

#### FINAL MONTHLY GROSS PERFORMANCE REPORT BOSTON RETIREMENT SYSTEM

#### MAY 31, 2023

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PROPRIETARY & CONFIDENTIAL

# Boston Retirement System TOTAL FUND PERFORMANCE DETAIL (GROSS)

	A	Allocation				Performance (%)								
	Market Value (\$)	% of Portfolio	Policy(%)	1 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date			
Total Fund	6,259,548,623	100.0	100.0	-0.8	3.1	1.3	7.8	5.4	6.5	7.5	Aug-94			
Allocation Index				-1.1	2.8	-0.2	7.3	5.3	6.3					
Policy Index				-1.1	3.4	0.6	7.5	5.9	6.7					
PRIT Core Fund/Teachers*	2,099,236,788	33.5		-0.4	4.0	-0.5	9.1	7.2	8.0	8.9	Jul-10			
Total Equity	2,956,217,732	47.2	47.0	-1.5	5.3	0.5	9.5	5.1	7.5	8.4	Dec-10			
MSCI AC World Index (Net)				-1.1	7.7	0.9	10.1	6.8	7.8	8.2				
Large Cap Comp	1,067,614,870	17.1	17.0	0.2	7.3	1.0	11.1	10.1	12.2	9.8	Dec-04			
Rhumbline Advisors	282,087,299	4.5		0.4	9.6	2.9	12.9	11.0	11.9	10.1	Aug-94			
DE Shaw Core Enhanced	358,863,571	5.7		0.3	8.5	1.9	12.6	11.1	12.3	13.3	Oct-09			
S&P 500 Index				0.4	9.6	2.9	12.9	11.0	12.0	12.8				
Aristotle Value	152,756,462	2.4		-2.3	1.0	-4.8	11.6			8.5	Nov-19			
Columbia Threadneedle	176,371,703	2.8		-3.8	-5.3	-6.3	15.0	7.9	10.3	9.6	Jan-97			
Russell 1000 Value Index				-3.9	-1.4	-4.5	11.6	6.8	8.4	8.0				
Zevenbergen Capital	97,116,427	1.6		11.7	40.2	18.1	-2.4	9.0	13.8	11.7	Aug-94			
Russell 1000 Growth Index				4.6	20.8	9.5	12.8	13.8	14.8	10.5				
Small Cap Comp	400,305,750	6.4	6.0	-2.4	-1.8	-4.4	8.9	4.9	8.7	9.0	Dec-04			
Aristotle Small Cap	176,654,967	2.8		-3.3	-4.9	-3.4	11.0	3.8		7.9	Nov-15			
Russell 2000 Index				-0.9	0.0	-4.7	9.2	2.7		7.0				
Westfield Capital Management	120,491,955	1.9		-0.6	6.3	4.3	9.0	8.1	10.6	10.8	Sep-03			
Russell 2000 Growth Index				0.0	4.9	2.7	4.6	2.7	7.9	8.2				
Mesirow Small Cap Value	102,886,851	1.6		-2.9						-2.9	May-23			
Russell 2000 Value Index				-2.0						-2.0				

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

- PRIT Core Fund/Teachers is not included in the Total Fund value

- Mesirow Small Cap was funded in April 2023.



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Total Non-US Equity	1,488,297,111	23.8	24.0	-2.5	5.7	1.4	8.3	1.4	3.6	5.7	Aug-94		
International Equity	1,029,008,911	16.4	16.0	-3.4	5.7	1.6	9.0	2.0	4.2	5.0	Dec-10		
Todd	300,040,096	4.8		-4.4	-0.1	-3.7	10.0	3.1		5.8	Apr-16		
MSCI ACWI ex USA				-3.6	4.8	-1.4	7.2	2.2		5.4			
Panagora Asset Management	312,817,367	5.0		-4.0	7.0	3.0	10.2	2.6	5.2	5.7	Aug-94		
Walter Scott International Equity	290,953,736	4.6		-1.4	12.6	8.1				4.0	Oct-20		
MSCI EAFE (Net)				-4.2	6.8	3.1				6.4			
Segall Bryant Hamill	124,967,846	2.0		-4.4	2.0	-2.5	9.1	-1.6		-1.0	Nov-17		
MSCI EAFE Small Cap (Net)				-4.2	2.6	-4.7	5.2	0.3		1.2			
Emerging Markets	459,288,200	7.3	8.0	-0.4	5.7	1.0	6.8	0.1	2.2	2.4	Dec-10		
ABS Emerging Markets Strategic Portfolio	90,578,207	1.4		-1.2	2.4	-5.6				-13.9	Nov-21		
Columbia Emerging Markets Equity	93,793,177	1.5		-1.3	0.9	-9.5				-22.5	Aug-21		
Polunin	128,434,097	2.1		-1.8	5.3	4.7	11.2	2.9		6.1	Oct-13		
MSCI Emerging Markets (Net)				-1.7	1.1	-8.5	3.5	-0.7		2.1			
Lazard	146,482,719	2.3		1.9	11.7	10.4	14.2	2.7		3.9	Oct-13		
MSCI Emerging Markets Small Cap (Net)				1.1	5.7	-3.0	15.3	2.6		3.9			
Total Fixed Income	1,604,109,720	25.6	27.0	-0.5	2.7	-0.5	1.0	2.2	2.6	3.3	Dec-10		
Core Fixed Income	1,010,896,489	16.1	18.0	-0.7	2.4	-1.2	-0.5	2.0	2.4	4.0	Dec-04		
AFL-CIO H.I.T.	44,039,457	0.7		-1.0	2.3	-3.1				-7.8	Dec-21		
BlackRock SIO	353,257,642	5.6		-0.2	1.9	0.1	2.3	2.9		2.9	Aug-15		
Allspring Global	308,994,972	4.9		-1.0	2.9	-1.7	-3.1	1.3	1.9	4.0	May-05		
Blmbg. U.S. Aggregate Index				-1.1	2.5	-2.1	-3.6	0.8	1.4	3.1			
IR&M	304,604,419	4.9		-1.0	2.5	-2.0	-0.5	2.1		2.3	Jul-15		
IR&M Custom Benchmark				-1.1	2.3	-2.4	-1.0	1.8		1.8			

- 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.

- Wells Asset Management is now Allspring Global.



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Value Added Fixed Income	593,213,232	9.5	9.0	0.0	3.1	0.6	3.5	2.4	2.7	3.6	Dec-10		
High Yield Income	380,348,580	6.1	5.0	-0.1	4.1	2.0	7.1	4.4	4.9	6.4	Jan-06		
Crescent Capital	114,052,320	1.8		-0.7	3.5	1.0	4.1	3.3		4.0	May-15		
50/50 S&P/LSTA Leveraged Loan/Bloomberg High Yield				-0.6	3.9	3.0	4.5	3.4		3.8			
Polen Capital	98,524,412	1.6		0.0	5.2	1.4	8.5	4.5		5.5	May-15		
75% BC HY 25% S&P Leverage Loan				-0.7	3.8	1.5	3.7	3.3		3.8			
GoldenTree Multi Sector Opp Credit	166,925,705	2.7		0.2	4.0	3.1	8.6	5.2		5.6	Dec-16		
Blended Index				-0.4	3.9	3.7	4.7	3.5		3.9			
Morningstar LSTA US Leveraged Loan				-0.2	4.1	5.9	5.9	3.7		4.0			
Emerging Market Debt	212,864,652	3.4	4.0	0.2	1.2	-1.8	-2.0	-0.7	-1.5	-0.6	Nov-11		
Aberdeen EMD Plus	212,864,335	3.4		0.2	1.2	-1.8	-2.0			0.2	Dec-18		
JP Morgan EMBI Global Diversified				-0.6	1.8	-1.5	-2.7			0.2			
Total Alternative Assets	1,676,920,349	26.8	26.0	0.2	0.0	4.3	11.2	9.4	8.4	8.7	Dec-10		
Hedge Fund Composite	307,872,143	4.9	5.0	0.8	2.6	4.5	7.0	4.4	3.1	3.6	Nov-04		
Blackstone	148,808,134	2.4		0.6	1.8	5.8	7.5	5.7		5.6	Feb-18		
Grosvenor	158,024,957	2.5		1.1	3.5	6.4	7.8	4.6		4.7	Jul-13		
HFRI Fund of Funds Composite Index				0.1	1.1	1.1	5.3	3.0		3.3			
Hedge Fund Transition Account	696,717	0.0	0.0										
EnTrust Peruvian Bonds	342,336	0.0		-0.4	-17.4	-92.5	-57.8	-41.7		-39.4	Jan-18		
Real Estate Composite	664,897,216	10.6	10.0	0.0	-3.9	5.5	9.7	9.3	10.3	7.9	Sep-04		
Private Equity & Debt	704,150,990	11.2	11.0	0.0	2.6	3.0	14.6	12.2	10.4	9.1	Jun-04		
Cash	22,300,822	0.4	0.0	0.3	1.7	1.7	0.8	1.0	0.5	1.1	Oct-04		

-Real Estate and Private Equity & Debt report on a quarterly basis and are lagged one quarter. Valuations are as of 12/31/2022.

-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

-EnTrust Peruvian Bonds is included in the Hedge Fund Transition Account value.



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