

# INVESTMENT MARKET UPDATE

(AS OF DECEMBER 31, 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	Dec	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%	3.0%	31.3%
<b>Russell 1000</b>	16.1%	1.5%	16.4%	33.1%	13.2%	0.9%	12.1%	21.7%	-4.8%	2.9%	31.3%
<b>Russell 2000</b>	26.9%	-4.2%	16.3%	38.8%	4.9%	-4.4%	21.3%	14.6%	-11.0%	2.9%	25.4%
<b>Russell 2500</b>	26.7%	-2.5%	17.9%	36.8%	7.1%	-2.9%	17.6%	16.8%	-10.0%	2.1%	27.6%
<b>MSCI EAFE</b>	7.8%	-12.1%	17.3%	22.8%	-4.9%	-0.8%	1.0%	25.0%	-13.8%	3.2%	21.9%
<b>MSCI EM</b>	18.9%	-18.4%	18.2%	-2.6%	-2.2%	-14.9%	11.2%	37.3%	-14.6%	7.5%	18.3%
<b>MSCI ACWI</b>	12.7%	-7.3%	16.1%	22.8%	4.2%	-2.4%	7.9%	24.0%	-9.4%	3.5%	26.5%
<b>Private Equity</b>	19.8%	9.5%	12.6%	22.3%	14.6%	10.4%	10.3%	21.0%	13.1%	-	9.9%
<b>BC TIPS</b>	6.3%	13.6%	7.0%	-8.6%	3.6%	-1.4%	4.7%	3.0%	-1.3%	0.4%	8.4%
<b>BC Municipal</b>	2.4%	10.7%	6.8%	-2.6%	9.1%	3.3%	0.2%	5.4%	1.3%	0.3%	7.5%
<b>BC Muni High Yield</b>	7.8%	9.2%	18.1%	-5.5%	13.8%	1.8%	3.0%	9.7%	4.8%	0.3%	10.6%
<b>BC US Corporate HY</b>	15.1%	5.0%	15.8%	7.4%	2.5%	-4.5%	17.1%	7.5%	-2.1%	2.0%	14.3%
<b>BC US Agg Bond</b>	6.5%	7.8%	4.2%	-2.0%	6.0%	0.5%	2.6%	3.5%	0.0%	-0.1%	8.7%
<b>BC Global Agg</b>	5.5%	5.6%	4.3%	-2.6%	0.6%	-3.2%	2.1%	7.4%	-1.2%	0.6%	6.8%
<b>BC Long Treasuries</b>	9.4%	29.9%	3.6%	-12.7%	25.1%	-1.2%	1.3%	8.5%	-1.8%	-2.8%	14.8%
<b>BC US Long Credit</b>	10.7%	17.1%	12.7%	-6.6%	16.4%	-4.6%	10.2%	12.2%	-6.8%	0.1%	23.3%
<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%	-4.2%	20.8%
<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%	4.1%	13.4%
<b>JPM EMBI Glob Div</b>	12.2%	7.3%	17.4%	-5.3%	7.4%	1.2%	10.2%	10.3%	-4.3%	2.0%	15.0%
<b>CS Hedge Fund</b>	10.9%	-2.5%	7.7%	9.7%	4.1%	-0.7%	1.2%	7.1%	-3.2%	-	7.6%
<b>BBG Commodity</b>	16.8%	-13.3%	-1.1%	-9.5%	-17.0%	-24.7%	11.8%	1.7%	-11.2%	5.0%	7.7%
<b>Alerian MLP</b>	35.9%	13.9%	4.8%	27.6%	4.8%	-32.6%	18.3%	-6.5%	-12.4%	8.5%	6.5%
<b>FTSE NAREIT Equity REITs</b>	28.0%	8.3%	18.1%	2.5%	30.1%	3.2%	8.5%	5.2%	-4.6%	-0.6%	25.9%

Source: FactSet, Barclays, Thomson One

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



## Firefighters' Retirement System of Louisiana

# INVESTMENT PERFORMANCE FLASH REPORT

### Investment Performance Summary - Net of Fees

	Market Value (\$)	Policy %	% of Portfolio	1 Mo (%)	3 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Total Plan Composite</b>	<b>1,835,970,476</b>	<b>100.0</b>	<b>100.0</b>	<b>2.4</b>	<b>5.4</b>	<b>6.4</b>	<b>17.8</b>	<b>8.5</b>	<b>6.0</b>	<b>6.0</b>	<b>5.9</b>	<b>Sep-92</b>
Policy Index				2.4	5.4	6.0	18.8	9.9	7.3	--	--	Sep-92
Allocation Index				2.2	5.2	6.0	18.1	9.4	7.0	--	--	Sep-92
<b>Total Equity Composite</b>	<b>927,767,172</b>	<b>49.0</b>	<b>50.5</b>	<b>3.9</b>	<b>9.6</b>	<b>9.3</b>	<b>25.7</b>	<b>10.5</b>	<b>7.4</b>	<b>9.4</b>	<b>7.4</b>	<b>Sep-92</b>
MSCI ACWI				3.5	9.0	8.9	26.6	12.4	8.4	8.8	7.8	Sep-92
<b>Domestic Equity Composite</b>	<b>414,827,846</b>	<b>21.5</b>	<b>22.6</b>	<b>2.8</b>	<b>9.0</b>	<b>10.2</b>	<b>29.9</b>	<b>12.1</b>	<b>9.4</b>	<b>11.8</b>	<b>8.1</b>	<b>Sep-92</b>
Russell 3000				2.9	9.1	10.4	31.0	14.6	11.2	13.4	10.0	Sep-92
Mellon Stock Index Fund	317,383,135		17.3	3.0	9.1	10.9	31.5	15.2	11.7	--	12.6	Nov-13
S&P 500				3.0	9.1	10.9	31.5	15.3	11.7	13.6	12.7	Nov-13
<b>SMID Cap Composite</b>	<b>97,442,085</b>	<b>5.5</b>	<b>5.3</b>	<b>2.0</b>	<b>8.6</b>	<b>7.9</b>	<b>24.8</b>	<b>7.3</b>	<b>6.2</b>	<b>--</b>	<b>9.1</b>	<b>Oct-12</b>
Russell 2500				2.1	8.5	7.1	27.8	10.3	8.9	12.6	12.3	Oct-12
Rothschild U.S. SMID Core	48,977,959		2.7	2.1	7.9	7.1	24.0	9.0	--	--	7.7	Jul-15
Russell 2500				2.1	8.5	7.1	27.8	10.3	8.9	12.6	8.8	Jul-15
QMA SMID	48,464,126		2.6	1.9	9.3	8.7	25.7	--	--	--	3.2	Jul-18
Russell 2500				2.1	8.5	7.1	27.8	10.3	8.9	12.6	5.9	Jul-18
<b>International Equity Composite</b>	<b>229,055,284</b>	<b>12.0</b>	<b>12.5</b>	<b>4.7</b>	<b>10.4</b>	<b>8.4</b>	<b>23.4</b>	<b>9.8</b>	<b>6.1</b>	<b>--</b>	<b>6.9</b>	<b>Oct-12</b>
MSCI ACWI ex USA				4.3	8.9	7.0	21.5	9.9	5.5	5.0	6.1	Oct-12
LSV International Equity Value	111,848,183		6.1	4.5	9.6	8.4	20.0	8.5	5.8	6.2	6.0	Oct-04
MSCI Custom Benchmark				4.3	8.9	7.0	21.5	9.9	5.5	5.0	5.4	Oct-04
Fisher All Foreign Equity	117,207,101		6.4	4.8	11.2	8.5	26.9	11.2	6.4	6.4	7.1	Oct-04
MSCI ACWI ex USA				4.3	8.9	7.0	21.5	9.9	5.5	5.0	6.2	Oct-04

Rothschild U.S. SMID Core, LSV International Equity Value and QMA SMID are preliminary as of 12/31/2019, and subject to change when finalized.

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 (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Global Equity Composite</b>	<b>184,669,742</b>	<b>10.0</b>	<b>10.1</b>	<b>3.6</b>	<b>9.0</b>	<b>9.5</b>	<b>23.1</b>	<b>7.8</b>	<b>5.3</b>	<b>--</b>	<b>9.3</b>	<b>Oct-12</b>
<i>MSCI ACWI</i>				3.5	9.0	8.9	26.6	12.4	8.4	8.8	9.8	Oct-12
Thornburg Global Opportunities	38,892,692		2.1	5.0	14.4	13.5	29.8	7.5	5.4	10.1	10.3	Oct-04
<i>MSCI ACWI</i>				3.5	9.0	8.9	26.6	12.4	8.4	8.8	7.6	Oct-04
Boston Partners Global Equity	106,202,156		5.8	3.1	7.1	7.3	19.4	8.0	--	--	9.7	Nov-16
<i>MSCI ACWI</i>				3.5	9.0	8.9	26.6	12.4	8.4	8.8	12.8	Nov-16
State Street ACWI Index Fund	39,566,857		2.2	3.5	9.0	--	--	--	--	--	11.4	Sep-19
<i>MSCI ACWI</i>				3.5	9.0	8.9	26.6	12.4	8.4	8.8	11.2	Sep-19
<b>Emerging Markets Equity</b>	<b>99,214,301</b>	<b>5.5</b>	<b>5.4</b>	<b>7.3</b>	<b>11.8</b>	<b>7.2</b>	<b>19.4</b>	<b>10.8</b>	<b>4.7</b>	<b>--</b>	<b>3.6</b>	<b>Oct-13</b>
<i>MSCI Emerging Markets</i>				7.5	11.8	7.1	18.4	11.6	5.6	3.7	4.4	Oct-13
Acadian Emerging Markets Equity	65,331,242		3.6	8.1	11.8	6.9	16.9	9.3	3.9	--	3.1	Dec-13
<i>MSCI Emerging Markets</i>				7.5	11.8	7.1	18.4	11.6	5.6	3.7	4.0	Dec-13
OFI Emerging Markets	33,883,059		1.8	5.7	11.9	7.7	24.5	14.1	6.6	--	4.7	Jan-14
<i>MSCI Emerging Markets</i>				7.5	11.8	7.1	18.4	11.6	5.6	3.7	4.3	Jan-14
<b>Total Fixed Income Composite</b>	<b>535,919,938</b>	<b>31.0</b>	<b>29.2</b>	<b>0.0</b>	<b>0.3</b>	<b>2.8</b>	<b>9.6</b>	<b>5.3</b>	<b>3.4</b>	<b>--</b>	<b>2.2</b>	<b>Oct-12</b>
<i>Total Fixed Income Custom Benchmark</i>				0.8	1.2	2.8	9.7	4.6	2.8	3.2	2.0	Oct-12
<b>Core Fixed Income</b>	<b>481,282,817</b>	<b>23.0</b>	<b>26.2</b>	<b>0.0</b>	<b>0.3</b>	<b>2.5</b>	<b>9.0</b>	<b>5.5</b>	<b>3.9</b>	<b>--</b>	<b>3.5</b>	<b>Dec-10</b>
<i>BBgBarc US Aggregate TR</i>				-0.1	0.2	2.5	8.7	4.0	3.0	3.7	3.3	Dec-10
Orleans Core Fixed Income	95,792,433		5.2	0.2	0.7	2.9	9.9	4.3	3.4	4.0	5.7	Aug-92
<i>BBgBarc US Aggregate TR</i>				-0.1	0.2	2.5	8.7	4.0	3.0	3.7	5.4	Aug-92
Blackrock US Debt	385,490,385		21.0	-0.1	0.2	2.5	8.7	4.0	3.1	--	3.1	Nov-14
<i>BBgBarc US Aggregate TR</i>				-0.1	0.2	2.5	8.7	4.0	3.0	3.7	3.1	Nov-14
<b>US TIPS Composite</b>	<b>54,637,121</b>	<b>3.0</b>	<b>3.0</b>	<b>0.4</b>	<b>0.8</b>	<b>2.1</b>	<b>8.4</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>6.4</b>	<b>Oct-18</b>
Blackrock US TIPS Index	54,637,121		3.0	0.4	0.8	2.1	8.4	--	--	--	6.4	Oct-18
<i>BBgBarc US TIPS TR</i>				0.4	0.8	2.1	8.4	3.3	2.6	3.4	6.3	Oct-18

Results for periods longer than one year are annualized.

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 (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>GAA Composite</b>	<b>178,692,230</b>	<b>10.0</b>	<b>9.7</b>	<b>2.7</b>	<b>4.9</b>	<b>6.4</b>	<b>20.3</b>	<b>8.1</b>	<b>5.3</b>	<b>--</b>	<b>4.9</b>	<b>Apr-14</b>
60% MSCI World (Net) / 40% FTSE WGBI				1.9	4.9	5.7	18.8	9.3	6.2	6.6	5.6	Apr-14
Blackrock Global Allocation	92,242,286		5.0	2.5	6.3	7.0	18.6	7.9	5.5	--	5.1	Apr-14
60% MSCI World (Net) / 40% FTSE WGBI				1.9	4.9	5.7	18.8	9.3	6.2	6.6	5.6	Apr-14
AQR Global Risk Premium – EL	86,449,944		4.7	2.8	3.5	5.7	21.5	8.6	5.1	--	4.7	May-14
60% MSCI World (Net) / 40% FTSE WGBI				1.9	4.9	5.7	18.8	9.3	6.2	6.6	5.4	May-14
<b>Total Alternative Composite</b>	<b>181,711,569</b>	<b>10.0</b>	<b>9.9</b>	<b>1.5</b>	<b>1.5</b>	<b>3.2</b>	<b>3.5</b>	<b>6.1</b>	<b>5.3</b>	<b>2.0</b>	<b>2.4</b>	<b>Jun-05</b>
<b>Private Equity Composite</b>	<b>68,835,845</b>	<b>4.0</b>	<b>3.7</b>	<b>2.2</b>	<b>2.2</b>	<b>6.2</b>	<b>2.8</b>	<b>8.1</b>	<b>6.6</b>	<b>2.5</b>	<b>-2.0</b>	<b>Jul-05</b>
Cambridge Associates US All PE (1 Qtr Lag)				0.0	0.0	3.4	6.7	13.8	11.2	13.9	13.1	Jul-05
Murphree Venture (\$2,000,000)	531,565		0.0	-13.4	-13.4	-18.4	-18.1	-29.4	-19.4	-7.7	-7.1	Sep-05
Louisiana Fund I (\$1,000,000)	1,432,178		0.1	-0.1	-0.1	-0.2	-17.3	-10.1	-7.2	-2.9	-7.1	Jul-05
DTC Private Equity II-Q, L.P. (\$7,500,000)	1,154,559		0.1	-2.4	-2.4	-0.6	-5.5	6.5	4.6	9.5	5.7	Feb-06
Greenspring Associates III (\$9,230,000)	3,752,690		0.2	11.7	11.7	28.0	19.8	10.0	8.3	14.5	7.5	Feb-06
DCM Private Equity II (\$7,500,000)	1,025,688		0.1	-4.2	-4.2	-6.3	-10.8	-3.9	-4.7	1.6	-2.0	Feb-06
FECF II (\$20,000,000)	37,466		0.0	9.4	9.4	71.5	54.6	48.4	16.2	15.4	14.3	Mar-08
GA Crossover Fund (\$25,000,000)	3,924,704		0.2	0.1	0.1	-11.0	-17.1	-0.5	5.3	14.7	11.6	Jan-08
CCMP Capital Investors III (\$15,000,000)	13,340,541		0.7	2.6	2.6	5.6	0.8	7.8	10.6	--	10.0	Oct-14
Landmark Equity Partners XV (\$25,000,000)	10,369,597		0.6	7.4	7.4	11.9	3.5	14.6	10.5	--	14.7	Dec-14
Harbourvest IV (\$20,000,000)	18,028,243		1.0	0.4	0.4	10.2	15.2	13.0	--	--	12.3	Nov-16
Mesirow (\$35,000,000)	12,855,811		0.7	-0.2	-0.2	0.2	-3.7	--	--	--	-3.4	Dec-18
HarbourVest Partners XI Buyout (\$35,000,000)	2,382,803		0.1	5.7	5.7	5.7	5.7	--	--	--	5.7	Jan-19

Results for periods longer than one year are annualized.

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.

Private Equity valuations are as of 09/30/2019 and cash adjusted to date.



## Firefighters' Retirement System of Louisiana

# INVESTMENT PERFORMANCE FLASH REPORT

	Market Value (\$)	Policy %	% of Portfolio	1 Mo (%)	3 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Real Estate Composite</b>	<b>112,875,724</b>	<b>6.0</b>	<b>6.1</b>	<b>1.1</b>	<b>1.1</b>	<b>1.5</b>	<b>3.7</b>	<b>5.2</b>	<b>4.7</b>	<b>5.1</b>	<b>5.1</b>	<b>Dec-09</b>
<i>NCREIF Property Index 1 Qtr. Lag</i>				1.4	1.4	2.9	6.2	6.8	8.6	9.8	9.3	<i>Dec-09</i>
Sentinel Real Estate Fund (\$30,000,000)	38,280,444		2.1	2.4	2.4	4.0	7.5	7.9	8.4	13.1	6.6	Feb-06
JP Morgan India (\$8,990,000)	1,108,014		0.1	-15.1	-15.1	-43.5	-43.5	-27.8	-18.3	-8.6	-16.4	Apr-07
Timbervest Crossover Fund (\$16,000,000)	6,333,265		0.3	-2.0	-2.0	1.3	1.9	-3.7	-3.7	-1.1	-1.2	Apr-08
AEW Partners VI LP (\$20,000,000)	777,138		0.0	47.7	47.7	50.2	52.4	29.3	22.8	--	18.3	Mar-10
AEW Core Property (\$12,000,000)	16,719,753		0.9	1.4	1.4	2.8	5.9	6.5	--	--	7.4	May-15
FRS-GA (Georgia)	3,463,043		0.2	0.0	0.0	0.0	0.0	-10.1	-6.0	-9.8	-8.5	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	-11.0	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	2.6	Jun-08
ASB Real Estate Fund	14,495,747		0.8	-0.6	-0.6	0.8	4.1	5.2	--	--	4.9	Jan-16
Heitman America Real Estate Trust	15,101,664		0.8	1.5	1.5	0.9	2.7	5.9	--	--	6.4	Nov-15
<b>Total Cash (\$9 MM)</b>	<b>11,879,567</b>	<b>--</b>	<b>0.6</b>	<b>0.1</b>	<b>0.5</b>	<b>1.0</b>	<b>2.2</b>	<b>1.6</b>	<b>1.1</b>	<b>0.6</b>	<b>2.8</b>	<b>Jun-92</b>
<i>91 Day T-Bills</i>				0.1	0.4	0.9	2.1	1.6	1.1	0.6	2.4	<i>Jun-92</i>

Results for periods longer than one year are annualized.  
 Fiscal YTD ends June 30th.  
 Real Estate valuations are as of 09/30/2019 and cash adjusted to date.  
 FRS – LB I is part of the Real Estate Composite as of 12/1/2012.  
 Harbourvest IV was funded 10/01/2016.



## Firefighters' Retirement System of Louisiana

# CURRENT MONTH CHANGE IN VALUE

### Total Cash Flow Summary

Month Ending December 31, 2019

	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Fees	Net Investment Change	Ending Market Value
Acadian Emerging Markets Equity	\$60,437,742	\$0	\$0	\$0	\$0	\$4,893,499	\$65,331,242
AEW Core Property (\$12,000,000)	\$16,482,514	\$0	\$0	\$0	\$0	\$237,239	\$16,719,753
AEW Partners VI LP (\$20,000,000)	-\$395,899	\$0	-\$566,038	-\$566,038	\$0	\$1,739,075	\$777,138
AQR Global Risk Premium – EL	\$84,061,357	\$0	\$0	\$0	-\$68,440	\$2,388,587	\$86,449,944
ASB Real Estate Fund	\$14,576,244	\$0	\$0	\$0	\$0	-\$80,497	\$14,495,747
Blackrock Global Allocation	\$89,979,213	\$0	\$0	\$0	\$0	\$2,263,073	\$92,242,286
Blackrock US Debt	\$385,759,507	\$0	\$0	\$0	\$0	-\$269,122	\$385,490,385
Blackrock US TIPS Index	\$54,435,415	\$0	\$0	\$0	\$0	\$201,706	\$54,637,121
Boston Partners Global Equity	\$102,918,445	\$0	\$0	\$0	-\$47,376	\$3,283,712	\$106,202,156
Cash/Clearing Account	\$6,899,416	\$6,206,218	-\$5,856,928	\$349,290	\$0	\$9,421	\$7,258,127
CCMP Capital Investors III (\$15,000,000)	\$13,005,177	\$0	\$0	\$0	\$0	\$335,364	\$13,340,541
DCM Private Equity II (\$7,500,000)	\$1,091,265	\$0	-\$20,317	-\$20,317	\$0	-\$45,260	\$1,025,688
DTC Private Equity II-Q, L.P. (\$7,500,000)	\$1,182,604	\$0	\$0	\$0	\$0	-\$28,045	\$1,154,559
Energy Opportunities Fund	\$2,623	\$0	\$0	\$0	\$0	\$3	\$2,626
FECP II (\$20,000,000)	\$8,922	\$0	\$0	\$0	\$0	\$28,524	\$37,446
Fisher All Foreign Equity	\$111,858,536	\$0	\$0	\$0	\$0	\$5,348,565	\$117,207,101
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	\$3,590	\$3,924,704
Greenspring Associates III (\$9,230,000)	\$3,360,919	\$0	\$0	\$0	\$0	\$391,771	\$3,752,690
Harbourvest IV (\$20,000,000)	\$17,953,639	\$0	\$0	\$0	\$0	\$74,604	\$18,028,243
HarbourVest Partners XI Buyout (\$35,000,000)	\$2,254,001	\$0	\$0	\$0	\$0	\$128,802	\$2,382,803



## Firefighters' Retirement System of Louisiana

# CURRENT MONTH CHANGE IN VALUE

	Month Ending December 31, 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	\$226,441	\$15,101,664	
JP Morgan India (\$8,990,000)	\$1,305,554	\$0	\$0	\$0	\$0	-\$197,540	\$1,108,014	
Landmark Equity Partners XV (\$25,000,000)	\$9,732,703	\$117,606	-\$203,863	-\$86,257	\$0	\$723,151	\$10,369,597	
Liquidating - BlackRock Global Focused	\$7,925	\$0	\$0	\$0	\$0	\$112	\$8,037	
Louisiana Asset Management Pool	\$4,614,753	\$0	\$0	\$0	\$0	\$6,688	\$4,621,440	
Louisiana Fund I (\$1,000,000)	\$1,433,550	\$0	\$0	\$0	\$0	-\$1,372	\$1,432,178	
LSV International Equity Value	\$106,998,316	\$0	\$0	\$0	\$0	\$4,849,867	\$111,848,183	
Mellon Stock Index Fund	\$312,958,393	\$0	-\$5,000,000	-\$5,000,000	\$0	\$9,424,742	\$317,383,135	
Mesirow (\$35,000,000)	\$11,480,614	\$1,400,000	\$0	\$1,400,000	\$0	-\$24,803	\$12,855,811	
Murphree Venture (\$2,000,000)	\$613,531	\$0	\$0	\$0	\$0	-\$81,966	\$531,565	
OFI Emerging Markets	\$32,058,746	\$0	\$0	\$0	-\$24,283	\$1,824,313	\$33,883,059	
Orleans Core Fixed Income	\$95,580,328	\$0	\$0	\$0	\$0	\$212,105	\$95,792,433	
QMA SMID	\$47,537,580	\$0	\$0	\$0	\$0	\$926,546	\$48,464,126	
Rothschild U.S. SMID Core	\$47,959,831	\$0	\$0	\$0	\$0	\$1,018,128	\$48,977,959	
Sentinel Real Estate Fund (\$30,000,000)	\$37,378,313	\$0	\$0	\$0	\$0	\$902,131	\$38,280,444	
State Street ACWI Index Fund	\$38,210,388	\$0	\$0	\$0	-\$1,978	\$1,356,469	\$39,566,857	
Thornburg Global Opportunities	\$37,053,071	\$0	\$0	\$0	\$0	\$1,839,621	\$38,892,692	
Timbervest Crossover Fund (\$16,000,000)	\$6,883,712	\$0	-\$416,000	-\$416,000	\$0	-\$134,447	\$6,333,265	
<b>Total</b>	<b>\$1,796,534,983</b>	<b>\$7,723,824</b>	<b>-\$12,063,145</b>	<b>-\$4,339,322</b>	<b>-\$142,077</b>	<b>\$43,774,795</b>	<b>\$1,835,970,456</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 December 31, 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	-\$222,569	\$4,243,285	\$65,331,242
AEW Core Property (\$12,000,000)	\$16,269,443	\$0	\$0	\$0	\$0	\$450,310	\$16,719,753
AEW Partners VI LP (\$20,000,000)	\$8,874,888	\$0	-\$9,846,919	-\$9,846,919	\$0	\$1,749,169	\$777,138
AQR Global Risk Premium – EL	\$81,793,968	\$0	\$0	\$0	-\$399,387	\$4,655,976	\$86,449,944
ASB Real Estate Fund	\$14,375,136	\$0	\$0	\$0	\$0	\$120,611	\$14,495,747
Blackrock Global Allocation	\$86,219,909	\$0	\$0	\$0	\$0	\$6,022,377	\$92,242,286
Blackrock US Debt	\$296,301,894	\$80,000,000	\$0	\$80,000,000	\$0	\$9,188,491	\$385,490,385
Blackrock US TIPS Index	\$53,502,426	\$0	\$0	\$0	\$0	\$1,134,695	\$54,637,121
Boston Partners Global Equity	\$98,946,150	\$0	-\$262,405	-\$262,405	-\$270,685	\$7,518,412	\$106,202,156
Cash/Clearing Account	\$10,592,120	\$135,118,246	-\$138,621,600	-\$3,503,354	\$0	\$169,361	\$7,258,127
CCMP Capital Investors III (\$15,000,000)	\$15,762,009	\$0	-\$3,134,513	-\$3,134,513	\$0	\$713,045	\$13,340,541
DCM Private Equity II (\$7,500,000)	\$1,190,696	\$0	-\$93,800	-\$93,800	\$0	-\$71,207	\$1,025,688
DTC Private Equity II-Q, L.P. (\$7,500,000)	\$1,311,002	\$0	-\$150,000	-\$150,000	\$0	-\$6,443	\$1,154,559
Energy Opportunities Fund	\$33	\$0	\$0	\$0	\$0	\$2,593	\$2,626
FCEP II (\$20,000,000)	\$197,102	\$0	-\$294,412	-\$294,412	\$0	\$134,756	\$37,446
Fisher All Foreign Equity	\$108,054,069	\$0	-\$630	-\$630	-\$309,188	\$9,153,661	\$117,207,101
FRS-GA (Georgia)	\$3,463,900	\$0	\$0	\$0	\$0	-\$857	\$3,463,043
FRS-LB I (NLTP AZ)	\$7,380,981	\$0	\$0	\$0	\$0	-\$65,871	\$7,315,110
FRS-LB III (ST George UT)	\$9,288,030	\$0	\$0	\$0	\$0	-\$6,484	\$9,281,546
GA Crossover Fund (\$25,000,000)	\$4,408,965	\$0	\$0	\$0	\$0	-\$484,261	\$3,924,704
Greenspring Associates III (\$9,230,000)	\$3,098,632	\$0	-\$166,140	-\$166,140	\$0	\$820,198	\$3,752,690
Harbourvest IV (\$20,000,000)	\$17,901,972	\$0	-\$1,540,000	-\$1,540,000	\$0	\$1,666,271	\$18,028,243
HarbourVest Partners XI Buyout (\$35,000,000)	\$154,001	\$2,100,000	\$0	\$2,100,000	\$0	\$128,802	\$2,382,803



## Firefighters' Retirement System of Louisiana

# CURRENT FYTD CHANGE IN VALUE

	Fiscal YTD Ending December 31, 2019						
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Fees	Net Investment Change	Ending Market Value
Heitman America Real Estate Trust	\$14,962,989	\$0	\$0	\$0	\$0	\$138,675	\$15,101,664
JP Morgan India (\$8,990,000)	\$1,962,601	\$0	\$0	\$0	\$0	-\$854,587	\$1,108,014
Landmark Equity Partners XV (\$25,000,000)	\$9,208,194	\$704,782	-\$651,247	\$53,535	\$0	\$1,107,868	\$10,369,597
Liquidating - BlackRock Global Focused	\$8,142	\$0	\$0	\$0	\$0	-\$105	\$8,037
Louisiana Asset Management Pool	\$4,574,500	\$0	\$0	\$0	\$0	\$46,940	\$4,621,440
Louisiana Fund I (\$1,000,000)	\$1,435,336	\$0	\$0	\$0	\$0	-\$3,158	\$1,432,178
LSV International Equity Value	\$103,194,258	\$0	-\$1,161	-\$1,161	-\$352,581	\$8,655,085	\$111,848,183
Mellon Stock Index Fund	\$290,644,592	\$38,152	-\$5,000,000	-\$4,961,848	-\$38,152	\$31,700,390	\$317,383,135
Mesirow (\$35,000,000)	\$8,397,499	\$4,445,000	\$0	\$4,445,000	\$0	\$13,312	\$12,855,811
Murphree Venture (\$2,000,000)	\$700,593	\$0	-\$48,775	-\$48,775	\$0	-\$120,253	\$531,565
OFI Emerging Markets	\$31,465,066	\$0	\$0	\$0	-\$135,435	\$2,417,993	\$33,883,059
Orleans Core Fixed Income	\$93,124,492	\$0	\$0	\$0	-\$29,523	\$2,667,941	\$95,792,433
QMA SMID	\$44,604,801	\$0	\$0	\$0	-\$116,280	\$3,859,325	\$48,464,126
Rothschild U.S. SMID Core	\$45,743,366	\$0	\$0	\$0	-\$79,368	\$3,234,592	\$48,977,959
Sentinel Real Estate Fund (\$30,000,000)	\$37,587,805	\$0	-\$770,759	-\$770,759	\$0	\$1,463,398	\$38,280,444
State Street ACWI Index Fund	--	\$35,000,000	\$0	\$35,000,000	-\$7,567	\$4,566,857	\$39,566,857
Thornburg Global Opportunities	\$60,232,986	\$0	-\$25,001,073	-\$25,001,073	-\$91,378	\$3,660,778	\$38,892,692
Timbervest Crossover Fund (\$16,000,000)	\$6,661,868	\$0	-\$416,000	-\$416,000	\$0	\$87,397	\$6,333,265
Z TERMINATED - Stone Harbor	\$79,483,138	\$0	-\$81,027,382	-\$81,027,382	\$0	\$1,544,244	--
<b>Total</b>	<b>\$1,734,167,508</b>	<b>\$257,406,180</b>	<b>-\$267,026,816</b>	<b>-\$9,620,635</b>	<b>-\$2,052,114</b>	<b>\$111,423,583</b>	<b>\$1,835,970,456</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 December 31, 2019					Ending Market Value
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Net Investment Change	
Acadian Emerging Markets Equity	--	\$65,000,000	-\$10,000,000	\$55,000,000	\$10,331,242	\$65,331,242
AEW Core Property (\$12,000,000)	--	\$12,000,000	\$0	\$12,000,000	\$4,719,753	\$16,719,753
AEW Partners VI LP (\$20,000,000)	--	\$18,420,450	-\$33,898,363	-\$15,477,913	\$16,255,051	\$777,138
AQR Global Risk Premium – EL	--	\$101,500,000	-\$30,700,000	\$70,800,000	\$15,649,944	\$86,449,944
ASB Real Estate Fund	--	\$12,254,130	-\$141,910	\$12,112,220	\$2,383,527	\$14,495,747
Blackrock Global Allocation	--	\$68,682,390	\$0	\$68,682,390	\$23,559,896	\$92,242,286
Blackrock US Debt	--	\$407,536,521	-\$58,500,000	\$349,036,521	\$36,453,864	\$385,490,385
Blackrock US TIPS Index	--	\$50,016,034	-\$4,805	\$50,011,229	\$4,625,892	\$54,637,121
Boston Partners Global Equity	--	\$80,939,406	-\$1,592,554	\$79,346,852	\$26,855,305	\$106,202,156
Cash/Clearing Account	--	\$2,544,518,196	-\$2,541,084,533	\$3,433,664	\$3,824,463	\$7,258,127
CCMP Capital Investors III (\$15,000,000)	--	\$13,375,862	-\$4,742,087	\$8,633,775	\$4,706,766	\$13,340,541
DCM Private Equity II (\$7,500,000)	--	\$8,232,280	-\$7,401,917	\$830,362	\$195,326	\$1,025,688
DTC Private Equity II-Q, L.P. (\$7,500,000)	--	\$5,480,845	-\$8,437,500	-\$2,956,655	\$4,111,214	\$1,154,559
Energy Opportunities Fund	--	\$50,039,277	-\$44,450,083	\$5,589,194	-\$5,586,568	\$2,626
FCEP II (\$20,000,000)	--	\$19,188,998	-\$22,596,774	-\$3,407,776	\$3,445,222	\$37,446
Fisher All Foreign Equity	--	\$117,180,807	-\$80,308,187	\$36,872,620	\$80,334,481	\$117,207,101
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	\$25,201,391	\$3,924,704
Greenspring Associates III (\$9,230,000)	--	\$8,491,600	-\$13,277,908	-\$4,786,308	\$8,538,998	\$3,752,690
Harbourvest IV (\$20,000,000)	--	\$17,325,303	-\$4,447,769	\$12,877,534	\$5,150,709	\$18,028,243

Cash flow statistics exclude management fees and expenses.



## Firefighters' Retirement System of Louisiana

# SINCE INCEPTION CHANGE IN VALUE

	Beginning Market Value	Ending December 31, 2019				Ending Market Value
		Contributions	Withdrawals	Net Cash Flow	Net Investment Change	
HarbourVest Partners XI Buyout (\$35,000,000)	--	\$2,100,000	\$0	\$2,100,000	\$282,803	\$2,382,803
Heitman America Real Estate Trust	--	\$12,000,000	\$0	\$12,000,000	\$3,101,664	\$15,101,664
JP Morgan India (\$8,990,000)	--	\$8,307,355	-\$3,814,303	\$4,493,052	-\$3,385,038	\$1,108,014
Landmark Equity Partners XV (\$25,000,000)	--	\$18,501,957	-\$13,642,320	\$4,859,637	\$5,509,960	\$10,369,597
Liquidating - BlackRock Global Focused	--	\$46,832,890	-\$59,572,953	-\$12,740,063	\$12,748,100	\$8,037
Louisiana Asset Management Pool	--	\$943,990,965	-\$944,296,689	-\$305,724	\$4,927,165	\$4,621,440
Louisiana Fund I (\$1,000,000)	--	\$1,010,000	\$0	\$1,010,000	\$422,178	\$1,432,178
LSV International Equity Value	--	\$103,818,122	-\$42,314,574	\$61,503,548	\$50,344,635	\$111,848,183
Mellon Stock Index Fund	--	\$275,513,975	-\$169,500,001	\$106,013,974	\$211,369,161	\$317,383,135
Mesirow (\$35,000,000)	--	\$13,123,620	\$0	\$13,123,620	-\$267,809	\$12,855,811
Murphree Venture (\$2,000,000)	--	\$2,058,578	-\$897,234	\$1,161,344	-\$629,779	\$531,565
OFI Emerging Markets	--	\$37,500,000	-\$11,500,000	\$26,000,000	\$7,883,059	\$33,883,059
Orleans Core Fixed Income	\$0	\$146,099,081	-\$91,022,995	\$55,076,086	\$40,716,347	\$95,792,433
QMA SMID	--	\$46,715,738	\$0	\$46,715,738	\$1,748,388	\$48,464,126
Rothschild U.S. SMID Core	--	\$55,500,000	-\$27,500,000	\$28,000,000	\$20,977,959	\$48,977,959
Sentinel Real Estate Fund (\$30,000,000)	--	\$30,000,000	-\$18,739,200	\$11,260,800	\$27,019,644	\$38,280,444
State Street ACWI Index Fund	--	\$35,000,000	\$0	\$35,000,000	\$4,566,857	\$39,566,857
Thornburg Global Opportunities	--	\$47,500,000	-\$95,307,331	-\$47,807,331	\$86,700,023	\$38,892,692
Timbervest Crossover Fund (\$16,000,000)	--	\$13,600,000	-\$8,679,895	\$4,920,105	\$1,413,160	\$6,333,265

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.
- This report is provided as a management aid for the client's internal use only. Information contained in this report does not constitute a recommendation by NEPC.
- This report may contain confidential or proprietary information and may not be copied or redistributed to any party not legally entitled to receive it.

### **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.

