

# INVESTMENT MARKET UPDATE

(AS OF SEPTEMBER 30, 2019)



Firefighters' Retirement System of Louisiana

**David Barnes, CFA, CAIA Senior Consultant**

**Rhett Humphreys, CFA, Partner**



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

# CALENDAR YEAR INDEX PERFORMANCE

	2010	2011	2012	2013	2014	2015	2016	2017	2018	Sep	YTD
<b>S&amp;P 500</b>	15.1%	2.1%	16.0%	32.4%	13.7%	1.4%	12.0%	21.8%	-4.4%	1.9%	20.6%
<b>Russell 1000</b>	16.1%	1.5%	16.4%	33.1%	13.2%	0.9%	12.1%	21.7%	-4.8%	1.7%	20.5%
<b>Russell 2000</b>	26.9%	-4.2%	16.3%	38.8%	4.9%	-4.4%	21.3%	14.6%	-11.0%	2.1%	14.2%
<b>Russell 2500</b>	26.7%	-2.5%	17.9%	36.8%	7.1%	-2.9%	17.6%	16.8%	-10.0%	1.8%	17.7%
<b>MSCI EAFE</b>	7.8%	-12.1%	17.3%	22.8%	-4.9%	-0.8%	1.0%	25.0%	-13.8%	2.9%	12.8%
<b>MSCI EM</b>	18.9%	-18.4%	18.2%	-2.6%	-2.2%	-14.9%	11.2%	37.3%	-14.6%	1.9%	5.9%
<b>MSCI ACWI</b>	12.7%	-7.3%	16.1%	22.8%	4.2%	-2.4%	7.9%	24.0%	-9.4%	2.1%	16.2%
<b>Private Equity</b>	19.8%	9.5%	12.6%	22.3%	14.6%	10.4%	10.3%	21.0%	13.1%	-	4.9%
<b>BC TIPS</b>	6.3%	13.6%	7.0%	-8.6%	3.6%	-1.4%	4.7%	3.0%	-1.3%	-1.4%	7.6%
<b>BC Municipal</b>	2.4%	10.7%	6.8%	-2.6%	9.1%	3.3%	0.2%	5.4%	1.3%	-0.8%	6.7%
<b>BC Muni High Yield</b>	7.8%	9.2%	18.1%	-5.5%	13.8%	1.8%	3.0%	9.7%	4.8%	-0.2%	9.7%
<b>BC US Corporate HY</b>	15.1%	5.0%	15.8%	7.4%	2.5%	-4.5%	17.1%	7.5%	-2.1%	0.4%	11.4%
<b>BC US Agg Bond</b>	6.5%	7.8%	4.2%	-2.0%	6.0%	0.5%	2.6%	3.5%	0.0%	-0.5%	8.5%
<b>BC Global Agg</b>	5.5%	5.6%	4.3%	-2.6%	0.6%	-3.2%	2.1%	7.4%	-1.2%	-1.0%	6.3%
<b>BC Long Treasuries</b>	9.4%	29.9%	3.6%	-12.7%	25.1%	-1.2%	1.3%	8.5%	-1.8%	-2.5%	19.8%
<b>BC US Long Credit</b>	10.7%	17.1%	12.7%	-6.6%	16.4%	-4.6%	10.2%	12.2%	-6.8%	-1.5%	21.9%
<b>BC US STRIPS 20+ Yr</b>	10.9%	58.5%	3.0%	-21.0%	46.4%	-3.7%	1.4%	13.7%	-4.1%	-3.6%	28.4%
<b>JPM GBI-EM Global Div</b>	15.7%	-1.8%	16.8%	-9.0%	-5.7%	-14.9%	9.9%	15.2%	-6.2%	1.0%	7.9%
<b>JPM EMBI Glob Div</b>	12.2%	7.3%	17.4%	-5.3%	7.4%	1.2%	10.2%	10.3%	-4.3%	-0.5%	13.0%
<b>CS Hedge Fund</b>	10.9%	-2.5%	7.7%	9.7%	4.1%	-0.7%	1.2%	7.1%	-3.2%	-	7.1%
<b>BBG Commodity</b>	16.8%	-13.3%	-1.1%	-9.5%	-17.0%	-24.7%	11.8%	1.7%	-11.2%	1.2%	3.1%
<b>Alerian MLP</b>	35.9%	13.9%	4.8%	27.6%	4.8%	-32.6%	18.3%	-6.5%	-12.4%	0.7%	11.1%
<b>FTSE NAREIT Equity REITs</b>	28.0%	8.3%	18.1%	2.5%	30.1%	3.2%	8.5%	5.2%	-4.6%	2.9%	27.0%

Source: FactSet, Barclays, Thomson One

\*Private Equity return represents calendar year pooled IRR and is subject to a one quarter lag



# MARKET COMMENTARY – SEPTEMBER 2019

## Market Environment

Risk assets were in the black in September following a challenging summer marked by an escalating trade war between the United States and China, and sluggish economic growth. Global equities rallied as central banks in the US and Europe eased monetary policy to offset concerns around an economic slowdown. The MSCI EAFE Index led the way, increasing 2.9% last month, on the back of a massive, open-ended stimulus plan from the European Central Bank. The S&P 500 Index and the MSCI EM Index gained 1.9% each in September.

Following a rate cut last month by the Federal Reserve, the short-end of the Treasury yield curve moved modestly lower. However, the curve steepened at the 10- and 30-year points by 18 and 16 basis points, respectively. As a result, the Barclays US Treasury Index and Long Treasury Index declined 0.8% and 2.5%, respectively, in September. Global rates also moved higher with the German bund increasing 13 basis points and the 10-year Japanese bond yield moving six basis points higher – reflecting investors' increased appetite for risk following the ECB's stimulus package. In credit, spreads posted a moderate decline across domestic investment-grade indexes. The Barclays US High Yield Index eked out a 0.4% monthly return as spreads on lower-quality indexes fell.

Within real assets, spot WTI crude oil declined 1.7% during the month, with losses of 7.0% for the quarter; that said, year-to-date gains total 19.9% so far this year.

As we move into the fourth quarter, we remain cautious about risk assets in the face of slowing global growth and the US economy in the late stage of the market cycle. To this end, we encourage reducing return-seeking credit and recommend shorter-duration safe-haven fixed income.

## Firefighters' Retirement System of Louisiana

# INVESTMENT PERFORMANCE FLASH REPORT

### Investment Performance Summary - Net of Fees

	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>1,749,211,776</b>	<b>100.0</b>	<b>100.0</b>	<b>1.1</b>	<b>0.8</b>	<b>11.8</b>	<b>2.5</b>	<b>7.0</b>	<b>5.0</b>	<b>5.6</b>	<b>5.7</b>	<b>Sep-92</b>
Policy Index				1.2	0.5	12.9	4.0	8.0	6.4	--	--	Sep-92
Allocation Index				1.0	0.7	12.5	4.0	7.8	6.0	--	--	Sep-92
<b>Total Equity Composite</b>	<b>851,051,902</b>	<b>49.0</b>	<b>48.7</b>	<b>2.7</b>	<b>-0.3</b>	<b>14.7</b>	<b>-1.7</b>	<b>8.3</b>	<b>5.7</b>	<b>8.8</b>	<b>7.2</b>	<b>Sep-92</b>
MSCI ACWI				2.1	0.0	16.2	1.4	9.7	6.7	8.3	7.5	Sep-92
<b>Domestic Equity Composite</b>	<b>385,357,763</b>	<b>21.5</b>	<b>22.0</b>	<b>2.1</b>	<b>1.1</b>	<b>19.2</b>	<b>0.3</b>	<b>10.7</b>	<b>8.2</b>	<b>11.4</b>	<b>7.9</b>	<b>Sep-92</b>
Russell 3000				1.8	1.2	20.1	2.9	12.8	10.4	13.1	9.8	Sep-92
Mellon Stock Index Fund	295,590,445		16.9	1.9	1.7	20.5	4.2	13.4	10.8	--	11.6	Nov-13
S&P 500				1.9	1.7	20.6	4.3	13.4	10.8	13.2	11.6	Nov-13
<b>SMID Cap Composite</b>	<b>89,764,703</b>	<b>5.5</b>	<b>5.1</b>	<b>2.7</b>	<b>-0.6</b>	<b>15.0</b>	<b>-6.9</b>	<b>7.2</b>	<b>5.4</b>	<b>--</b>	<b>8.2</b>	<b>Oct-12</b>
Russell 2500				1.8	-1.3	17.7	-4.0	9.5	8.6	12.2	11.4	Oct-12
Rothschild U.S. SMID Core	45,412,049		2.6	1.8	-0.7	15.0	-6.7	8.9	--	--	6.2	Jul-15
Russell 2500				1.8	-1.3	17.7	-4.0	9.5	8.6	12.2	7.3	Jul-15
QMA SMID	44,352,654		2.5	3.8	-0.6	15.0	-7.1	--	--	--	-3.3	Jul-18
Russell 2500				1.8	-1.3	17.7	-4.0	9.5	8.6	12.2	0.4	Jul-18
<b>International Equity Composite</b>	<b>207,486,822</b>	<b>12.0</b>	<b>11.9</b>	<b>3.9</b>	<b>-1.8</b>	<b>11.8</b>	<b>-2.8</b>	<b>6.5</b>	<b>3.6</b>	<b>--</b>	<b>5.6</b>	<b>Oct-12</b>
MSCI ACWI ex USA				2.6	-1.8	11.6	-1.2	6.3	2.9	4.5	5.0	Oct-12
LSV International Equity Value	102,047,844		5.8	4.7	-1.1	9.4	-4.6	6.3	2.9	5.2	5.4	Oct-04
MSCI Custom Benchmark				2.6	-1.8	11.6	-1.2	6.3	2.9	4.3	4.9	Oct-04
Fisher All Foreign Equity	105,438,978		6.0	3.2	-2.4	14.2	-0.9	6.7	4.2	5.7	6.4	Oct-04
MSCI ACWI ex USA				2.6	-1.8	11.6	-1.2	6.3	2.9	4.5	5.7	Oct-04

Performance and values are preliminary and subject to change.

Returns are net of manager fees.

Results for periods longer than one year are annualized.

Fiscal Year ends June 30th.

SMID Cap Composite 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.



## Firefighters' Retirement System of Louisiana

# INVESTMENT PERFORMANCE FLASH REPORT

	Market Value (\$)	Policy %	% of Portfolio	1 Mo (%)	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Global Equity Composite</b>	<b>169,478,643</b>	<b>10.0</b>	<b>9.7</b>	<b>2.8</b>	<b>0.5</b>	<b>13.0</b>	<b>-4.6</b>	<b>6.4</b>	<b>4.0</b>	<b>--</b>	<b>8.3</b>	<b>Oct-12</b>
<i>MSCI ACWI</i>				2.1	0.0	16.2	1.4	9.7	6.7	8.3	8.8	Oct-12
Thornburg Global Opportunities	34,003,924		1.9	3.3	-0.8	13.5	-5.7	4.6	4.0	9.1	9.4	Oct-04
<i>MSCI ACWI</i>				2.1	0.0	16.2	1.4	9.7	6.7	8.3	7.1	Oct-04
Boston Partners Global Equity	99,181,786		5.7	2.8	0.2	11.5	-4.9	--	--	--	8.0	Nov-16
<i>MSCI ACWI</i>				2.1	0.0	16.2	1.4	9.7	6.7	8.3	10.6	Nov-16
State Street ACWI Index Fund	36,285,021		2.1	2.1	--	--	--	--	--	--	2.1	Sep-19
<i>MSCI ACWI</i>				2.1	0.0	16.2	1.4	9.7	6.7	8.3	2.1	Sep-19
<b>Emerging Markets Equity</b>	<b>88,728,675</b>	<b>5.5</b>	<b>5.1</b>	<b>2.4</b>	<b>-4.1</b>	<b>6.8</b>	<b>-2.7</b>	<b>5.4</b>	<b>1.4</b>	<b>--</b>	<b>1.9</b>	<b>Oct-13</b>
<i>MSCI Emerging Markets</i>				1.9	-4.2	5.9	-2.0	6.0	2.3	3.4	2.7	Oct-13
Acadian Emerging Markets Equity	58,443,730		3.3	3.3	-4.3	4.6	-5.2	4.3	1.0	--	1.3	Dec-13
<i>MSCI Emerging Markets</i>				1.9	-4.2	5.9	-2.0	6.0	2.3	3.4	2.2	Dec-13
OFI Emerging Markets	30,284,945		1.7	0.7	-3.8	11.3	2.6	8.0	2.8	--	2.9	Jan-14
<i>MSCI Emerging Markets</i>				1.9	-4.2	5.9	-2.0	6.0	2.3	3.4	2.4	Jan-14
<b>Total Fixed Income Composite</b>	<b>534,195,007</b>	<b>31.0</b>	<b>30.5</b>	<b>-0.6</b>	<b>2.5</b>	<b>9.3</b>	<b>10.7</b>	<b>4.2</b>	<b>3.1</b>	<b>--</b>	<b>2.2</b>	<b>Oct-12</b>
<i>Total Fixed Income Custom Benchmark</i>				-0.3	1.6	8.4	10.2	3.0	2.5	3.1	1.8	Oct-12
<b>Core Fixed Income</b>	<b>479,982,020</b>	<b>23.0</b>	<b>27.4</b>	<b>-0.5</b>	<b>2.3</b>	<b>8.7</b>	<b>10.3</b>	<b>4.6</b>	<b>4.0</b>	<b>--</b>	<b>3.5</b>	<b>Dec-10</b>
<i>BBgBarc US Aggregate TR</i>				-0.5	2.3	8.5	10.3	2.9	3.4	3.7	3.4	Dec-10
Orleans Core Fixed Income	95,161,452		5.4	-0.4	2.2	9.2	10.2	3.2	3.4	4.1	5.7	Aug-92
<i>BBgBarc US Aggregate TR</i>				-0.5	2.3	8.5	10.3	2.9	3.4	3.7	5.4	Aug-92
Blackrock US Debt	384,820,568		22.0	-0.5	2.3	8.6	10.4	2.9	--	--	3.3	Nov-14
<i>BBgBarc US Aggregate TR</i>				-0.5	2.3	8.5	10.3	2.9	3.4	3.7	3.2	Nov-14
<b>US TIPS Composite</b>	<b>54,212,988</b>	<b>3.0</b>	<b>3.1</b>	<b>-1.4</b>	<b>1.3</b>	<b>7.5</b>	<b>7.2</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>7.2</b>	<b>Oct-18</b>
Blackrock US TIPS Index	54,212,988		3.1	-1.4	1.3	7.5	7.2	--	--	--	7.2	Oct-18
<i>BBgBarc US TIPS TR</i>				-1.4	1.3	7.6	7.1	2.2	2.4	3.5	7.1	Oct-18

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Fiscal YTD ends June 30th.

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

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

Returns are net of manager fees.

SMID Cap Composite 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.



## Firefighters' Retirement System of Louisiana

# INVESTMENT PERFORMANCE FLASH REPORT

	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>170,339,586</b>	<b>10.0</b>	<b>9.7</b>	<b>0.2</b>	<b>1.4</b>	<b>14.6</b>	<b>5.5</b>	<b>6.1</b>	<b>4.2</b>	<b>--</b>	<b>4.2</b>	<b>Apr-14</b>
60% MSCI World (Net) / 40% FTSE WGBI				2.5	2.4	15.1	6.5	7.3	5.6	6.4	5.2	Apr-14
Blackrock Global Allocation	86,782,093		5.0	0.8	0.7	11.6	3.5	5.8	4.1	--	4.2	Apr-14
60% MSCI World (Net) / 40% FTSE WGBI				2.5	2.4	15.1	6.5	7.3	5.6	6.4	5.2	Apr-14
AQR Global Risk Premium – EL	83,557,493		4.8	-0.3	2.2	17.4	9.6	6.5	4.3	--	4.3	May-14
60% MSCI World (Net) / 40% FTSE WGBI				2.5	2.4	15.1	6.5	7.3	5.6	6.4	5.1	May-14
<b>Total Alternative Composite</b>	<b>175,197,728</b>	<b>10.0</b>	<b>10.0</b>	<b>0.0</b>	<b>0.0</b>	<b>2.3</b>	<b>1.9</b>	<b>5.5</b>	<b>4.8</b>	<b>2.3</b>	<b>2.3</b>	<b>Jun-05</b>
<b>Private Equity Composite</b>	<b>63,647,754</b>	<b>4.0</b>	<b>3.6</b>	<b>0.0</b>	<b>0.0</b>	<b>3.5</b>	<b>0.5</b>	<b>7.4</b>	<b>6.6</b>	<b>3.1</b>	<b>-2.2</b>	<b>Jul-05</b>
Cambridge Associates US All PE				0.0	0.0	9.7	7.8	14.2	11.4	14.0	12.8	Jul-05
Murphree Venture (\$2,000,000)	613,531		0.0	0.0	0.0	-4.6	-5.1	-25.9	-16.6	-6.3	-6.2	Sep-05
Louisiana Fund I (\$1,000,000)	1,433,550		0.1	0.0	0.0	-17.3	-17.3	-10.1	-7.3	-2.9	-7.2	Jul-05
DTC Private Equity II-Q, L.P. (\$7,500,000)	1,182,604		0.1	0.0	0.0	4.1	-2.9	6.9	5.0	9.6	5.8	Feb-06
Greenspring Associates III (\$9,230,000)	3,360,919		0.2	0.0	0.0	19.4	6.4	5.5	9.1	13.8	6.6	Feb-06
DCM Private Equity II (\$7,500,000)	1,091,265		0.1	0.0	0.0	-5.4	-6.6	-2.3	-4.8	1.2	-1.7	Feb-06
FECF II (\$20,000,000)	-97,310		0.0	0.0	0.0	61.9	40.5	40.3	9.3	14.2	13.6	Mar-08
GA Crossover Fund (\$25,000,000)	3,921,114		0.2	0.0	0.0	-11.1	-17.2	0.9	8.6	15.2	12.2	Jan-08
CCMP Capital Investors III (\$15,000,000)	13,005,177		0.7	0.0	0.0	4.6	-2.1	7.0	10.1	--	10.1	Oct-14
Landmark Equity Partners XV (\$25,000,000)	9,793,650		0.6	0.0	0.0	-4.2	-3.7	11.6	--	--	13.6	Dec-14
Harbourvest IV (\$20,000,000)	17,953,639		1.0	0.0	0.0	12.2	14.1	13.8	--	--	14.2	Nov-16
Mesirov (\$35,000,000)	9,835,614		0.6	0.0	0.0	-0.5	--	--	--	--	-5.8	Dec-18

FECF II has a negative market value due to outflows exceeding the Q2 valuation.

Results for periods longer than one year are annualized. Results are preliminary and subject to change.

Fiscal YTD ends June 30th.

Total Fixed Income Custom Benchmark is comprised of the Barclays Aggregate from 10/1/2012 to 10/31/2013; 75% Barclays Aggregate/25% JPM GBI EM Diversified from 11/1/2013 to 2/29/2016; 85% Barclays Aggregate/15% JPM GBI EM Diversified from 3/1/2016 to 12/31/2018; 70% Barclays Aggregate/20% JPM GBI EM Diversified/ 10% Barclays US TIPS going forward.

Total Fixed Income Composite start date is 10/1/2012.



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# INVESTMENT PERFORMANCE FLASH REPORT

	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>111,549,974</b>	<b>6.0</b>	<b>6.4</b>	<b>0.0</b>	<b>0.0</b>	<b>1.6</b>	<b>2.5</b>	<b>4.7</b>	<b>4.9</b>	<b>--</b>	<b>5.1</b>	<b>Dec-09</b>
<i>NCREIF Property Index</i>				0.0	0.0	3.3	4.8	6.3	8.3	9.6	9.8	Dec-09
Sentinel Real Estate Fund (\$30,000,000)	37,762,927		2.2	0.0	0.0	3.5	4.9	7.0	8.5	12.6	6.5	Feb-06
JP Morgan India (\$8,990,000)	1,305,554		0.1	0.0	0.0	-33.5	-33.5	-24.3	-16.0	-7.0	-15.8	Apr-07
Timbervest Crossover Fund (\$16,000,000)	6,883,712		0.4	0.0	0.0	4.4	3.9	-3.0	-3.2	-0.7	-1.1	Apr-08
AEW Partners VI LP (\$20,000,000)	-395,899		0.0	0.0	0.0	0.8	1.6	11.8	13.6	--	13.5	Mar-10
AEW Core Property (\$12,000,000)	16,482,514		0.9	0.0	0.0	2.8	4.4	6.0	--	--	7.5	May-15
FRS-GA (Georgia)	3,463,043		0.2	0.0	0.0	0.0	0.0	-10.1	-6.0	-9.8	-8.7	Jun-08
FRS-LB I (NLTP AZ)	7,315,110		0.4	0.0	0.0	-0.9	-0.9	17.9	11.3	-10.3	-11.2	Jun-07
FRS-LB III (ST George UT)	9,281,546		0.5	0.0	0.0	-0.1	-0.1	0.0	3.4	1.2	2.7	Jun-08
ASB Real Estate Fund	14,576,244		0.8	0.0	0.0	3.4	4.7	5.6	--	--	5.6	Jan-16
Heitman America Real Estate Trust	14,875,223		0.9	0.0	0.0	0.7	1.2	5.4	--	--	6.4	Nov-15
<b>Total Cash (\$9 MM)</b>	<b>18,427,553</b>	<b>--</b>	<b>1.1</b>	<b>0.2</b>	<b>0.5</b>	<b>1.7</b>	<b>2.3</b>	<b>1.5</b>	<b>1.0</b>	<b>0.6</b>	<b>2.8</b>	<b>Jun-92</b>
<i>91 Day T-Bills</i>				0.2	0.5	1.7	2.3	1.5	1.0	0.5	2.4	Jun-92

AEW Partners VI LP has a negative market value due to outflows exceeding the Q2 valuation.

Results for periods longer than one year are annualized.

Fiscal YTD ends June 30th.

Real Estate valuations are as of 06/30/2019 and adjusted for cash flows.

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

Harbourvest IV was funded 10/01/2016.

Private Equity valuations are as of 06/30/2019 and adjusted for cash flows.



## Firefighters' Retirement System of Louisiana

# CURRENT MONTH CHANGE IN VALUE

### Total Cash Flow Summary

Month Ending September 30, 2019

	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Fees	Net Investment Change	Ending Market Value
Acadian Emerging Markets Equity	\$56,579,935	\$0	\$0	\$0	\$0	\$1,863,795	\$58,443,730
AEW Core Property (\$12,000,000)	\$16,482,514	\$0	\$0	\$0	\$0	\$0	\$16,482,514
AEW Partners VI LP (\$20,000,000)	\$3,377,686	\$0	-\$3,773,585	-\$3,773,585	\$0	\$0	-\$395,899
AQR Global Risk Premium – EL	\$83,809,425	\$0	\$0	\$0	-\$66,150	-\$251,932	\$83,557,493
ASB Real Estate Fund	\$14,576,244	\$0	\$0	\$0	\$0	\$0	\$14,576,244
Blackrock Global Allocation	\$86,128,680	\$0	\$0	\$0	\$0	\$653,413	\$86,782,093
Blackrock US Debt	\$386,896,016	\$0	\$0	\$0	\$0	-\$2,075,449	\$384,820,568
Blackrock US TIPS Index	\$54,960,573	\$0	\$0	\$0	\$0	-\$747,586	\$54,212,988
Boston Partners Global Equity	\$96,392,768	\$0	\$0	\$0	-\$44,451	\$2,789,018	\$99,181,786
Cash/Clearing Account	\$11,337,282	\$4,610,108	-\$2,142,727	\$2,467,380	\$0	\$22,496	\$13,827,159
CCMP Capital Investors III (\$15,000,000)	\$13,005,177	\$0	\$0	\$0	\$0	\$0	\$13,005,177
DCM Private Equity II (\$7,500,000)	\$1,164,748	\$0	-\$73,483	-\$73,483	\$0	\$0	\$1,091,265
DTC Private Equity II-Q, L.P. (\$7,500,000)	\$1,332,604	\$0	-\$150,000	-\$150,000	\$0	\$0	\$1,182,604
Energy Opportunities Fund	\$33	\$0	\$0	\$0	\$0	\$2,582	\$2,615
FECP II (\$20,000,000)	\$197,102	\$0	-\$294,412	-\$294,412	\$0	\$0	-\$97,310
Fisher All Foreign Equity	\$102,210,734	\$0	\$0	\$0	\$0	\$3,228,244	\$105,438,978
FRS-GA (Georgia)	\$3,463,043	\$0	\$0	\$0	\$0	\$0	\$3,463,043
FRS-LB I (NLTP AZ)	\$7,315,110	\$0	\$0	\$0	\$0	\$0	\$7,315,110
FRS-LB III (ST George UT)	\$9,281,546	\$0	\$0	\$0	\$0	\$0	\$9,281,546
GA Crossover Fund (\$25,000,000)	\$3,921,114	\$0	\$0	\$0	\$0	\$0	\$3,921,114
Greenspring Associates III (\$9,230,000)	\$3,360,919	\$0	\$0	\$0	\$0	\$0	\$3,360,919
Harbourvest IV (\$20,000,000)	\$17,953,639	\$0	\$0	\$0	\$0	\$0	\$17,953,639
HarbourVest Partners XI Buyout (\$35,000,000)	\$154,001	\$1,400,000	\$0	\$1,400,000	\$0	\$0	\$1,554,001





## Firefighters' Retirement System of Louisiana

# CURRENT MONTH CHANGE IN VALUE

	Month Ending September 30, 2019							Ending Market Value
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Fees	Net Investment Change		
Heitman America Real Estate Trust	\$14,875,223	\$0	\$0	\$0	\$0	\$0	\$14,875,223	
JP Morgan India (\$8,990,000)	\$1,305,554	\$0	\$0	\$0	\$0	\$0	\$1,305,554	
Landmark Equity Partners XV (\$25,000,000)	\$9,556,467	\$344,065	-\$106,882	\$237,183	\$0	\$0	\$9,793,650	
Liquidating - BlackRock Global Focused	\$8,023	\$0	\$0	\$0	\$0	-\$111	\$7,912	
Louisiana Asset Management Pool	\$4,592,339	\$0	\$0	\$0	\$0	\$8,055	\$4,600,394	
Louisiana Fund I (\$1,000,000)	\$1,433,550	\$0	\$0	\$0	\$0	\$0	\$1,433,550	
LSV International Equity Value	\$97,474,490	\$0	\$0	\$0	\$0	\$4,573,354	\$102,047,844	
Mellon Stock Index Fund	\$290,157,829	\$0	\$0	\$0	\$0	\$5,432,615	\$295,590,445	
Mesirow (\$35,000,000)	\$9,835,614	\$0	\$0	\$0	\$0	\$0	\$9,835,614	
Murphree Venture (\$2,000,000)	\$613,531	\$0	\$0	\$0	\$0	\$0	\$613,531	
OFI Emerging Markets	\$30,060,505	\$0	\$0	\$0	-\$21,704	\$224,440	\$30,284,945	
Orleans Core Fixed Income	\$95,570,590	\$0	\$0	\$0	\$0	-\$409,138	\$95,161,452	
QMA SMID	\$42,748,397	\$0	\$0	\$0	\$0	\$1,604,257	\$44,352,654	
Rothschild U.S. SMID Core	\$44,615,456	\$0	\$0	\$0	\$0	\$796,593	\$45,412,049	
Sentinel Real Estate Fund (\$30,000,000)	\$37,762,927	\$0	\$0	\$0	\$0	\$0	\$37,762,927	
State Street ACWI Index Fund	\$35,522,884	\$0	\$0	\$0	\$0	\$762,137	\$36,285,021	
Thornburg Global Opportunities	\$32,918,953	\$0	\$0	\$0	\$0	\$1,084,971	\$34,003,924	
Timbervert Crossover Fund (\$16,000,000)	\$6,883,712	\$0	\$0	\$0	\$0	\$0	\$6,883,712	
<b>Total</b>	<b>\$1,729,836,937</b>	<b>\$6,354,173</b>	<b>-\$6,541,090</b>	<b>-\$186,917</b>	<b>-\$132,305</b>	<b>\$19,561,755</b>	<b>\$1,749,211,776</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).



## Firefighters' Retirement System of Louisiana

# CURRENT FYTD CHANGE IN VALUE

### Total Cash Flow Summary

Fiscal YTD Ending September 30, 2019

	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Fees	Net Investment Change	Ending Market Value
Acadian Emerging Markets Equity	\$61,087,956	\$0	\$0	\$0	-\$111,817	-\$2,644,226	\$58,443,730
AEW Core Property (\$12,000,000)	\$16,482,514	\$0	\$0	\$0	\$0	\$0	\$16,482,514
AEW Partners VI LP (\$20,000,000)	\$8,884,982	\$0	-\$9,280,881	-\$9,280,881	\$0	\$0	-\$395,899
AQR Global Risk Premium – EL	\$81,793,968	\$0	\$0	\$0	-\$197,784	\$1,763,525	\$83,557,493
ASB Real Estate Fund	\$14,576,244	\$0	\$0	\$0	\$0	\$0	\$14,576,244
Blackrock Global Allocation	\$86,219,909	\$0	\$0	\$0	\$0	\$562,184	\$86,782,093
Blackrock US Debt	\$296,301,894	\$80,000,000	\$0	\$80,000,000	\$0	\$8,518,674	\$384,820,568
Blackrock US TIPS Index	\$53,502,426	\$0	\$0	\$0	\$0	\$710,562	\$54,212,988
Boston Partners Global Equity	\$98,946,150	\$0	-\$130,870	-\$130,870	-\$131,881	\$366,506	\$99,181,786
Cash/Clearing Account	\$10,592,120	\$126,277,834	-\$123,162,503	\$3,115,332	\$0	\$119,707	\$13,827,159
CCMP Capital Investors III (\$15,000,000)	\$16,139,690	\$0	-\$3,134,513	-\$3,134,513	\$0	\$0	\$13,005,177
DCM Private Equity II (\$7,500,000)	\$1,164,748	\$0	-\$73,483	-\$73,483	\$0	\$0	\$1,091,265
DTC Private Equity II-Q, L.P. (\$7,500,000)	\$1,332,604	\$0	-\$150,000	-\$150,000	\$0	\$0	\$1,182,604
Energy Opportunities Fund	\$33	\$0	\$0	\$0	\$0	\$2,582	\$2,615
FECF II (\$20,000,000)	\$303,334	\$0	-\$294,412	-\$294,412	\$0	-\$106,232	-\$97,310
Fisher All Foreign Equity	\$108,054,069	\$0	-\$630	-\$630	-\$156,059	-\$2,614,461	\$105,438,978
FRS-GA (Georgia)	\$3,463,043	\$0	\$0	\$0	\$0	\$0	\$3,463,043
FRS-LB I (NLTP AZ)	\$7,315,110	\$0	\$0	\$0	\$0	\$0	\$7,315,110
FRS-LB III (ST George UT)	\$9,281,546	\$0	\$0	\$0	\$0	\$0	\$9,281,546
GA Crossover Fund (\$25,000,000)	\$3,921,114	\$0	\$0	\$0	\$0	\$0	\$3,921,114
Greenspring Associates III (\$9,230,000)	\$3,527,059	\$0	-\$166,140	-\$166,140	\$0	\$0	\$3,360,919
Harbourvest IV (\$20,000,000)	\$19,493,639	\$0	-\$1,540,000	-\$1,540,000	\$0	\$0	\$17,953,639
HarbourVest Partners XI Buyout (\$35,000,000)	\$154,001	\$1,400,000	\$0	\$1,400,000	\$0	\$0	\$1,554,001



## Firefighters' Retirement System of Louisiana

# CURRENT FYTD CHANGE IN VALUE

	Fiscal YTD Ending September 30, 2019						
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Fees	Net Investment Change	Ending Market Value
Heitman America Real Estate Trust	\$14,875,223	\$0	\$0	\$0	\$0	\$0	\$14,875,223
JP Morgan India (\$8,990,000)	\$1,305,554	\$0	\$0	\$0	\$0	\$0	\$1,305,554
Landmark Equity Partners XV (\$25,000,000)	\$9,592,911	\$525,279	-\$324,540	\$200,739	\$0	\$0	\$9,793,650
Liquidating - BlackRock Global Focused	\$8,142	\$0	\$0	\$0	\$0	-\$230	\$7,912
Louisiana Asset Management Pool	\$4,574,500	\$0	\$0	\$0	\$0	\$25,894	\$4,600,394
Louisiana Fund I (\$1,000,000)	\$1,433,550	\$0	\$0	\$0	\$0	\$0	\$1,433,550
LSV International Equity Value	\$103,194,258	\$0	-\$1,161	-\$1,161	-\$176,103	-\$1,145,254	\$102,047,844
Mellon Stock Index Fund	\$290,644,592	\$38,152	\$0	\$38,152	-\$38,152	\$4,907,700	\$295,590,445
Mesirow (\$35,000,000)	\$8,435,614	\$1,400,000	\$0	\$1,400,000	\$0	\$0	\$9,835,614
Murphree Venture (\$2,000,000)	\$662,306	\$0	-\$48,775	-\$48,775	\$0	\$0	\$613,531
OFI Emerging Markets	\$31,465,066	\$0	\$0	\$0	-\$65,476	-\$1,180,121	\$30,284,945
Orleans Core Fixed Income	\$93,124,492	\$0	\$0	\$0	-\$29,523	\$2,036,961	\$95,161,452
QMA SMID	\$44,604,801	\$0	\$0	\$0	-\$58,083	-\$252,147	\$44,352,654
Rothschild U.S. SMID Core	\$45,743,366	\$0	\$0	\$0	-\$79,368	-\$331,317	\$45,412,049
Sentinel Real Estate Fund (\$30,000,000)	\$38,149,072	\$0	-\$386,145	-\$386,145	\$0	\$0	\$37,762,927
State Street ACWI Index Fund	--	\$35,000,000	\$0	\$35,000,000	\$0	\$1,285,021	\$36,285,021
Stone Harbor	\$79,483,138	\$0	-\$81,027,382	-\$81,027,382	\$0	\$1,544,244	--
Thornburg Global Opportunities	\$60,232,986	\$0	-\$25,000,000	-\$25,000,000	-\$91,378	-\$1,229,062	\$34,003,924
Timbervest Crossover Fund (\$16,000,000)	\$6,883,712	\$0	\$0	\$0	\$0	\$0	\$6,883,712
<b>Total</b>	<b>\$1,736,951,437</b>	<b>\$244,641,265</b>	<b>-\$244,721,434</b>	<b>-\$80,169</b>	<b>-\$1,135,624</b>	<b>\$12,340,508</b>	<b>\$1,749,211,776</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).



## Firefighters' Retirement System of Louisiana

# SINCE INCEPTION CHANGE IN VALUE

### Total Cash Flow Summary

	Ending September 30, 2019					
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Net Investment Change	Ending Market Value
Acadian Emerging Markets Equity	--	\$65,000,000	-\$10,000,000	\$55,000,000	\$3,443,730	\$58,443,730
AEW Core Property (\$12,000,000)	--	\$12,000,000	\$0	\$12,000,000	\$4,482,514	\$16,482,514
AEW Partners VI LP (\$20,000,000)	--	\$18,420,450	-\$33,332,325	-\$14,911,875	\$14,515,976	-\$395,899
AQR Global Risk Premium – EL	--	\$101,500,000	-\$30,700,000	\$70,800,000	\$12,757,493	\$83,557,493
ASB Real Estate Fund	--	\$12,254,130	-\$141,910	\$12,112,220	\$2,464,024	\$14,576,244
Blackrock Global Allocation	--	\$68,682,390	\$0	\$68,682,390	\$18,099,703	\$86,782,093
Blackrock US Debt	--	\$407,536,521	-\$58,500,000	\$349,036,521	\$35,784,047	\$384,820,568
Blackrock US TIPS Index	--	\$50,016,034	-\$4,805	\$50,011,229	\$4,201,759	\$54,212,988
Boston Partners Global Equity	--	\$80,939,406	-\$1,461,019	\$79,478,387	\$19,703,399	\$99,181,786
Cash/Clearing Account	--	\$2,535,677,784	-\$2,525,625,435	\$10,052,350	\$3,774,809	\$13,827,159
CCMP Capital Investors III (\$15,000,000)	--	\$13,375,862	-\$4,742,087	\$8,633,775	\$4,371,402	\$13,005,177
DCM Private Equity II (\$7,500,000)	--	\$8,232,280	-\$7,381,601	\$850,679	\$240,585	\$1,091,265
DTC Private Equity II-Q, L.P. (\$7,500,000)	--	\$5,480,845	-\$8,437,500	-\$2,956,655	\$4,139,259	\$1,182,604
Energy Opportunities Fund	--	\$50,039,277	-\$44,450,083	\$5,589,194	-\$5,586,579	\$2,615
FCEP II (\$20,000,000)	--	\$19,188,998	-\$22,596,774	-\$3,407,776	\$3,310,466	-\$97,310
Fisher All Foreign Equity	--	\$117,180,807	-\$80,308,187	\$36,872,620	\$68,566,358	\$105,438,978
FRS-GA (Georgia)	--	\$9,416,075	\$0	\$9,416,075	-\$5,953,032	\$3,463,043
FRS-LB I (NLTP AZ)	--	\$24,900,208	\$0	\$24,900,208	-\$17,585,098	\$7,315,110
FRS-LB III (ST George UT)	--	\$6,878,923	\$0	\$6,878,923	\$2,402,623	\$9,281,546
GA Crossover Fund (\$25,000,000)	--	\$25,000,000	-\$46,276,687	-\$21,276,687	\$25,197,801	\$3,921,114
Greenspring Associates III (\$9,230,000)	--	\$8,491,600	-\$13,277,908	-\$4,786,308	\$8,147,227	\$3,360,919
Harbourvest IV (\$20,000,000)	--	\$17,325,303	-\$4,447,769	\$12,877,534	\$5,076,105	\$17,953,639

Cash flow statistics exclude management fees and expenses.



## Firefighters' Retirement System of Louisiana

# SINCE INCEPTION CHANGE IN VALUE

	Beginning Market Value	Ending September 30, 2019				Ending Market Value
		Contributions	Withdrawals	Net Cash Flow	Net Investment Change	
HarbourVest Partners XI Buyout (\$35,000,000)	--	\$1,400,000	\$0	\$1,400,000	\$154,001	\$1,554,001
Heitman America Real Estate Trust	--	\$12,000,000	\$0	\$12,000,000	\$2,875,223	\$14,875,223
JP Morgan India (\$8,990,000)	--	\$8,307,355	-\$3,814,303	\$4,493,052	-\$3,187,498	\$1,305,554
Landmark Equity Partners XV (\$25,000,000)	--	\$18,322,454	-\$13,315,613	\$5,006,841	\$4,786,809	\$9,793,650
Liquidating - BlackRock Global Focused	--	\$46,832,890	-\$59,572,953	-\$12,740,063	\$12,747,975	\$7,912
Louisiana Asset Management Pool	--	\$943,990,965	-\$944,296,689	-\$305,724	\$4,906,118	\$4,600,394
Louisiana Fund I (\$1,000,000)	--	\$1,010,000	\$0	\$1,010,000	\$423,550	\$1,433,550
LSV International Equity Value	--	\$103,818,122	-\$42,314,574	\$61,503,548	\$40,544,296	\$102,047,844
Mellon Stock Index Fund	--	\$275,513,975	-\$164,500,001	\$111,013,974	\$184,576,471	\$295,590,445
Mesirow (\$35,000,000)	--	\$10,078,620	\$0	\$10,078,620	-\$243,006	\$9,835,614
Murphree Venture (\$2,000,000)	--	\$2,058,578	-\$897,234	\$1,161,344	-\$547,813	\$613,531
OFI Emerging Markets	--	\$37,500,000	-\$11,500,000	\$26,000,000	\$4,284,945	\$30,284,945
Orleans Core Fixed Income	\$0	\$146,099,081	-\$91,022,995	\$55,076,086	\$40,085,366	\$95,161,452
QMA SMID	--	\$46,715,738	\$0	\$46,715,738	-\$2,363,085	\$44,352,654
Rothschild U.S. SMID Core	--	\$55,500,000	-\$27,500,000	\$28,000,000	\$17,412,049	\$45,412,049
Sentinel Real Estate Fund (\$30,000,000)	--	\$30,000,000	-\$18,354,586	\$11,645,414	\$26,117,513	\$37,762,927
State Street ACWI Index Fund	--	\$35,000,000	\$0	\$35,000,000	\$1,285,021	\$36,285,021
Stone Harbor	--	\$86,000,000	-\$81,027,382	\$4,972,618	-\$4,972,618	--
Thornburg Global Opportunities	--	\$47,500,000	-\$95,306,258	-\$47,806,258	\$81,810,182	\$34,003,924
Timbervest Crossover Fund (\$16,000,000)	--	\$13,600,000	-\$8,263,895	\$5,336,105	\$1,547,607	\$6,883,712

Cash flow statistics exclude management fees and expenses.



### **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.
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### **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.

