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**Firefighters' Retirement System of Louisiana**

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**Investment Market Update**  
**(As of May 31, 2017)**

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## Index Performance Summary as of 05/31/2017

	2009	2010	2011	2012	2013	2014	2015	2016	Q1	April	May	YTD
<b>MSCI EM</b>	78.5%	18.9%	-18.4%	18.2%	-2.6%	-2.2%	-14.9%	11.2%	11.4%	2.2%	3.0%	17.3%
<b>MSCI EAFE</b>	31.8%	7.8%	-12.1%	17.3%	22.8%	-4.9%	-0.8%	1.0%	7.2%	2.5%	3.7%	14.0%
<b>MSCI ACWI</b>	34.6%	12.7%	-7.3%	16.1%	22.8%	4.2%	-2.4%	7.9%	6.9%	1.6%	2.2%	11.0%
<b>JPM GBI-EM Global Div</b>	22.0%	15.7%	-1.8%	16.8%	-9.0%	-5.7%	-14.9%	9.9%	6.5%	1.2%	2.0%	9.9%
<b>S&amp;P 500</b>	26.5%	15.1%	2.1%	16.0%	32.4%	13.7%	1.4%	12.0%	6.1%	1.0%	1.4%	8.7%
<b>Russell 1000</b>	28.4%	16.1%	1.5%	16.4%	33.1%	13.2%	0.9%	12.1%	6.0%	1.1%	1.3%	8.5%
<b>BC US STRIPS 20+ Yr</b>	-36.0%	10.9%	58.5%	3.0%	-21.0%	46.4%	-3.7%	1.4%	1.8%	1.8%	3.1%	6.8%
<b>JPM EMBI Global Diversified</b>	29.8%	12.2%	7.3%	17.4%	-5.3%	7.4%	1.2%	10.2%	3.9%	1.6%	0.9%	6.3%
<b>BC US Long Credit</b>	16.8%	10.7%	17.1%	12.7%	-6.6%	16.4%	-4.6%	10.2%	1.7%	1.6%	2.1%	5.4%
<b>BC US Govt/Credit Long</b>	1.9%	10.2%	22.5%	8.8%	-8.8%	19.3%	-3.3%	6.7%	1.6%	1.6%	2.0%	5.2%
<b>BC US Corporate HY</b>	58.2%	15.1%	5.0%	15.8%	7.4%	2.5%	-4.5%	17.1%	2.7%	1.2%	0.9%	4.8%
<b>BC Global Agg</b>	-6.5%	-5.3%	-5.3%	-4.1%	2.7%	-0.6%	3.3%	2.1%	1.8%	1.1%	1.5%	4.5%
<b>BC Municipal</b>	12.9%	2.4%	10.7%	6.8%	-2.6%	9.1%	3.3%	0.2%	1.6%	0.7%	1.6%	3.9%
<b>Russell 2500</b>	34.4%	26.7%	-2.5%	17.9%	36.8%	7.1%	-2.9%	17.6%	3.8%	0.8%	-1.1%	3.4%
<b>BC US Agg Bond</b>	5.9%	6.5%	7.8%	4.2%	-2.0%	6.0%	0.5%	2.6%	0.8%	0.8%	0.8%	2.4%
<b>CS Leveraged Loan</b>	44.9%	10.0%	1.8%	9.4%	6.2%	2.1%	-0.4%	9.9%	1.2%	0.4%	0.4%	2.0%
<b>BC US Agg Interm</b>	6.5%	6.1%	6.0%	3.6%	-1.0%	4.1%	1.2%	2.0%	0.7%	0.6%	0.5%	1.9%
<b>BC TIPS</b>	11.4%	6.3%	13.6%	7.0%	-8.6%	3.6%	-1.4%	4.7%	1.3%	0.6%	0.0%	1.8%
<b>Credit Suisse Hedge Fund</b>	18.6%	10.9%	-2.5%	7.7%	9.7%	4.1%	-0.7%	1.2%	2.1%	0.4%	-	2.5%
<b>Russell 2000</b>	27.2%	26.9%	-4.2%	16.3%	38.8%	4.9%	-4.4%	21.3%	2.5%	1.1%	-2.0%	1.5%
<b>BC US Govt/Credit 1-3 Yr</b>	3.8%	2.8%	1.6%	1.3%	0.6%	0.8%	0.7%	1.3%	0.4%	0.2%	0.2%	0.8%
<b>FTSE NAREIT Equity REITs</b>	28.0%	28.0%	8.3%	18.1%	2.5%	30.1%	3.2%	8.5%	1.2%	0.1%	-0.8%	0.5%
<b>Alerian MLP</b>	76.4%	35.9%	13.9%	4.8%	27.6%	4.8%	-32.6%	18.3%	3.9%	-1.3%	-4.5%	-2.0%
<b>Bloomberg Commodity</b>	18.9%	16.8%	-13.3%	-1.1%	-9.5%	-17.0%	-24.7%	11.8%	-2.3%	-1.5%	-1.4%	-5.4%

Source: Bloomberg, Barclays, Alerian, Nareit, MSCI, JP Morgan, Credit Suisse



NEPC, LLC

### Market Environment

Global equities forged ahead in May with international stocks continuing to lead the way. The MSCI EAFE Index returned 3.7% on the month as investors took comfort in the victory of centrist candidate Emmanuel Macron in the French presidential elections. Emerging market equities posted their fifth consecutive monthly gain with the MSCI EM Index rising 3.0% in May; the index is up 17.3% so far this year. US equities trailed their international counterparts with the S&P 500 returning 1.4% as a steady jobs report and an accommodative Fed bolstered gains.

The Treasury yield fell eight basis points to 2.21% at month end as the Fed announced no changes to its interest rate or balance sheet policy. As a result, the Barclays US Aggregate Bond Index was up 0.8% and the Barclays Long Treasury Index returned 2.0%. Within emerging markets, the JP Morgan GBI-EM Global Diversified Index returned 2.0% with appreciating currencies accounting for around half the gains. The Bloomberg Commodity Index fell 1.4% in May as subdued energy prices continued to hurt returns.

At NEPC, we maintain an overweight position in international equities despite the recent rally because we believe in the potential for strong economic growth in emerging markets and greater increase in corporate earnings in Europe. Within US fixed income, we believe dynamic strategies are the way to proceed as credit spreads continue to decline. Lastly, we still recommend investors consider a dedicated allocation to macro hedge funds.

# Firefighters' Retirement System of Louisiana Investment Performance Flash Report

May 31, 2017

## Investment Performance Summary - Net of Fees

	Market Value (\$)	Policy %	% of Portfolio	1 Mo (%)	YTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Return (%)	Since
<b>Total Plan Composite</b>	<b>1,548,537,724</b>	<b>100.0</b>	<b>100.0</b>	<b>1.4</b>	<b>7.1</b>	<b>13.1</b>	<b>13.3</b>	<b>3.6</b>	<b>5.9</b>	<b>2.4</b>	<b>5.8</b>	<b>Sep-92</b>
<i>Policy Index</i>				1.5	7.7	12.2	13.1	5.4	--	--	--	Sep-92
<i>Allocation Index</i>				1.4	7.0	11.7	12.7	4.9	--	--	--	Sep-92
<b>Total Equity Composite</b>	<b>883,893,893</b>	<b>57.0</b>	<b>57.1</b>	<b>1.9</b>	<b>10.1</b>	<b>20.4</b>	<b>19.0</b>	<b>5.5</b>	<b>12.2</b>	<b>4.9</b>	<b>7.4</b>	<b>Sep-92</b>
<i>MSCI/ACWI</i>				2.2	11.0	18.2	17.5	5.3	11.5	3.6	7.5	Sep-92
<b>Domestic Equity Composite</b>	<b>402,727,674</b>	<b>27.0</b>	<b>26.0</b>	<b>0.3</b>	<b>5.3</b>	<b>15.7</b>	<b>15.6</b>	<b>6.8</b>	<b>12.8</b>	<b>6.7</b>	<b>7.7</b>	<b>Sep-92</b>
<i>Russell 3000</i>				1.0	8.0	17.4	17.7	9.7	15.3	7.0	9.7	Sep-92
Mellon Stock Index Fund	292,284,977		18.9	1.4	8.6	17.2	17.5	10.1	--	--	11.5	Nov-13
S&P 500				1.4	8.7	17.2	17.5	10.1	15.4	6.9	11.6	Nov-13
<b>SMID Cap Composite</b>	<b>110,442,696</b>	<b>8.0</b>	<b>7.1</b>	<b>-2.6</b>	<b>-2.4</b>	<b>12.0</b>	<b>11.1</b>	<b>-0.8</b>	<b>--</b>	<b>--</b>	<b>6.0</b>	<b>Oct-12</b>
<i>Russell 2500</i>				-1.1	3.4	16.9	16.9	7.7	14.3	7.0	13.2	Oct-12
Energy Opportunities Fund	15,497,642		1.0	-6.6	-23.2	-13.9	-12.2	-17.5	-4.2	--	-2.9	Jul-07
<i>OlH/XLE Blended Energy Benchmark</i>				-5.2	-17.5	-6.2	-3.0	-14.5	-1.5	--	-2.2	Jul-07
<b>SMID Cap Composite ex Energy</b>	<b>94,945,055</b>	<b>--</b>	<b>6.1</b>	<b>-1.9</b>	<b>2.6</b>	<b>18.4</b>	<b>16.7</b>	<b>4.4</b>	<b>--</b>	<b>--</b>	<b>10.1</b>	<b>Oct-12</b>
<i>Russell 2500</i>				-1.1	3.4	16.9	16.9	7.7	14.3	7.0	13.2	Oct-12
Advisory Research SMID	32,306,778		2.1	-3.7	-1.5	15.0	13.0	0.5	8.9	--	12.1	Jun-09
<i>Russell 2500 Value</i>				-2.2	-0.7	15.3	16.0	6.8	14.0	6.0	15.4	Jun-09
Rothschild U.S. SMID Core	62,638,277		4.0	-1.0	5.0	20.1	18.7	--	--	--	6.5	Jul-15
<i>Russell 2500</i>				-1.1	3.4	16.9	16.9	7.7	14.3	7.0	6.4	Jul-15
<b>International Equity Composite</b>	<b>246,832,095</b>	<b>15.0</b>	<b>15.9</b>	<b>3.9</b>	<b>15.2</b>	<b>25.7</b>	<b>22.0</b>	<b>3.1</b>	<b>--</b>	<b>--</b>	<b>7.6</b>	<b>Oct-12</b>
<i>MSCI/ACWI ex USA</i>				3.2	13.7	20.1	18.2	1.3	8.4	1.2	6.1	Oct-12
LSV International Equity Value	122,510,042		7.9	3.3	12.8	26.7	22.5	2.8	10.3	1.0	6.2	Oct-04
<i>MSCI Custom Benchmark</i>				3.2	13.7	20.1	18.2	1.3	8.4	0.4	5.2	Oct-04
Fisher All Foreign Equity	124,322,053		8.0	4.5	17.6	24.8	21.6	3.4	9.3	3.1	7.2	Oct-04
<i>MSCI/ACWI ex USA</i>				3.2	13.7	20.1	18.2	1.3	8.4	1.2	6.2	Oct-04

Returns are net of manager fees.  
Results for periods longer than one year are annualized.  
Fiscal Year ends June 30th.  
SMID Cap and 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.

# Firefighters' Retirement System of Louisiana Investment Performance Flash Report

May 31, 2017

	Market Value (\$)	Policy %	% of Portfolio	1 Mo (%)	YTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Return (%)	Since
<b>Global Equity Composite</b>	<b>155,672,473</b>	<b>10.0</b>	<b>10.1</b>	<b>2.6</b>	<b>12.0</b>	<b>24.1</b>	<b>19.8</b>	<b>5.7</b>	--	--	<b>12.1</b>	<b>Oct-12</b>
MSCI ACWI				2.2	11.0	18.2	17.5	5.3	11.5	3.6	9.7	Oct-12
Thornburg Global Opportunities	63,349,886		4.1	3.2	15.2	29.0	20.9	8.8	18.1	8.0	11.8	Oct-04
MSCI ACWI				2.2	11.0	18.2	17.5	5.3	11.5	3.6	7.0	Oct-04
Boston Partners Global Equity	92,310,327		6.0	2.3	9.6	--	--	--	--	--	16.4	Nov-16
MSCI ACWI				2.2	11.0	18.2	17.5	5.3	11.5	3.6	14.2	Nov-16
<b>Emerging Markets Equity</b>	<b>78,661,651</b>	<b>5.0</b>	<b>5.1</b>	<b>2.4</b>	<b>18.2</b>	<b>24.5</b>	<b>28.9</b>	<b>1.3</b>	--	--	<b>2.3</b>	<b>Oct-13</b>
MSCI Emerging Markets				3.0	17.3	22.5	27.4	1.6	4.5	2.3	2.8	Oct-13
Acadian Emerging Markets Equity	54,553,555		3.5	2.2	18.7	26.4	32.2	2.2	--	--	2.7	Dec-13
MSCI Emerging Markets				3.0	17.3	22.5	27.4	1.6	4.5	2.3	1.9	Dec-13
OFI Emerging Markets	24,108,096		1.6	2.8	17.5	21.4	23.5	0.5	--	--	1.2	Jan-14
MSCI Emerging Markets				3.0	17.3	22.5	27.4	1.6	4.5	2.3	2.4	Jan-14
<b>Total Fixed Income Composite</b>	<b>339,002,450</b>	<b>23.0</b>	<b>21.9</b>	<b>0.9</b>	<b>4.0</b>	<b>2.1</b>	<b>4.3</b>	<b>1.0</b>	--	--	<b>0.9</b>	<b>Oct-12</b>
Total Fixed Income Custom Benchmark				0.9	3.5	0.7	3.1	0.8	1.1	3.9	0.8	Oct-12
<b>Core Fixed Income</b>	<b>277,442,565</b>	<b>19.0</b>	<b>17.9</b>	<b>0.8</b>	<b>2.7</b>	<b>1.3</b>	<b>2.7</b>	<b>2.3</b>	<b>2.4</b>	--	<b>2.7</b>	<b>Dec-10</b>
BBgBarc US Aggregate TR				0.8	2.4	-0.2	1.6	2.5	2.2	4.5	3.1	Dec-10
Orleans Core Fixed Income	67,305,882		4.3	0.8	2.5	0.7	2.3	2.4	2.5	4.8	5.8	Aug-92
BBgBarc US Aggregate TR				0.8	2.4	-0.2	1.6	2.5	2.2	4.5	5.5	Aug-92
Blackrock US Debt	149,022,686		9.6	0.8	2.4	-0.2	1.5	--	--	--	2.5	Nov-14
BBgBarc US Aggregate TR				0.8	2.4	-0.2	1.6	2.5	2.2	4.5	2.5	Nov-14
Standish	61,113,997		3.9	0.7	3.7	6.8	6.7	--	--	--	2.7	Oct-15
3-Month LIBOR + 4%				0.4	2.1	4.6	5.0	4.6	4.5	5.1	4.8	Oct-15
<b>Emerging Markets Debt</b>	<b>61,559,885</b>	<b>4.0</b>	<b>4.0</b>	<b>1.5</b>	<b>10.7</b>	<b>6.2</b>	<b>12.6</b>	<b>-3.8</b>	--	--	<b>-3.3</b>	<b>Nov-13</b>
JP Morgan GBI EM Global Diversified TR USD				2.0	9.9	5.9	12.2	-2.6	0.3	3.9	-2.0	Nov-13
Stone Harbor	61,559,885		4.0	1.5	10.7	6.2	12.6	-3.8	--	--	-3.3	Nov-13
JP Morgan GBI EM Global Diversified TR USD				2.0	9.9	5.9	12.2	-2.6	0.3	3.9	-2.0	Nov-13

Results for periods longer than one year are annualized.

Fiscal YTD ends June 30th.

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

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 going forward.

Global Equity Composite market value includes \$12,260.38 in a terminated manager account.

Mellon Global Equity was liquidated 10/28/2016. Liquidation settled on 11/01/2016.

Boston Partners Global Equity was funded 11/02/2016.



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May 31, 2017

# Firefighters' Retirement System of Louisiana

## Investment Performance Flash Report

May 31, 2017

	Market Value (\$)	Policy %	% of Portfolio	1 Mo (%)	YTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Return (%)	Since
<b>GAA Composite</b>	<b>149,247,998</b>	<b>10.0</b>	<b>9.6</b>	<b>1.2</b>	<b>6.0</b>	<b>8.3</b>	<b>9.8</b>	<b>2.5</b>	--	--	<b>3.1</b>	<b>Apr-14</b>
60% MSCI World (Net) / 40% CITI WGBI				2.0	8.0	8.6	9.5	3.3	7.4	4.0	3.9	Apr-14
Blackrock Global Allocation	78,038,280		5.0	1.5	7.4	12.0	11.9	3.7	--	--	4.1	Apr-14
60% MSCI World (Net) / 40% CITI WGBI				2.0	8.0	8.6	9.5	3.3	7.4	4.0	3.9	Apr-14
AQR Global Risk Premium – EL	42,340,538		2.7	0.8	4.0	2.5	6.3	0.8	--	--	1.7	May-14
60% MSCI World (Net) / 40% CITI WGBI				2.0	8.0	8.6	9.5	3.3	7.4	4.0	3.6	May-14
Putnam Risk Parity	28,869,180		1.9	0.8	5.0	7.8	9.6	--	--	--	1.4	Jul-14
60% MSCI World (Net) / 40% CITI WGBI				2.0	8.0	8.6	9.5	3.3	7.4	4.0	2.9	Jul-14
<b>Total Alternative Composite</b>	<b>163,366,638</b>	<b>10.0</b>	<b>10.5</b>	<b>0.0</b>	<b>0.0</b>	<b>5.5</b>	<b>7.3</b>	<b>0.3</b>	<b>-1.4</b>	<b>-0.1</b>	<b>1.5</b>	<b>Jun-05</b>
<b>Private Equity Composite</b>	<b>48,036,439</b>	<b>4.0</b>	<b>3.1</b>	<b>0.0</b>	<b>0.0</b>	<b>5.3</b>	<b>10.7</b>	<b>-4.2</b>	<b>-4.0</b>	<b>0.7</b>	<b>-4.1</b>	<b>Jul-05</b>
Cambridge Associates US All PE				0.0	0.0	8.6	12.9	8.8	11.8	9.3	12.1	Jul-05
Murphree Venture (\$2,000,000)	1,619,694		0.1	0.0	0.0	3.4	4.9	-0.7	2.8	0.6	0.0	Sep-05
Louisiana Fund I (\$1,000,000)	1,837,967		0.1	0.0	0.0	-7.0	-11.9	-4.3	-0.1	0.1	-6.7	Jul-05
DTC Private Equity II-Q, L.P. (\$7,500,000)	2,197,956		0.1	0.0	0.0	6.4	1.8	3.7	7.6	6.1	5.3	Feb-06
Greenspring Associates (\$9,230,000)	4,606,156		0.3	0.0	0.0	6.6	5.5	11.3	14.9	10.9	6.6	Feb-06
DCM Private Equity II (\$7,500,000)	2,509,514		0.2	0.0	0.0	2.0	-0.1	-6.0	-0.8	-0.6	-1.4	Feb-06
FECF II (\$20,000,000)	379,040		0.0	0.0	0.0	-44.3	-47.4	-25.8	-3.5	--	0.9	Mar-08
FECF III (\$20,000,000)	2,769,460		0.2	0.0	0.0	1.6	4.3	2.7	22.5	--	17.1	Jul-09
GA Crossover Fund (\$25,000,000)	5,418,630		0.3	0.0	0.0	15.0	33.5	18.5	28.0	--	16.9	Jan-08
CCMP Capital Investors III (\$15,000,000)	11,623,942		0.8	0.0	0.0	3.8	15.1	--	--	--	11.5	Oct-14
Landmark Equity Partners XV (\$25,000,000)	7,871,648		0.5	0.0	0.0	6.0	7.1	--	--	--	13.8	Dec-14
Harbourvest IV (\$20,000,000)	7,202,432		0.5	0.0	0.0	--	--	--	--	--	-1.4	Nov-16

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

Fiscal YTD ends June 30th.

Harbourvest IV was funded 10/01/2016.

Private Equity valuations are as of 12/31/2016 adjusted for cash flows.

# Firefighters' Retirement System of Louisiana

## Investment Performance Flash Report

May 31, 2017

	Market Value (\$)	Policy %	% of Portfolio	1 Mo (%)	YTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Return (%)	Since
<b>Real Estate Composite</b>	<b>115,330,199</b>	<b>6.0</b>	<b>7.4</b>	<b>0.0</b>	<b>0.0</b>	<b>5.5</b>	<b>5.9</b>	<b>5.2</b>	<b>5.0</b>	<b>--</b>	<b>5.0</b>	<b>Dec-09</b>
<i>NCREIF Property Index</i>				0.0	1.6	5.1	7.3	10.6	10.7	6.7	10.8	Dec-09
Americus Fund II (\$13,168,000)	280,856		0.0	0.0	0.0	6.5	-23.6	-20.6	-10.2	0.3	0.9	Dec-05
Sentinel Real Estate Fund (\$30,000,000)	34,717,737		2.2	0.0	0.0	4.0	6.3	9.7	14.0	5.8	6.2	Feb-06
JP Morgan India (\$8,990,000)	2,869,371		0.2	0.0	0.0	-2.3	-4.8	-2.2	-2.8	-12.5	-12.5	Apr-07
Timbervest Crossover Fund (\$16,000,000)	9,361,447		0.6	0.0	0.0	-4.2	-4.7	-3.6	-1.8	--	-0.7	Apr-08
AEW Partners VI LP (\$20,000,000)	10,077,161		0.7	0.0	0.0	15.5	17.1	19.0	17.9	--	14.0	Mar-10
AEW Core Property (\$12,000,000)	13,914,779		0.9	0.0	0.0	2.1	4.3	--	--	--	7.4	May-15
FRS-GA (Georgia)	4,762,850		0.3	0.0	0.0	0.0	0.2	-4.4	-2.7	--	-7.6	Jun-08
FRS-LB I (NLTP AZ)	4,463,550		0.3	0.0	0.0	0.0	-0.4	1.3	-26.8	-17.8	-17.8	Jun-07
FRS-LB III (ST George UT)	9,279,979		0.6	0.0	0.0	35.9	18.3	5.8	2.3	--	3.3	Jun-08
ASB Real Estate Fund	12,481,256		0.8	0.0	0.0	2.3	3.6	--	--	--	3.4	Jan-16
Heitman America Real Estate Trust	13,121,213		0.8	0.0	0.0	5.2	6.5	--	--	--	7.8	Nov-15
<b>Total Cash (\$9 MM)</b>	<b>13,026,745</b>	<b>--</b>	<b>0.8</b>	<b>0.1</b>	<b>0.3</b>	<b>0.5</b>	<b>0.5</b>	<b>0.2</b>	<b>0.2</b>	<b>0.7</b>	<b>2.9</b>	<b>Jun-92</b>
<i>91 Day T-Bills</i>				0.1	0.3	0.5	0.5	0.2	0.1	0.5	2.5	Jun-92

Results for periods longer than one year are annualized.

Fiscal YTD ends June 30th.

Real Estate valuations are as of 12/31/2016 adjusted for cash flows.

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

# Firefighters' Retirement System of Louisiana

## Current Monthly Breakdown of Change in Value

May 31, 2017

### Total Cash Flow Summary

Month Ending May 31, 2017

	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Fees	Net Investment Change	Ending Market Value
Acadian Emerging Markets Equity	\$53,388,620	\$0	\$0	\$0	-\$76,608	\$1,164,935	\$54,553,555
Advisory Research SMID	\$33,539,714	\$0	\$0	\$0	\$0	-\$1,232,937	\$32,306,778
AEW Core Property (\$12,000,000)	\$13,914,779	\$0	\$0	\$0	\$0	\$0	\$13,914,779
AEW Partners VI LP (\$20,000,000)	\$11,958,385	\$0	-\$1,881,224	-\$1,881,224	\$0	\$0	\$10,077,161
Americus Fund II (\$13,168,000)	\$280,856	\$0	\$0	\$0	\$0	\$0	\$280,856
AQR Global Risk Premium – EL	\$42,023,210	\$0	\$0	\$0	-\$33,520	\$317,327	\$42,340,538
ASB Real Estate Fund	\$12,481,256	\$0	\$0	\$0	\$0	\$0	\$12,481,256
Blackrock Global Allocation	\$76,729,081	\$122,275	\$0	\$122,275	-\$122,275	\$1,186,924	\$78,038,280
Blackrock US Debt	\$138,041,093	\$9,814,003	\$0	\$9,814,003	-\$14,003	\$1,167,590	\$149,022,686
Boston Partners Global Equity	\$90,332,732	\$0	-\$121,639	-\$121,639	-\$50,001	\$2,099,233	\$92,310,327
Cash/Clearing Account	\$32,586,762	\$3,732,796	-\$27,706,950	-\$23,974,154	\$0	\$8,762	\$8,621,370
CCMP Capital Investors III (\$15,000,000)	\$11,623,942	\$0	\$0	\$0	\$0	\$0	\$11,623,942
DCM Private Equity II (\$7,500,000)	\$2,509,514	\$0	\$0	\$0	\$0	\$0	\$2,509,514
DTC Private Equity II-Q, L.P. (\$7,500,000)	\$2,197,956	\$0	\$0	\$0	\$0	\$0	\$2,197,956
Energy Opportunities Fund	\$16,597,568	\$0	\$0	\$0	-\$55,429	-\$1,099,926	\$15,497,642
FECP II (\$20,000,000)	\$403,790	\$0	-\$24,750	-\$24,750	\$0	\$0	\$379,040
FECP III (\$20,000,000)	\$2,872,092	-\$102,632	\$0	-\$102,632	\$0	\$0	\$2,769,460
Fisher All Foreign Equity	\$118,927,359	\$0	\$0	\$0	\$0	\$5,394,695	\$124,322,053
FRS-GA (Georgia)	\$4,762,850	\$0	\$0	\$0	\$0	\$0	\$4,762,850
FRS-LB I (NLTP AZ)	\$4,463,550	\$0	\$0	\$0	\$0	\$0	\$4,463,550
FRS-LB III (ST George UT)	\$9,279,979	\$0	\$0	\$0	\$0	\$0	\$9,279,979
GA Crossover Fund (\$25,000,000)	\$5,418,630	\$0	\$0	\$0	\$0	\$0	\$5,418,630
Greenspring Associates (\$9,230,000)	\$4,606,156	\$0	\$0	\$0	\$0	\$0	\$4,606,156
Harbourvest IV (\$20,000,000)	\$7,202,432	\$0	\$0	\$0	\$0	\$0	\$7,202,432
Heitman America Real Estate Trust	\$13,121,213	\$0	\$0	\$0	\$0	\$0	\$13,121,213



# Firefighters' Retirement System of Louisiana

## Current Monthly Breakdown of Change in Value

May 31, 2017

	Month Ending May 31, 2017						
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Fees	Net Investment Change	Ending Market Value
JP Morgan India (\$8,990,000)	\$4,370,721	\$0	-\$1,501,350	-\$1,501,350	\$0	\$0	\$2,869,371
Landmark Equity Partners XV (\$25,000,000)	\$8,094,488	\$0	-\$222,840	-\$222,840	\$0	\$0	\$7,871,648
Liquidating - BlackRock Global Focused	\$12,076	\$0	\$0	\$0	\$0	\$185	\$12,260
Louisiana Asset Management Pool	\$4,402,057	\$0	\$0	\$0	\$0	\$3,318	\$4,405,375
Louisiana Fund I (\$1,000,000)	\$1,837,967	\$0	\$0	\$0	\$0	\$0	\$1,837,967
LSV International Equity Value	\$118,603,382	\$0	\$0	\$0	\$0	\$3,906,659	\$122,510,042
Mellon Stock Index Fund	\$288,228,938	\$19,001	\$0	\$19,001	-\$19,001	\$4,037,038	\$292,284,977
Murphree Venture (\$2,000,000)	\$1,619,694	\$0	\$0	\$0	\$0	\$0	\$1,619,694
OFI Emerging Markets	\$23,440,211	\$0	\$0	\$0	-\$17,277	\$667,885	\$24,108,096
Orleans Core Fixed Income	\$66,741,933	\$0	\$0	\$0	\$0	\$563,949	\$67,305,882
Putnam Risk Parity	\$28,631,682	\$0	\$0	\$0	-\$17,322	\$237,498	\$28,869,180
Rothschild U.S. SMID Core	\$63,286,964	\$0	\$0	\$0	\$0	-\$648,687	\$62,638,277
Sentinel Real Estate Fund (\$30,000,000)	\$34,717,737	\$0	\$0	\$0	\$0	\$0	\$34,717,737
Standish	\$52,208,097	\$8,500,000	\$0	\$8,500,000	\$0	\$405,899	\$61,113,997
Stone Harbor	\$53,646,325	\$7,000,000	\$0	\$7,000,000	-\$43,605	\$913,560	\$61,559,885
Thornburg Global Opportunities	\$61,391,806	\$0	\$0	\$0	-\$79,498	\$1,958,080	\$63,349,886
Timbervest Crossover Fund (\$16,000,000)	\$9,361,447	\$0	\$0	\$0	\$0	\$0	\$9,361,447
<b>Total</b>	<b>\$1,529,859,044</b>	<b>\$29,085,444</b>	<b>-\$31,458,753</b>	<b>-\$2,373,309</b>	<b>-\$528,540</b>	<b>\$21,051,990</b>	<b>\$1,548,537,724</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 Fiscal YTD Breakdown of Change in Value**

May 31, 2017

**Total Cash Flow Summary**

Fiscal YTD Ending May 31, 2017

	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Fees	Net Investment Change	Ending Market Value
Acadian Emerging Markets Equity	\$34,944,517	\$20,000,000	-\$10,000,000	\$10,000,000	-\$281,147	\$9,609,038	\$54,553,555
Advisory Research SMID	\$32,306,260	\$0	-\$5,000,000	-\$5,000,000	-\$236,434	\$5,000,518	\$32,306,778
AEW Core Property (\$12,000,000)	\$13,634,845	\$0	\$0	\$0	\$0	\$279,934	\$13,914,779
AEW Partners VI LP (\$20,000,000)	\$12,151,343	\$0	-\$3,940,536	-\$3,940,536	\$0	\$1,866,354	\$10,077,161
Americus Fund II (\$13,168,000)	\$582,381	\$0	-\$336,600	-\$336,600	\$0	\$35,075	\$280,856
AQR Global Risk Premium – EL	\$41,311,508	\$0	\$0	\$0	-\$358,383	\$1,029,029	\$42,340,538
ASB Real Estate Fund	\$12,168,888	\$68,413	-\$34,328	\$34,085	\$0	\$278,283	\$12,481,256
Blackrock Global Allocation	\$69,213,303	\$471,673	\$0	\$471,673	-\$471,673	\$8,353,304	\$78,038,280
Blackrock US Debt	\$147,959,644	\$9,857,353	-\$8,500,000	\$1,357,353	-\$57,353	-\$294,310	\$149,022,686
Boston Partners Global Equity	--	\$80,939,406	-\$195,247	\$80,744,159	-\$263,565	\$11,566,168	\$92,310,327
Cash/Clearing Account	\$4,966,116	\$144,183,847	-\$140,564,148	\$3,619,698	\$0	\$35,555	\$8,621,370
CCMP Capital Investors III (\$15,000,000)	\$8,812,564	\$2,448,518	\$0	\$2,448,518	\$0	\$362,860	\$11,623,942
DCM Private Equity II (\$7,500,000)	\$2,933,335	-\$183,532	-\$299,244	-\$482,777	\$0	\$58,955	\$2,509,514
DTC Private Equity II-Q, L.P. (\$7,500,000)	\$2,704,493	\$0	-\$675,000	-\$675,000	\$0	\$168,463	\$2,197,956
Energy Opportunities Fund	\$22,851,429	\$0	-\$5,000,000	-\$5,000,000	-\$236,105	-\$2,353,787	\$15,497,642
FECP II (\$20,000,000)	\$1,117,338	\$0	-\$326,273	-\$326,273	\$0	-\$412,025	\$379,040
FECP III (\$20,000,000)	\$3,122,710	-\$102,632	-\$298,461	-\$401,093	\$0	\$47,843	\$2,769,460
Fisher All Foreign Equity	\$99,751,388	\$0	-\$166,173	-\$166,173	-\$430,566	\$24,736,838	\$124,322,053
FRS-GA (Georgia)	\$4,762,850	\$0	\$0	\$0	\$0	\$0	\$4,762,850
FRS-LB I (NLTP AZ)	\$4,463,550	\$0	\$0	\$0	\$0	\$0	\$4,463,550
FRS-LB III (ST George UT)	\$4,594,816	\$2,232,883	\$0	\$2,232,883	\$0	\$2,452,280	\$9,279,979
GA Crossover Fund (\$25,000,000)	\$11,666,189	\$0	-\$7,910,991	-\$7,910,991	\$0	\$1,663,432	\$5,418,630
Greenspring Associates (\$9,230,000)	\$5,398,918	\$0	-\$1,122,290	-\$1,122,290	\$0	\$329,528	\$4,606,156
Harbourvest IV (\$20,000,000)	--	\$7,250,000	\$0	\$7,250,000	\$0	-\$47,568	\$7,202,432
Heitman America Real Estate Trust	\$12,474,049	\$0	\$0	\$0	\$0	\$647,164	\$13,121,213

# Firefighters' Retirement System of Louisiana

## Current Fiscal YTD Breakdown of Change in Value

May 31, 2017

	Fiscal YTD Ending May 31, 2017						
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Fees	Net Investment Change	Ending Market Value
JP Morgan India (\$8,990,000)	\$4,471,910	\$0	-\$1,501,350	-\$1,501,350	\$0	-\$101,189	\$2,869,371
Landmark Equity Partners XV (\$25,000,000)	\$7,246,880	\$2,025,505	-\$1,817,939	\$207,566	\$0	\$417,202	\$7,871,648
Liquidating - BlackRock Global Focused	\$38,504	\$926	-\$30,796	-\$29,869	\$0	\$3,626	\$12,260
Louisiana Asset Management Pool	\$4,379,144	\$0	\$0	\$0	\$0	\$26,232	\$4,405,375
Louisiana Fund I (\$1,000,000)	\$1,976,804	\$0	\$0	\$0	\$0	-\$138,837	\$1,837,967
LSV International Equity Value	\$96,703,747	\$0	\$0	\$0	-\$425,922	\$25,806,294	\$122,510,042
Mellon Stock Index Fund	\$258,331,649	\$56,434	-\$9,500,001	-\$9,443,567	-\$75,457	\$43,396,895	\$292,284,977
Murphree Venture (\$2,000,000)	\$1,566,381	\$0	\$0	\$0	\$0	\$53,313	\$1,619,694
OFI Emerging Markets	\$19,860,080	\$0	\$0	\$0	-\$171,866	\$4,248,016	\$24,108,096
Orleans Core Fixed Income	\$66,864,691	\$0	\$0	\$0	-\$94,358	\$441,191	\$67,305,882
Putnam Risk Parity	\$26,791,354	\$0	\$0	\$0	-\$150,489	\$2,077,826	\$28,869,180
Rothschild U.S. SMID Core	\$52,150,941	\$0	\$0	\$0	-\$280,269	\$10,487,335	\$62,638,277
Sentinel Real Estate Fund (\$30,000,000)	\$35,289,933	\$0	-\$1,957,669	-\$1,957,669	\$0	\$1,385,473	\$34,717,737
Standish	\$49,048,765	\$8,688,604	\$0	\$8,688,604	-\$188,604	\$3,376,628	\$61,113,997
Stone Harbor	\$51,284,146	\$7,000,000	\$0	\$7,000,000	-\$407,616	\$3,275,739	\$61,559,885
Thornburg Global Opportunities	\$61,655,743	\$0	-\$14,939,406	-\$14,939,406	-\$343,209	\$16,633,548	\$63,349,886
Timbervest Crossover Fund (\$16,000,000)	\$10,574,135	\$0	-\$784,000	-\$784,000	\$0	-\$428,688	\$9,361,447
Z Terminated Mellon Global Equity	\$63,767,414	\$5,854	-\$66,186,500	-\$66,180,646	-\$5,854	\$2,413,232	--
<b>Total</b>	<b>\$1,365,894,658</b>	<b>\$284,943,251</b>	<b>-\$281,086,951</b>	<b>\$3,856,300</b>	<b>-\$4,478,870</b>	<b>\$178,786,767</b>	<b>\$1,548,537,724</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 Breakdown of Change in Value

### Total Cash Flow Summary

		Ending May 31, 2017				
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Net Investment Change	Ending Market Value
Z Terminated - Commonwealth	--	\$30,000,000	-\$9,671,012	\$20,328,988	-\$20,328,988	--
Acadian Emerging Markets Equity	--	\$60,000,000	-\$10,000,000	\$50,000,000	\$4,553,555	\$54,553,555
Advisory Research SMID	--	\$34,937,469	-\$47,800,000	-\$12,862,531	\$45,169,309	\$32,306,778
AEW Core Property (\$12,000,000)	--	\$12,000,000	\$0	\$12,000,000	\$1,914,779	\$13,914,779
AEW Partners VI LP (\$20,000,000)	--	\$18,420,450	-\$20,480,298	-\$2,059,848	\$12,137,009	\$10,077,161
Americus Fund II (\$13,168,000)	--	\$12,044,774	-\$15,990,930	-\$3,946,156	\$4,227,012	\$280,856
AQR Global Risk Premium – EL	--	\$40,100,000	\$0	\$40,100,000	\$2,240,538	\$42,340,538
ASB Real Estate Fund	--	\$12,073,746	-\$34,328	\$12,039,418	\$441,838	\$12,481,256
Blackrock Global Allocation	--	\$67,785,014	\$0	\$67,785,014	\$10,253,266	\$78,038,280
Blackrock US Debt	--	\$198,381,330	-\$58,500,000	\$139,881,330	\$9,141,356	\$149,022,686
Boston Partners Global Equity	--	\$80,939,406	-\$195,247	\$80,744,159	\$11,566,168	\$92,310,327
Cash/Clearing Account	--	\$2,019,923,759	-\$2,014,452,888	\$5,470,871	\$3,150,500	\$8,621,370
CCMP Capital Investors III (\$15,000,000)	--	\$9,798,330	-\$129,294	\$9,669,036	\$1,954,906	\$11,623,942
DCM Private Equity II (\$7,500,000)	--	\$8,156,786	-\$5,989,216	\$2,167,570	\$341,944	\$2,509,514
DTC Private Equity II-Q, L.P. (\$7,500,000)	--	\$5,476,825	-\$7,012,500	-\$1,535,675	\$3,733,631	\$2,197,956
Energy Opportunities Fund	--	\$50,000,000	-\$33,002,876	\$16,997,124	-\$1,499,482	\$15,497,642
FECF II (\$20,000,000)	--	\$19,188,998	-\$21,826,673	-\$2,637,675	\$3,016,715	\$379,040
FECF III (\$20,000,000)	--	\$19,103,727	-\$28,554,534	-\$9,450,807	\$12,220,267	\$2,769,460
Fisher All Foreign Equity	--	\$117,000,000	-\$55,331,790	\$61,668,210	\$62,653,844	\$124,322,053
FRS-GA (Georgia)	--	\$9,416,075	\$0	\$9,416,075	-\$4,653,225	\$4,762,850
FRS-LB I (NLTP AZ)	--	\$24,900,208	\$0	\$24,900,208	-\$20,436,658	\$4,463,550
FRS-LB III (ST George UT)	--	\$6,878,923	\$0	\$6,878,923	\$2,401,056	\$9,279,979
GA Crossover Fund (\$25,000,000)	--	\$25,000,000	-\$45,664,212	-\$20,664,212	\$26,082,842	\$5,418,630
Greenspring Associates (\$9,230,000)	--	\$8,491,600	-\$11,436,727	-\$2,945,127	\$7,551,283	\$4,606,156
Harbourvest IV (\$20,000,000)	--	\$7,250,000	\$0	\$7,250,000	-\$47,568	\$7,202,432

Cash flow statistics exclude management fees and expenses.

## Firefighters' Retirement System of Louisiana

### Since Inception Breakdown of Change in Value

	Beginning Market Value	Ending May 31, 2017			Net Investment Change	Ending Market Value
		Contributions	Withdrawals	Net Cash Flow		
Heitman America Real Estate Trust	--	\$12,000,000	\$0	\$12,000,000	\$1,121,213	\$13,121,213
JP Morgan India (\$8,990,000)	--	\$8,307,355	-\$3,757,352	\$4,550,003	-\$1,680,632	\$2,869,371
Landmark Equity Partners XV (\$25,000,000)	--	\$11,583,834	-\$5,550,752	\$6,033,082	\$1,838,566	\$7,871,648
Liquidating - BlackRock Global Focused	--	\$46,832,890	-\$59,568,544	-\$12,735,654	\$12,747,915	\$12,260
Louisiana Asset Management Pool	--	\$943,990,965	-\$944,296,689	-\$305,724	\$4,711,099	\$4,405,375
Louisiana Fund I (\$1,000,000)	--	\$1,010,000	\$0	\$1,010,000	\$827,967	\$1,837,967
LSV International Equity Value	--	\$103,500,000	-\$17,281,912	\$86,218,088	\$36,291,953	\$122,510,042
Mellon Stock Index Fund	--	\$275,330,679	-\$89,500,001	\$185,830,678	\$106,454,299	\$292,284,977
Murphree Venture (\$2,000,000)	--	\$2,058,578	-\$848,459	\$1,210,119	\$409,575	\$1,619,694
OFI Emerging Markets	--	\$31,500,000	-\$8,500,000	\$23,000,000	\$1,108,096	\$24,108,096
Orleans Core Fixed Income	\$0	\$126,099,081	-\$91,022,995	\$35,076,086	\$32,229,796	\$67,305,882
Putnam Risk Parity	--	\$27,400,000	\$0	\$27,400,000	\$1,469,180	\$28,869,180
Rothschild U.S. SMID Core	--	\$55,500,000	\$0	\$55,500,000	\$7,138,277	\$62,638,277
Sentinel Real Estate Fund (\$30,000,000)	--	\$30,000,000	-\$14,799,086	\$15,200,914	\$19,516,824	\$34,717,737
Standish	--	\$58,809,506	\$0	\$58,809,506	\$2,304,491	\$61,113,997
Stone Harbor	--	\$70,000,000	\$0	\$70,000,000	-\$8,440,115	\$61,559,885
Thornburg Global Opportunities	--	\$47,500,000	-\$70,301,715	-\$22,801,715	\$86,151,601	\$63,349,886
Timbervest Crossover Fund (\$16,000,000)	--	\$13,600,000	-\$6,352,000	\$7,248,000	\$2,113,447	\$9,361,447

Cash flow statistics exclude management fees and expenses.

## Information Disclaimer and Reporting Methodology

### 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.