



Firefighters' Retirement System of Louisiana

# MONTHLY PERFORMANCE REPORT

**FIREFIGHTERS' RETIREMENT  
SYSTEM OF LOUISIANA**

SEPTEMBER 30, 2023

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# CALENDAR YEAR INDEX PERFORMANCE

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Sep	YTD
<b>S&amp;P 500</b>	32.4%	13.7%	1.4%	12.0%	21.8%	-4.4%	31.5%	18.4%	28.7%	-18.1%	-4.8%	13.1%
<b>Russell 1000</b>	33.1%	13.2%	0.9%	12.1%	21.7%	-4.8%	31.4%	21.0%	26.5%	-19.1%	-4.7%	13.0%
<b>Russell 2000</b>	38.8%	4.9%	-4.4%	21.3%	14.6%	-11.0%	25.5%	20.0%	14.8%	-20.4%	-5.9%	2.5%
<b>Russell 2500</b>	36.8%	7.1%	-2.9%	17.6%	16.8%	-10.0%	27.8%	20.0%	18.2%	-18.4%	-5.6%	3.6%
<b>MSCI EAFE</b>	22.8%	-4.9%	-0.8%	1.0%	25.0%	-13.8%	22.0%	7.8%	11.3%	-14.5%	-3.4%	7.1%
<b>MSCI EM</b>	-2.6%	-2.2%	-14.9%	11.2%	37.3%	-14.6%	18.4%	18.3%	-2.5%	-20.1%	-2.6%	1.8%
<b>MSCI ACWI</b>	22.8%	4.2%	-2.4%	7.9%	24.0%	-9.4%	26.6%	16.3%	18.5%	-18.4%	-4.1%	10.1%
<b>Private Equity</b>	12.6%	22.3%	14.6%	10.4%	10.3%	21.0%	13.1%	17.2%	45.0%	-9.3%	-	2.1%
<b>BBG TIPS</b>	-8.6%	3.6%	-1.4%	4.7%	3.0%	-1.3%	8.4%	11.0%	6.0%	-11.8%	-1.8%	-0.8%
<b>BBG Municipal</b>	-2.6%	9.1%	3.3%	0.2%	5.4%	1.3%	7.5%	5.2%	1.5%	-8.5%	-2.9%	-1.4%
<b>BBG Muni High Yield</b>	-5.5%	13.8%	1.8%	3.0%	9.7%	4.8%	10.7%	4.9%	7.8%	-13.1%	-3.4%	0.0%
<b>BBG US Corporate HY</b>	7.4%	2.5%	-4.5%	17.1%	7.5%	-2.1%	14.3%	7.1%	5.3%	-11.2%	-1.2%	5.9%
<b>BBG US Agg Bond</b>	-2.0%	6.0%	0.5%	2.6%	3.5%	0.0%	8.7%	7.5%	-1.5%	-13.0%	-2.5%	-1.2%
<b>BBG Global Agg</b>	-2.6%	0.6%	-3.2%	2.1%	7.4%	-1.2%	6.8%	9.2%	-4.7%	-16.2%	-2.9%	-2.2%
<b>BBG Long Treasuries</b>	-12.7%	25.1%	-1.2%	1.3%	8.5%	-1.8%	14.8%	17.7%	-4.6%	-29.3%	-7.3%	-8.6%
<b>BBG US Long Credit</b>	-6.6%	16.4%	-4.6%	10.2%	12.2%	-6.8%	23.4%	13.3%	-1.2%	-25.3%	-5.3%	-2.6%
<b>BBG US STRIPS 20+ Yr</b>	-21.0%	46.4%	-3.7%	1.4%	13.7%	-4.1%	20.9%	24.0%	-5.2%	-39.6%	-11.6%	-15.0%
<b>JPM GBI-EM Global Div</b>	-9.0%	-5.7%	-14.9%	9.9%	15.2%	-6.2%	13.5%	2.7%	-8.7%	-11.7%	-3.4%	4.3%
<b>JPM EMBI Glob Div</b>	-5.3%	7.4%	1.2%	10.2%	10.3%	-4.3%	15.0%	5.3%	-1.8%	-17.8%	-2.6%	1.8%
<b>CS Hedge Fund</b>	9.7%	4.1%	-0.7%	1.2%	7.1%	-3.2%	9.3%	6.4%	8.2%	1.1%	-	3.4%
<b>BBG Commodity</b>	-9.5%	-17.0%	-24.7%	11.8%	1.7%	-11.2%	7.7%	-3.1%	27.1%	16.1%	-0.7%	-3.4%
<b>Alerian Midstream</b>	-	16.4%	-37.3%	33.8%	-2.4%	-13.3%	24.0%	-23.4%	38.4%	21.5%	-0.7%	7.1%
<b>FTSE NAREIT Equity REITs</b>	2.5%	30.1%	3.2%	8.5%	5.2%	-4.6%	26.0%	-8.0%	43.2%	-24.4%	-6.8%	-2.1%

\*Private Equity return represents calendar year pooled IRR and is subject to a one quarter lag  
Source: FactSet, Barclays, Thomson One



# MARKET ENVIRONMENT

There was nowhere to hide in September as bonds and equities sold off amid market expectations of interest rates staying higher for longer; the optimism that rates will revert to under 3% sooner rather than later seemingly dissipated last month.

So far, the Federal Reserve has increased rates by over 500 basis points, and appears to have reached the end of its tightening cycle. Meanwhile, Congress has continued to provide fiscal stimulus with no material reduction in spending. With rates ticking up higher, the effect of higher interest burdens on budgets and their impact on capital markets remains to be seen; the markets started discounting the risks associated with this dynamic in September.

Interest rate duration drove returns in fixed income last month as the sell-off in longer-dated Treasuries fueled losses in bonds. Treasury yields rose sharply in September with the 10-year yield rising 48 basis points and the 30-year yield up 50 basis points. During this period, investment-grade credit spreads widened modestly by three basis points, while spreads on high-yield bonds widened 22 basis points; the duration effect drove investment-grade and high-yield debt down 2.7% and 1.2%, respectively.

Typically, a selloff in bonds is indicative of a risk-on sentiment but with inflation above target, large fiscal deficits, and cash yielding above 5%, equity valuations are experiencing a repricing. As interest rates rose nearly 50 basis points in September, U.S. equities fell 4.8%, according to the S&P 500 Index. Global equities fared relatively better with the MSCI ACWI down 4.1%; emerging market stocks outperformed with losses of 2.6%.

Elsewhere, energy markets ended last month higher with WTI Crude Oil spot prices up 9.8%; so far WTI Crude Oil spot prices have risen almost 30% since June. Overall, the Bloomberg Commodity Index gained 4.1% in September.

Keeping in mind the market dynamics, we suggest investors reduce S&P 500 exposure, while maintaining U.S. large-cap value positions. We also recommend investors increase exposure to U.S. high-yield bonds and broadly evaluate the risk-return benefit of fixed income.

Real interest rates have risen to attractive levels and, given the continued uncertainty surrounding inflation, we encourage taking advantage of the available real yields of 2.5% and adding exposure to TIPS. Lastly, we suggest holding greater levels of cash within safe-haven fixed-income exposures to enhance portfolio liquidity.



# TOTAL FUND PERFORMANCE DETAIL

	Allocation			Performance (%)								
	Market Value (\$)	Policy (%)	% of Portfolio	1 Mo (%)	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Total Plan Composite</b>	<b>2,140,158,704</b>	<b>100.0</b>	<b>100.0</b>	<b>-3.0</b>	<b>-2.6</b>	<b>4.3</b>	<b>11.9</b>	<b>4.7</b>	<b>4.6</b>	<b>5.0</b>	<b>5.7</b>	<b>Oct-92</b>
<i>Policy Index</i>				-3.3	-3.0	4.5	11.4	3.8	4.7	6.1		
<i>Allocation Index</i>				-3.3	-3.0	3.8	10.6	3.5	4.5	5.7		
<b>Total Equity Composite</b>	<b>1,225,216,308</b>	<b>56.0</b>	<b>57.2</b>	<b>-3.8</b>	<b>-3.0</b>	<b>8.0</b>	<b>20.6</b>	<b>8.3</b>	<b>5.8</b>	<b>7.1</b>	<b>7.2</b>	<b>Oct-92</b>
<i>MSCI AC World Index (Net)</i>				-4.1	-3.4	10.1	20.8	6.9	6.5	7.6	7.5	
<b>Domestic Equity Composite</b>	<b>637,925,404</b>	<b>27.5</b>	<b>29.8</b>	<b>-4.7</b>	<b>-3.4</b>	<b>8.5</b>	<b>18.1</b>	<b>9.7</b>	<b>7.7</b>	<b>9.3</b>	<b>8.1</b>	<b>Oct-92</b>
<i>Russell 3000 Index</i>				-4.8	-3.3	12.4	20.5	9.4	9.1	11.3	9.9	
Mellon Stock Index Fund	351,499,819		16.4	-4.8	-3.3	13.0	21.6	10.1	9.9		11.5	Nov-13
<i>S&amp;P 500 Index</i>				-4.8	-3.3	13.1	21.6	10.2	9.9		11.5	
Mellon Large Cap Value Stock Index Fund	133,817,609		6.3	-3.9	-3.2	1.8	14.4				1.1	Aug-22
<i>Russell 1000 Value Index</i>				-3.9	-3.2	1.8	14.4				1.1	
<b>SMID Cap Composite</b>	<b>152,607,976</b>	<b>7.0</b>	<b>7.1</b>	<b>-5.4</b>	<b>-3.9</b>	<b>4.7</b>	<b>13.5</b>	<b>10.1</b>	<b>2.7</b>	<b>5.4</b>	<b>7.1</b>	<b>Oct-12</b>
<i>Russell 2500 Index</i>				-5.6	-4.8	3.6	11.3	8.4	4.5	7.9	9.7	
PGIM QS SMID Core	41,181,955		1.9	-5.0	-1.4	8.2	21.4	17.7	6.5		6.9	Jul-18
<i>Russell 2500 Index</i>				-5.6	-4.8	3.6	11.3	8.4	4.5		5.2	
Blackrock Russell 2500 Index Fund	111,426,021		5.2	-5.6	-4.8	3.6	11.3				-0.9	Feb-21
<i>Russell 2500 Index</i>				-5.6	-4.8	3.6	11.3				-0.9	
<b>International Equity Composite</b>	<b>247,786,146</b>	<b>11.5</b>	<b>11.6</b>	<b>-2.9</b>	<b>-3.4</b>	<b>7.5</b>	<b>25.6</b>	<b>6.1</b>	<b>3.4</b>	<b>4.3</b>	<b>5.4</b>	<b>Oct-12</b>
<i>MSCI AC World ex USA (Net)</i>				-3.2	-3.8	5.3	20.4	3.7	2.6	3.3	4.5	
LSV International Equity Value	127,867,046		6.0	-1.0	-0.2	8.4	27.3	9.7	3.0	4.2	5.3	Oct-04
<i>MSCI Custom Benchmark</i>				-3.2	-3.8	5.3	20.4	3.7	2.6	3.3	4.6	
Fisher All Foreign Equity	119,919,099		5.6	-4.8	-6.6	6.5	23.9	2.8	3.7	4.3	6.1	Oct-04
<i>MSCI AC World ex USA (Net)</i>				-3.2	-3.8	5.3	20.4	3.7	2.6	3.3	5.2	



# TOTAL FUND PERFORMANCE DETAIL

	Allocation			Performance (%)									Inception Date
	Market Value (\$)	Policy (%)	% of Portfolio	1 Mo (%)	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)		
<b>Global Equity Composite</b>	<b>228,516,551</b>	<b>10.0</b>	<b>10.7</b>	<b>-2.9</b>	<b>-2.2</b>	<b>7.2</b>	<b>22.8</b>	<b>11.3</b>	<b>6.4</b>	<b>7.2</b>	<b>8.7</b>	<b>Oct-12</b>	
<i>MSCI AC World Index (Net)</i>				-4.1	-3.4	10.1	20.8	6.9	6.5	7.6	8.4		
Boston Partners Global Equity	123,715,839		5.8	-1.8	-1.3	4.8	24.1	15.4	6.2		8.7	Nov-16	
<i>MSCI AC World Index (Net)</i>				-4.1	-3.4	10.1	20.8	6.9	6.5		9.0		
State Street ACWI Index Fund	104,795,358		4.9	-4.1	-3.3	10.3	21.1	7.2			8.5	Sep-19	
<i>MSCI AC World Index (Net)</i>				-4.1	-3.4	10.1	20.8	6.9			8.2		
<b>Emerging Markets Equity</b>	<b>110,988,209</b>	<b>7.0</b>	<b>5.2</b>	<b>-2.0</b>	<b>-1.8</b>	<b>8.4</b>	<b>20.3</b>	<b>1.1</b>	<b>1.5</b>	<b>2.2</b>	<b>2.2</b>	<b>Oct-13</b>	
<i>MSCI Emerging Markets (Net)</i>				-2.6	-2.9	1.8	11.7	-1.7	0.6	2.1	2.1		
Acadian Emerging Markets Equity	62,571,392		2.9	-1.1	0.3	12.3	24.5	4.6	2.7		2.7	Dec-13	
<i>MSCI Emerging Markets (Net)</i>				-2.6	-2.9	1.8	11.7	-1.7	0.6		1.8		
Invesco Oppenheimer Developing Markets	20,386,508		1.0	-3.7	-6.2	4.2	16.1	-4.7	-0.3		1.2	Jan-14	
<i>MSCI Emerging Markets (Net)</i>				-2.6	-2.9	1.8	11.7	-1.7	0.6		1.9		
Mellon Emerging Markets	28,030,309		1.3	-2.6	-3.0						0.7	Mar-23	
<i>MSCI Emerging Markets (Net)</i>				-2.6	-2.9						0.9		
<b>Total Fixed Income Composite</b>	<b>562,462,511</b>	<b>26.0</b>	<b>26.3</b>	<b>-2.6</b>	<b>-3.1</b>	<b>-0.2</b>	<b>2.7</b>	<b>-4.6</b>	<b>0.7</b>	<b>0.8</b>	<b>0.8</b>	<b>Oct-12</b>	
<i>Total Fixed Income Custom Benchmark</i>				-2.6	-3.2	-0.1	3.1	-4.3	0.4	0.7	0.5		
<b>Core Fixed Income</b>	<b>427,541,204</b>	<b>18.0</b>	<b>20.0</b>	<b>-2.5</b>	<b>-3.2</b>	<b>-1.0</b>	<b>0.9</b>	<b>-5.0</b>	<b>0.2</b>	<b>1.2</b>	<b>1.7</b>	<b>Dec-10</b>	
<i>Blmbg. U.S. Aggregate Index</i>				-2.5	-3.2	-1.2	0.6	-5.2	0.1	1.1	1.6		
Orleans Core Fixed Income	95,769,975		4.5	-2.5	-3.0	-0.8	1.6	-4.5	0.4	1.3	4.7	Sep-92	
<i>Blmbg. U.S. Aggregate Index</i>				-2.5	-3.2	-1.2	0.6	-5.2	0.1	1.1	4.4		
Blackrock US Debt	331,771,230		15.5	-2.5	-3.2	-1.0	0.7	-5.2	0.1		0.7	Nov-14	
<i>Blmbg. U.S. Aggregate Index</i>				-2.5	-3.2	-1.2	0.6	-5.2	0.1		0.7		
<b>US TIPS Composite</b>	<b>46,095,242</b>	<b>3.0</b>	<b>2.2</b>										
Blackrock US TIPS Index	46,095,242		2.2	-1.8	-2.6	-0.6	1.2	-2.0	2.1		2.1	Oct-18	
<i>Blmbg. U.S. TIPS</i>				-1.8	-2.6	-0.8	1.2	-2.0	2.1		2.1		
<b>Emerging Markets Debt</b>	<b>88,826,064</b>	<b>5.0</b>	<b>4.2</b>										
Wellington Blended Opportunistic EMD	88,826,064		4.2	-3.2	-3.2	3.4	12.1	-3.0			0.2	May-20	
<i>EMD Custom Benchmark</i>				-3.0	-2.7	3.0	11.6	-3.6			-0.6		



# TOTAL FUND PERFORMANCE DETAIL

	Allocation			Performance (%)								
	Market Value (\$)	Policy (%)	% of Portfolio	1 Mo (%)	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>GAA Composite</b>	<b>62,208,925</b>	<b>3.0</b>	<b>2.9</b>	<b>-3.7</b>	<b>-4.2</b>	<b>2.8</b>	<b>9.2</b>	<b>1.2</b>	<b>3.5</b>		<b>3.7</b>	<b>Apr-14</b>
60% MSCI World (Net) / 40% FTSE WGBI				-3.9	-3.8	5.5	13.3	1.2	3.6		4.2	
Blackrock Global Allocation	62,208,925		2.9	-3.7	-4.2	2.8	9.2	1.4	4.5		4.4	Apr-14
60% MSCI World (Net) / 40% FTSE WGBI				-3.9	-3.8	5.5	13.3	1.2	3.6		4.2	
<b>Total Alternative Composite</b>	<b>279,021,030</b>	<b>15.0</b>	<b>13.0</b>	<b>0.0</b>	<b>0.0</b>	<b>-2.5</b>	<b>-2.5</b>	<b>13.2</b>	<b>9.0</b>	<b>4.9</b>	<b>4.0</b>	<b>Jul-05</b>
<b>Private Equity Composite</b>	<b>123,818,071</b>	<b>7.0</b>	<b>5.8</b>	<b>0.0</b>	<b>0.0</b>	<b>3.7</b>	<b>-1.2</b>	<b>17.9</b>	<b>11.9</b>	<b>4.0</b>	<b>1.1</b>	<b>Aug-05</b>
C/A US All PE (1 Qtr Lag)				0.0	0.0	3.7	4.3	20.2	14.7	14.2	13.9	
Murphree Venture (\$2,000,000)	137,423		0.0	0.0	0.0	-2.1	4.1	-3.2	-17.1	-15.9	-9.4	Oct-05
Louisiana Fund I (\$1,000,000)	1,261,905		0.1	0.0	0.0	0.5	5.0	1.4	-2.8	-3.1	-5.5	Aug-05
DCM Private Equity II (\$7,500,000)	476,534		0.0	0.0	0.0	-10.9	-18.7	-0.5	-5.8	-4.1	-2.5	Mar-06
GA Crossover Fund (\$25,000,000)	3,298,744		0.2	0.0	0.0	-4.4	-17.3	-4.1	0.2	7.5	9.5	Feb-08
CCMP Capital Investors III (\$15,000,000)	318,586		0.0	0.0	0.0	65.7	24.1	14.2	10.8		11.4	Oct-14
Landmark Equity Partners XV (\$25,000,000)	5,077,304		0.2	0.0	0.0	-1.2	-44.2	-2.4	-2.3		5.7	Dec-14
Harbourvest IV (\$20,000,000)	15,303,693		0.7	0.0	0.0	4.1	0.3	9.8	10.4		10.1	Nov-16
Mesirow (\$35,000,000)	42,690,779		2.0	0.0	0.0	3.5	4.9	22.6			14.0	Dec-18
HarbourVest Partners XI Buyout (\$35,000,000)	30,053,434		1.4	0.0	0.0	3.3	3.9	31.0			20.1	Jan-19
HarbourVest FRS R3 LLC (Tranche 1)	25,199,669		1.2	0.0	0.0	8.0	-1.2				-1.2	Oct-22

# TOTAL FUND PERFORMANCE DETAIL

	Allocation			Performance (%)								
	Market Value (\$)	Policy (%)	% of Portfolio	1 Mo (%)	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Real Estate Composite</b>	<b>151,590,960</b>	<b>6.0</b>	<b>7.1</b>	<b>0.0</b>	<b>0.0</b>	<b>-6.8</b>	<b>-3.7</b>	<b>8.9</b>	<b>6.3</b>	<b>5.8</b>	<b>6.7</b>	<b>Oct-04</b>
<i>NCREIF Property Index 1 Qtr. Lag</i>				-2.0	-2.0	-7.1	-6.6	6.8	5.9	7.8	8.1	
<i>NCREIF ODCE 1 Qtr. Lag</i>				-2.7	-2.7	-10.4	-10.0	8.0	6.5	8.7	7.7	
Sentinel Real Estate Fund (\$30,000,000)	52,661,840		2.5	0.0	0.0	-4.0	-0.2	16.3	11.5	10.6	7.9	Mar-06
Timbervest Crossover Fund (\$16,000,000)	2,207,194		0.1	0.0	0.0	-15.0	-16.1	-11.9	-6.9	-5.4	-3.2	May-08
AEW Partners VI LP (\$20,000,000)	293,404		0.0	0.0	0.0	0.6	2.9	8.8	24.8	20.7	17.8	Apr-10
AEW Core Property (\$12,000,000)	30,357,499		1.4	0.0	0.0	-8.8	-7.1	8.0	6.2		6.9	May-15
FRS-GA (Georgia)	3,210,959		0.2	0.0	0.0	0.0	0.0	0.0	-1.5	-5.2	-6.9	Jun-08
FRS-LB I (NLTP AZ)	7,252,509		0.3	0.0	0.0	0.0	0.0	0.1	-0.2	5.5	-8.6	Jun-07
ASB Real Estate Fund	27,236,711		1.3	0.0	0.0	-9.3	-7.3	6.3	5.6		5.3	Jan-16
Heitman America Real Estate Trust	28,370,844		1.3	0.0	0.0	-8.6	-7.3	10.8	6.7		7.0	Nov-15
<b>Real Assets Composite</b>	<b>3,611,999</b>	<b>2.0</b>	<b>0.2</b>									
HarbourVest FRS R3 LLC (Tranche 2)	3,611,999		0.2	0.0	0.0	-4.6					-4.6	Jan-23
<b>Total Cash (\$9 MM)</b>	<b>11,249,929</b>	<b>0.0</b>	<b>0.5</b>	<b>0.4</b>	<b>1.4</b>	<b>3.8</b>	<b>4.7</b>	<b>1.8</b>	<b>1.7</b>	<b>1.1</b>	<b>2.6</b>	<b>Jul-92</b>
<i>90 Day U.S. Treasury Bill</i>				0.5	1.3	3.6	4.5	1.7	1.7	1.1	2.4	





# TOTAL FUND PERFORMANCE DETAIL

Returns are net of manager fees. Results for periods longer than one year are annualized.

Fiscal Year ends June 30th. Fiscal Year to Date data will be the same as that for 1 Quarter.

Blackrock Global Allocation, Blackrock Russell 2500 Index Fund, Blackrock US Debt, Blackrock US TIPS Index, Boston Partners Global Equity, PGIM QS SMID Core, and State Street ACWI Index Fund are preliminary as of 09/30/2023.

SMID Cap Composite start date is 10/1/2012.

International Equity Composites start date is 10/1/2012.

MSCI Custom Benchmark is comprised of the MSCI EAFE until 12/31/2009 and MSCI ACWI ex USA beginning 1/1/2010.

Policy Index is comprised of 20.5% S&P 500, 7% Russell 2500, 11.5% MSCI ACWI ex USA, 7% MSCI Emerging Markets, 10% MSCI ACWI, 18% Bloomberg US Aggregate TR, 3% Bloomberg US TIPS TR, 5% EMD Custom Benchmark, 3% 60% MSCI World (Net) / 40% FTSE WGBI, 7% CJA US All PE (1 Qtr Lag), 6% NCREIF ODCE (1 Qtr Lag), and 2% CJA US Infrastructure (1 Qtr Lag).

Thornburg Global Opportunities market value as of 09/30/2023 is \$5,353.

Global Equity Composite start date is 10/1/2012.

Total Fixed Income Custom Benchmark is comprised of the Bloomberg Aggregate from 10/1/2012 to 10/31/2013; 75% Bloomberg Aggregate/25% JPM GBI EM Diversified from

11/1/2013 to 2/29/2016; 85%Bloomberg Aggregate/15% JPM GBI EM Diversified from 3/1/2016 to 12/31/2018; 70% Bloomberg Aggregate/20% JPM GBI EM Diversified/ 10% Bloomberg US TIPS going forward.

EMD Custom Benchmark is comprised of 50% JPMorgan EMBI Global Diversified/50% JPMorgan GBI-EM Global Diversified as of 05/01/2020.

Private Equity valuations are as of 03/31/2023.

FRS-LB is part of the Real Estate Composite as of 12/1/2012.



**CASH FLOW SUMMARY BY MANAGER**

1 Month Ending September 30, 2023							
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flows	Fees	Capital Apprec./ Deprec.	Ending Market Value
Acadian Emerging Markets Equity	\$63,284,391	-	-	-	-	-\$712,999	\$62,571,392
AEW Core Property (\$12,000,000)	\$30,357,499	-	-	-	-	-	\$30,357,499
AEW Partners VI LP (\$20,000,000)	\$293,404	-	-	-	-	-	\$293,404
ASB Real Estate Fund	\$27,236,711	-	-	-	-	-	\$27,236,711
Blackrock Global Allocation	\$64,586,185	-	-	-	-	-\$2,377,260	\$62,208,925
Blackrock Russell 2500 Index Fund	\$118,015,952	-	-	-	-	-\$6,589,931	\$111,426,021
Blackrock US Debt	\$340,374,545	-	-	-	-	-\$8,603,315	\$331,771,230
Blackrock US TIPS Index	\$46,958,413	-	-	-	-	-\$863,170	\$46,095,242
Boston Partners Global Equity	\$125,911,701	-	-	-	-\$55,588	-\$2,140,273	\$123,715,839
Cash/Clearing Account	\$10,746,982	\$1,133,733	-\$5,583,417	-\$4,449,684	-	\$43,158	\$6,340,456
CCMP Capital Investors III (\$15,000,000)	\$318,586	-	-	-	-	-	\$318,586
DCM Private Equity II (\$7,500,000)	\$476,534	-	-	-	-	-	\$476,534
Fisher All Foreign Equity	\$126,002,651	-	-	-	-\$30	-\$6,083,522	\$119,919,099
FRS-GA (Georgia)	\$3,210,959	-	-	-	-	-	\$3,210,959
FRS-LB I (NLTP AZ)	\$7,252,509	-	-	-	-	-	\$7,252,509
GA Crossover Fund (\$25,000,000)	\$3,298,744	-	-	-	-	-	\$3,298,744
HarbourVest FRS R3 LLC (Tranche 1)	\$22,699,669	\$2,500,000	-	\$2,500,000	-	-	\$25,199,669
HarbourVest FRS R3 LLC (Tranche 2)	\$3,611,999	-	-	-	-	-	\$3,611,999
Harbourvest IV (\$20,000,000)	\$15,490,768	-	-\$187,075	-\$187,075	-	-	\$15,303,693
HarbourVest Partners XI Buyout (\$35,000,000)	\$30,053,434	-	-	-	-	-	\$30,053,434
Heitman America Real Estate Trust	\$28,370,844	-	-	-	-	-	\$28,370,844
Invesco Oppenheimer Developing Markets	\$21,159,615	-	-	-	-\$15,164	-\$757,943	\$20,386,508
Landmark Equity Partners XV (\$25,000,000)	\$5,303,297	-	-\$225,993	-\$225,993	-	-	\$5,077,304
Liquidating - BlackRock Global Focused	-	-	-	-	-	-	-
Louisiana Asset Management Pool	\$4,887,985	-	-	-	-	\$21,488	\$4,909,473
Louisiana Fund I (\$1,000,000)	\$1,261,905	-	-	-	-	-	\$1,261,905
LSV International Equity Value	\$129,115,472	-	-	-	-	-\$1,248,425	\$127,867,046
Mellon Emerging Markets	\$28,778,307	-	-	-	-	-\$747,998	\$28,030,309
Mellon Large Cap Value Stock Index Fund	\$139,190,563	-	-	-	-	-\$5,372,954	\$133,817,609
Mellon Stock Index Fund	\$369,100,622	-	-	-	-	-\$17,600,803	\$351,499,819

**CASH FLOW SUMMARY BY MANAGER**

	Beginning Market Value	Contributions	Withdrawals	Net Cash Flows	Fees	Capital Apprec./ Deprec.	Ending Market Value
Mesirow (\$35,000,000)	\$43,040,779	-	-\$350,000	-\$350,000	-	-	\$42,690,779
Murphree Venture (\$2,000,000)	\$137,423	-	-	-	-	-	\$137,423
Orleans Core Fixed Income	\$98,273,740	-	-	-	-	-\$2,503,766	\$95,769,975
PGIM QS SMID Core	\$43,363,020	-	-	-	-	-\$2,181,065	\$41,181,955
Real Assets Account	-	-	-	-	-	-	-
Sentinel Real Estate Fund (\$30,000,000)	\$52,661,840	-	-	-	-	-	\$52,661,840
State Street ACWI Index Fund	\$109,307,217	-	-\$16,748	-\$16,748	-\$5,465	-\$4,489,645	\$104,795,358
Thornburg Global Opportunities	\$5,490	-	-	-	-	-\$137	\$5,353
Timbervest Crossover Fund (\$16,000,000)	\$2,207,194	-	-	-	-	-	\$2,207,194
Wellington Blended Opportunistic EMD	\$91,692,488	-	-	-	-\$42,026	-\$2,824,398	\$88,826,064
<b>Total</b>	<b>\$2,208,039,436</b>	<b>\$3,633,733</b>	<b>-\$6,363,233</b>	<b>-\$2,729,500</b>	<b>-\$118,274</b>	<b>-\$65,032,958</b>	<b>\$2,140,158,704</b>

Beginning Market Value may not match the Ending Market Value of the previous Flash report due to delayed reporting of private investments (private equity and real estate).

**CASH FLOW SUMMARY BY MANAGER**

Fiscal Year To Date Ending September 30, 2023							
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flows	Fees	Capital Apprec./ Deprec.	Ending Market Value
Acadian Emerging Markets Equity	\$74,922,394	-	-\$13,000,000	-\$13,000,000	-\$137,244	\$786,242	\$62,571,392
AEW Core Property (\$12,000,000)	\$30,357,499	-	-	-	-	-	\$30,357,499
AEW Partners VI LP (\$20,000,000)	\$293,404	-	-	-	-	-	\$293,404
ASB Real Estate Fund	\$27,236,711	-	-	-	-	-	\$27,236,711
Blackrock Global Allocation	\$89,793,239	\$120,853	-\$25,000,000	-\$24,879,147	-\$120,853	-\$2,584,314	\$62,208,925
Blackrock Russell 2500 Index Fund	\$117,018,972	\$5,562	-	\$5,562	-\$5,562	-\$5,592,951	\$111,426,021
Blackrock US Debt	\$297,461,195	\$45,026,122	-	\$45,026,122	-\$26,122	-\$10,689,965	\$331,771,230
Blackrock US TIPS Index	\$62,356,918	\$7,822	-\$15,000,000	-\$14,992,178	-\$7,822	-\$1,261,675	\$46,095,242
Boston Partners Global Equity	\$142,823,250	-	-\$18,182,785	-\$18,182,785	-\$183,032	-\$741,594	\$123,715,839
Cash/Clearing Account	\$23,888,714	\$49,582,353	-\$67,364,111	-\$17,781,758	-	\$233,500	\$6,340,456
CCMP Capital Investors III (\$15,000,000)	\$984,355	-	-\$665,769	-\$665,769	-	-	\$318,586
DCM Private Equity II (\$7,500,000)	\$476,534	-	-	-	-	-	\$476,534
Fisher All Foreign Equity	\$124,473,859	\$4,000,000	-	\$4,000,000	-\$179,406	-\$8,375,354	\$119,919,099
FRS-GA (Georgia)	\$3,210,959	-	-	-	-	-	\$3,210,959
FRS-LB I (NLTP AZ)	\$7,252,509	-	-	-	-	-	\$7,252,509
GA Crossover Fund (\$25,000,000)	\$3,298,744	-	-	-	-	-	\$3,298,744
HarbourVest FRS R3 LLC (Tranche 1)	\$22,699,669	\$2,500,000	-	\$2,500,000	-	-	\$25,199,669
HarbourVest FRS R3 LLC (Tranche 2)	\$2,861,999	\$750,000	-	\$750,000	-	-	\$3,611,999
Harbourvest IV (\$20,000,000)	\$15,490,768	-	-\$187,075	-\$187,075	-	-	\$15,303,693
HarbourVest Partners XI Buyout (\$35,000,000)	\$27,953,434	\$2,100,000	-	\$2,100,000	-	-	\$30,053,434
Heitman America Real Estate Trust	\$28,370,844	-	-	-	-	-	\$28,370,844
Invesco Oppenheimer Developing Markets	\$29,353,823	-	-\$8,000,000	-\$8,000,000	-\$52,554	-\$914,761	\$20,386,508
Landmark Equity Partners XV (\$25,000,000)	\$5,303,297	-	-\$225,993	-\$225,993	-	-	\$5,077,304
Liquidating - BlackRock Global Focused	\$2,259	-	-\$2,707	-\$2,707	-	\$448	-
Louisiana Asset Management Pool	\$4,844,851	-	-	-	-	\$64,621	\$4,909,473
Louisiana Fund I (\$1,000,000)	\$1,270,700	-	-\$8,795	-\$8,795	-	-	\$1,261,905
LSV International Equity Value	\$121,380,247	\$7,000,000	-	\$7,000,000	-\$204,161	-\$309,039	\$127,867,046
Mellon Emerging Markets	\$28,891,211	\$4,682	-	\$4,682	-\$4,682	-\$860,902	\$28,030,309
Mellon Large Cap Value Stock Index Fund	\$134,303,427	\$4,006,697	-	\$4,006,697	-\$6,697	-\$4,485,818	\$133,817,609
Mellon Stock Index Fund	\$354,620,958	\$9,022,669	-	\$9,022,669	-\$22,669	-\$12,121,140	\$351,499,819

**CASH FLOW SUMMARY BY MANAGER**

	Beginning Market Value	Contributions	Withdrawals	Net Cash Flows	Fees	Capital Apprec./ Deprec.	Ending Market Value
Mesirow (\$35,000,000)	\$43,040,779	-	-\$350,000	-\$350,000	-	-	\$42,690,779
Murphree Venture (\$2,000,000)	\$137,423	-	-	-	-	-	\$137,423
Orleans Core Fixed Income	\$90,739,405	\$8,000,000	-	\$8,000,000	-\$30,185	-\$2,939,246	\$95,769,975
PGIM QS SMID Core	\$32,062,891	\$10,000,000	-	\$10,000,000	-\$37,852	-\$843,084	\$41,181,955
Real Assets Account	-	-	-	-	-	-	-
Sentinel Real Estate Fund (\$30,000,000)	\$53,109,920	-	-\$448,081	-\$448,081	-	-	\$52,661,840
State Street ACWI Index Fund	\$116,184,119	-	-\$8,016,748	-\$8,016,748	-\$17,297	-\$3,354,716	\$104,795,358
Thornburg Global Opportunities	\$5,524	-	-\$69,065	-\$69,065	-	\$68,895	\$5,353
Timbervest Crossover Fund (\$16,000,000)	\$2,207,194	-	-	-	-	-	\$2,207,194
Wellington Blended Opportunistic EMD	\$91,679,026	-	-	-	-\$127,105	-\$2,725,856	\$88,826,064
<b>Total</b>	<b>\$2,212,363,023</b>	<b>\$142,126,760</b>	<b>-\$156,521,128</b>	<b>-\$14,394,368</b>	<b>-\$1,163,242</b>	<b>-\$56,646,709</b>	<b>\$2,140,158,704</b>

Beginning Market Value may not match the Ending Market Value of the previous Flash report due to delayed reporting of private investments (private equity and real estate).

# CASH FLOW SUMMARY BY MANAGER

Since Inception Ending September 30, 2023							
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flows	Fees	Capital Apprec./ Deprec.	Ending Market Value
Acadian Emerging Markets Equity	-	\$105,000,000	-\$54,000,000	\$51,000,000	-\$4,213,476	\$15,784,868	\$62,571,392
AEW Core Property (\$12,000,000)	-	\$20,000,000	-	\$20,000,000	-	\$10,357,499	\$30,357,499
AEW Partners VI LP (\$20,000,000)	-	\$18,420,450	-\$34,766,288	-\$16,345,838	-\$551,334	\$17,190,576	\$293,404
ASB Real Estate Fund	-	\$20,216,279	-\$141,910	\$20,074,369	-	\$7,162,342	\$27,236,711
Blackrock Global Allocation	-	\$70,187,506	-\$45,000,000	\$25,187,506	-\$3,796,660	\$40,818,079	\$62,208,925
Blackrock Russell 2500 Index Fund	-	\$116,539,024	-\$4,059	\$116,534,965	-\$40,536	-\$5,068,409	\$111,426,021
Blackrock US Debt	-	\$466,358,866	-\$144,500,000	\$321,858,866	-\$681,033	\$10,587,611	\$331,771,230
Blackrock US TIPS Index	-	\$55,117,882	-\$15,004,805	\$40,113,077	-\$120,793	\$6,102,958	\$46,095,242
Boston Partners Global Equity	-	\$80,939,406	-\$21,791,027	\$59,148,378	-\$4,045,798	\$67,103,363	\$123,715,839
Cash/Clearing Account	-	\$3,231,403,231	-\$3,227,657,933	\$3,745,298	-\$151,572	\$2,094,953	\$6,340,456
CCMP Capital Investors III (\$15,000,000)	-	\$13,421,953	-\$23,319,507	-\$9,897,554	-	\$10,216,140	\$318,586
DCM Private Equity II (\$7,500,000)	-	\$8,278,452	-\$7,824,775	\$453,677	-\$319,441	\$342,298	\$476,534
Fisher All Foreign Equity	-	\$125,180,807	-\$100,308,217	\$24,872,590	-\$8,061,412	\$94,638,615	\$119,919,099
FRS-GA (Georgia)	-	\$9,416,075	-	\$9,416,075	-	-\$6,205,116	\$3,210,959
FRS-LB I (NLTP AZ)	-	\$24,900,208	-	\$24,900,208	-	-\$17,647,699	\$7,252,509
GA Crossover Fund (\$25,000,000)	-	\$25,000,000	-\$47,276,687	-\$22,276,687	-\$91,932	\$25,667,363	\$3,298,744
HarbourVest FRS R3 LLC (Tranche 1)	-	\$25,000,000	-	\$25,000,000	-	\$199,669	\$25,199,669
HarbourVest FRS R3 LLC (Tranche 2)	-	\$3,750,000	-	\$3,750,000	-	-\$138,001	\$3,611,999
Harbourvest IV (\$20,000,000)	-	\$17,325,303	-\$15,149,045	\$2,176,258	-	\$13,127,435	\$15,303,693
HarbourVest Partners XI Buyout (\$35,000,000)	-	\$20,529,215	-\$2,885,932	\$17,643,283	-	\$12,410,151	\$30,053,434
Heitman America Real Estate Trust	-	\$20,000,000	-\$113,305	\$19,886,695	-	\$8,484,149	\$28,370,844
Invesco Oppenheimer Developing Markets	-	\$47,500,000	-\$28,500,000	\$19,000,000	-\$2,542,511	\$3,298,198	\$20,386,508
Landmark Equity Partners XV (\$25,000,000)	-	\$20,148,424	-\$23,553,634	-\$3,405,210	-	\$8,482,514	\$5,077,304
Liquidating - BlackRock Global Focused	-	\$46,832,890	-\$59,581,517	-\$12,748,627	-\$933,177	\$10,375,539	-
Louisiana Asset Management Pool	-	\$943,990,965	-\$944,296,689	-\$305,724	-	\$5,008,697	\$4,909,473
Louisiana Fund I (\$1,000,000)	-	\$1,010,000	-\$228,519	\$781,481	-\$46,015	\$526,439	\$1,261,905
LSV International Equity Value	-	\$114,818,122	-\$52,331,336	\$62,486,786	-\$9,198,266	\$61,332,967	\$127,867,046
Mellon Emerging Markets	-	\$30,007,542	-	\$30,007,542	-\$7,542	-\$1,969,691	\$28,030,309
Mellon Large Cap Value Stock Index Fund	-	\$129,013,060	-	\$129,013,060	-\$23,920	\$4,828,469	\$133,817,609
Mellon Stock Index Fund	-	\$319,826,762	-\$300,500,001	\$19,298,192	-\$775,020	\$332,976,647	\$351,499,819

# CASH FLOW SUMMARY BY MANAGER

	Beginning Market Value	Contributions	Withdrawals	Net Cash Flows	Fees	Capital Apprec./ Deprec.	Ending Market Value
Mesirow (\$35,000,000)	-	\$25,653,620	-\$1,050,000	\$24,603,620	-	\$18,087,159	\$42,690,779
Murphree Venture (\$2,000,000)	-	\$2,058,578	-\$1,009,818	\$1,048,760	-\$58,578	-\$852,759	\$137,423
Orleans Core Fixed Income	-	\$154,099,081	-\$91,022,995	\$63,076,086	-\$2,058,685	\$23,238,507	\$95,769,975
PGIM QS SMID Core	-	\$61,715,738	-\$36,535,748	\$25,179,990	-\$947,800	\$16,913,220	\$41,181,955
Real Assets Account	-	-	-	-	-	-	-
Sentinel Real Estate Fund (\$30,000,000)	-	\$30,000,000	-\$24,703,680	\$5,296,320	-	\$47,365,520	\$52,661,840
State Street ACWI Index Fund	-	\$101,000,000	-\$28,065,212	\$72,934,788	-\$230,307	\$32,090,878	\$104,795,358
Thornburg Global Opportunities	-	\$47,500,000	-\$134,337,054	-\$86,837,054	-\$5,932,793	\$86,883,564	\$5,353
Timbervest Crossover Fund (\$16,000,000)	-	\$13,600,000	-\$11,463,895	\$2,136,105	-	\$71,089	\$2,207,194
Wellington Blended Opportunistic EMD	-	\$95,000,000	-	\$95,000,000	-\$1,099,533	-\$5,139,491	\$88,826,064
<b>Total</b>	-	<b>\$6,660,759,441</b>	<b>-\$5,476,923,589</b>	<b>\$1,183,807,283</b>	<b>-\$45,928,134</b>	<b>\$956,746,309</b>	<b>\$2,140,158,704</b>

Beginning Market Value may not match the Ending Market Value of the previous Flash report due to delayed reporting of private investments (private equity and real estate).



# 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.

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



# ASSET ALLOCATION DECISION TREE



