2.2	4.4	20.0	6.0	5.9	3.7	4.5	Jul-13
Hedge Fund Transition Account	1,206,386	0.0										
<b>Real Estate Composite</b>	<b>512,205,271</b>	<b>7.9</b>	<b>10.0</b>	<b>0.0</b>	<b>1.8</b>	<b>1.8</b>	<b>1.7</b>	<b>6.2</b>	<b>7.2</b>	<b>10.0</b>	--	
<b>Private Equity &amp; Debt</b>	<b>530,091,777</b>	<b>8.2</b>	<b>11.0</b>	<b>0.0</b>	<b>8.2</b>	<b>8.2</b>	<b>9.0</b>	<b>8.8</b>	<b>8.5</b>	<b>8.2</b>	--	
<b>Cash</b>	<b>68,471,210</b>	<b>1.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.9</b>	<b>0.5</b>	<b>0.3</b>	<b>1.1</b>	<b>Oct-04</b>

- 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	Cummulative Distribution	Contributed Capital	QTR	Last Year	Valuation
Private Equity & Debt IRR	\$1,226,045,043	\$631,431,955	\$3,765,973,532	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	\$3,232,602,060			\$278,249,759
Real Estate IRR	\$1,037,705,453	\$812,718,387	\$871,419,205	1.8%	1.7%	\$512,205,271



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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.

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Source of private fund performance benchmark data: Cambridge Associates, via Refinitiv







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