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Firefighters' Retirement System of Louisiana

Investment Market Update
(As of October 31, 2016)

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Index Performance Summary as of 10/31/2016

	2009	2010	2011	2012	2013	2014	2015	Q1	Q2	Q3	Oct	YTD
MSCI EM	78.5%	18.9%	-18.4%	18.2%	-2.6%	-2.2%	-14.9%	5.7%	0.7%	9.0%	0.2%	16.3%
JPM GBI-EM Global Div	22.0%	15.7%	-1.8%	16.8%	-9.0%	-5.7%	-14.9%	11.0%	2.7%	2.7%	-0.8%	16.1%
Barclays US Corporate HY	58.2%	15.1%	5.0%	15.8%	7.4%	2.5%	-4.5%	3.4%	5.5%	5.6%	0.4%	15.6%
Barclays US STRIPS 20+ Yr	-36.0%	10.9%	58.5%	3.0%	-21.0%	46.4%	-3.7%	11.4%	9.6%	-0.2%	-6.2%	14.3%
Barclays US Long Credit	16.8%	10.7%	17.1%	12.7%	-6.6%	16.4%	-4.6%	6.8%	6.7%	2.3%	-2.1%	14.1%
JPM EMBI Global Diversified	29.8%	12.2%	7.3%	17.4%	-5.3%	7.4%	1.2%	5.0%	5.0%	4.0%	-1.2%	13.3%
Barclays US Govt/Credit Long	1.9%	10.2%	22.5%	8.8%	-8.8%	19.3%	-3.3%	7.3%	6.5%	1.2%	-2.8%	12.5%
Alerian MLP	76.4%	35.9%	13.9%	4.8%	27.6%	4.8%	-32.6%	-4.2%	19.7%	1.1%	-4.5%	10.8%
Bloomberg Commodity	18.9%	16.8%	-13.3%	-1.1%	-9.5%	-17.0%	-24.7%	0.4%	12.8%	-3.9%	-0.5%	8.3%
Credit Suisse Leveraged Loan	44.9%	10.0%	1.8%	9.4%	6.2%	2.1%	-0.4%	1.3%	2.9%	3.1%	0.8%	8.3%
Citi WGBI	2.6%	5.2%	6.4%	1.6%	-4.0%	-0.5%	-3.6%	7.1%	3.4%	0.3%	-3.4%	7.3%
Russell 2500	34.4%	26.7%	-2.5%	17.9%	36.8%	7.1%	-2.9%	0.4%	3.6%	6.6%	-4.1%	6.3%
Russell 2000	27.2%	26.9%	-4.2%	16.3%	38.8%	4.9%	-4.4%	-1.5%	3.8%	9.0%	-4.8%	6.2%
S&P 500	26.5%	15.1%	2.1%	16.0%	32.4%	13.7%	1.4%	1.3%	2.5%	3.9%	-1.8%	5.9%
Russell 1000	28.4%	16.1%	1.5%	16.4%	33.1%	13.2%	0.9%	1.2%	2.5%	4.0%	-2.0%	5.8%
FTSE NAREIT Equity REITs	28.0%	28.0%	8.3%	18.1%	2.5%	30.1%	3.2%	6.0%	7.0%	-1.4%	-5.7%	5.4%
Barclays US Agg Bond	5.9%	6.5%	7.8%	4.2%	-2.0%	6.0%	0.5%	3.0%	2.2%	0.5%	-0.8%	5.0%
MSCI ACWI	34.6%	12.7%	-7.3%	16.1%	22.8%	4.2%	-2.4%	0.2%	1.0%	5.3%	-1.7%	4.8%
Barclays US Agg Interm	6.5%	6.1%	6.0%	3.6%	-1.0%	4.1%	1.2%	2.3%	1.4%	0.3%	-0.4%	3.7%
Barclays Municipal	12.9%	2.4%	10.7%	6.8%	-2.6%	9.1%	3.3%	1.7%	2.6%	-0.3%	-1.0%	2.9%
BC US Govt/Credit 1-3 Yr	3.8%	2.8%	1.6%	1.3%	0.6%	0.8%	0.7%	1.0%	0.7%	0.0%	0.0%	1.6%
Credit Suisse Hedge Fund	18.6%	10.9%	-2.5%	7.7%	9.7%	4.1%	-0.7%	-2.2%	0.6%	1.7%	-	0.1%
MSCI EAFE	31.8%	7.8%	-12.1%	17.3%	22.8%	-4.9%	-0.8%	-3.0%	-1.5%	6.4%	-2.0%	-0.4%

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



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Market Environment

US equities sold off in October ahead of the presidential elections on November 8. The S&P 500 lost 1.8% on the month and the Russell 2000 fell 4.8% amid lackluster earnings reports. Emerging market equities eked out modest gains generated partially by continued capital inflows. International developed-market equities were in the black but currency depreciation offset gains for unhedged investors as the pound, euro, and yen fell against the dollar; the unhedged MSCI EAFE Index lost 2.0%.

Despite the seemingly risk-averse environment, most fixed-income indices fell in October. The 10-year Treasury yield rose 21 basis points amid signs of inflation and indications from the Federal Reserve that it would allow the economy to “run hot.” As a result, the Barclays US Treasury Index fell 1.1% with long issues fairing worse as the Barclays Long Treasury Index declined 4.1%. The losses were somewhat offset by credit spread compression in the Barclays Aggregate Index, which fell just 0.8%, while the Barclays High Yield Index rose 0.4% in October. Steepening yield curves were felt globally, especially in Europe, where investors appear skeptical about the European Central Bank’s ability to maintain or expand its current pace of debt purchases. To this end, the Citi WGBI Index fell 2.4% in October. In real estate, the NAREIT Composite Index tumbled 4.8% around expectation of an interest rate hike in December.

Market Outlook

As investors brace for potential volatility stemming from the US election, we remind them of the benefits of diversification, discipline and rebalancing. While political events can trigger uncertainty in the short term, investment returns are ultimately shaped by market fundamentals. In the US, we see a broadly supportive backdrop for risky assets despite higher valuations, as the economy experiences a continued expansion and the yield curve remains steep. Additionally, we maintain our overweight recommendation for international developed equities with a partial currency hedge. In fixed income, we remain negative on international developed bond exposure as expected returns hover around historical lows despite the recent uptick in yields.

Firefighters' Retirement System of Louisiana Investment Performance Flash Report

October 31, 2016

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
Total Plan Composite	1,394,350,496	100.0	100.0	-1.1	4.9	2.7	2.6	1.7	3.9	2.5	5.5	Sep-92
<i>Policy Index</i>				-1.5	6.5	2.3	4.7	4.4	--	--	--	Sep-92
<i>Allocation Index</i>				-1.4	6.2	2.2	4.4	3.9	--	--	--	Sep-92
Total Equity Composite	776,024,279	58.0	55.7	-1.5	5.1	4.5	2.4	3.4	8.3	4.8	6.9	Sep-92
<i>MSCI/ACWI</i>				-1.7	4.8	3.5	2.0	3.2	8.0	3.8	7.1	Sep-92
Domestic Equity Composite	373,017,068	27.0	26.8	-2.4	5.8	2.0	3.3	5.6	10.1	6.4	7.4	Sep-92
<i>Russell 3000</i>				-2.2	5.8	2.1	4.2	8.1	13.4	6.8	9.3	Sep-92
<i>Mellon Stock Index Fund</i>	263,399,610		18.9	-1.8	5.8	2.0	4.5	8.8	--	--	8.8	Nov-13
<i>S&P 500</i>				-1.8	5.9	2.0	4.5	8.8	13.6	6.7	8.8	Nov-13
SMID Cap Composite	109,617,457	8.0	7.9	-3.8	5.8	2.2	0.4	-1.9	--	--	4.6	Oct-12
<i>Russell 2500</i>				-4.1	6.3	2.2	4.0	5.2	12.2	7.0	11.5	Oct-12
<i>Energy Opportunities Fund</i>	22,258,157		1.6	-6.4	9.8	-2.6	-1.6	-12.9	-4.7	--	-1.8	Jul-07
<i>OlH/XLE Blended Energy Benchmark</i>				-3.5	11.1	-1.4	-1.0	-10.9	-3.2	--	-1.8	Jul-07
SMID Cap Composite ex Energy	87,359,301	--	6.3	-3.1	4.8	3.4	0.9	2.2	--	--	8.0	Oct-12
<i>Russell 2500</i>				-4.1	6.3	2.2	4.0	5.2	12.2	7.0	11.5	Oct-12
<i>Advisory Research SMID</i>	33,934,071		2.4	-1.9	5.6	5.0	-0.2	0.1	7.9	--	11.7	Jun-09
<i>Russell 2500 Value</i>				-3.0	11.1	3.0	7.8	5.5	12.6	6.1	14.9	Jun-09
<i>Rothschild U.S. SMID Core</i>	53,425,230		3.8	-3.8	4.3	2.4	1.6	--	--	--	-2.8	Jul-15
<i>Russell 2500</i>				-4.1	6.3	2.2	4.0	5.2	12.2	7.0	-1.1	Jul-15
International Equity Composite	210,307,260	16.0	15.1	-1.3	2.9	7.1	-0.7	-0.5	--	--	4.5	Oct-12
<i>MSCI/ACWI ex USA</i>				-1.4	4.3	5.4	0.2	-1.5	3.6	1.6	3.6	Oct-12
<i>LSV International Equity Value</i>	105,227,637		7.5	-0.1	5.6	8.8	1.3	-0.6	5.0	1.3	5.2	Oct-04
<i>MSCI Custom Benchmark</i>				-1.4	4.3	5.4	0.2	-1.5	3.6	0.7	4.4	Oct-04
<i>Fisher All Foreign Equity</i>	105,079,622		7.5	-2.5	0.2	5.3	-2.7	-0.4	4.2	3.2	6.1	Oct-04
<i>MSCI/ACWI ex USA</i>				-1.4	4.3	5.4	0.2	-1.5	3.6	1.6	5.3	Oct-04

Returns are net of manager fees.
Results for periods longer than one year are annualized. Results are preliminary and subject to change.
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

October 31, 2016

	Market Value (\$)	Policy %	% of Portfolio	1 Mo (%)	YTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Return (%)	Since
Global Equity Composite	132,454,864	10.0	9.5	-0.2	1.0	5.6	-0.4	3.8	--	--	9.5	Oct-12
MSCI ACWI				-1.7	4.8	3.5	2.0	3.2	8.0	3.8	7.6	Oct-12
Thornburg Global Opportunities	66,259,398		4.8	1.1	-0.9	7.5	-0.6	7.9	12.9	8.1	10.7	Oct-04
MSCI ACWI				-1.7	4.8	3.5	2.0	3.2	8.0	3.8	6.2	Oct-04
Mellon Global Equity	66,186,500		4.7	-1.5	--	3.8	--	--	--	--	3.4	May-16
MSCI ACWI				-1.7	4.8	3.5	2.0	3.2	8.0	3.8	3.0	May-16
Emerging Markets Equity	60,245,088	5.0	4.3	0.5	15.8	9.9	9.3	-2.2	--	--	-1.3	Oct-13
MSCI Emerging Markets				0.2	16.3	9.3	9.3	-2.0	0.5	3.5	-0.5	Oct-13
Acadian Emerging Markets Equity	38,587,081		2.8	0.7	17.3	10.4	9.7	--	--	--	-1.4	Dec-13
MSCI Emerging Markets				0.2	16.3	9.3	9.3	-2.0	0.5	3.5	-1.6	Dec-13
OFI Emerging Markets	21,658,007		1.6	0.2	13.3	9.1	8.7	--	--	--	-2.3	Jan-14
MSCI Emerging Markets				0.2	16.3	9.3	9.3	-2.0	0.5	3.5	-1.1	Jan-14
Total Fixed Income Composite	311,725,038	24.0	22.4	-0.6	6.2	0.5	4.5	0.5	--	--	0.6	Oct-12
Total Fixed Income Custom Benchmark				-0.8	6.6	0.0	5.0	1.4	1.6	4.0	0.8	Oct-12
Core Fixed Income	259,632,778	20.0	18.6	-0.6	4.5	0.3	3.5	2.1	3.0	--	2.8	Dec-10
Barclays Aggregate				-0.8	5.0	-0.3	4.4	3.5	2.9	4.6	3.4	Dec-10
Orleans Core Fixed Income	66,949,702		4.8	-0.7	6.3	0.1	5.5	3.4	3.0	5.0	5.9	Aug-92
Barclays Aggregate				-0.8	5.0	-0.3	4.4	3.5	2.9	4.6	5.7	Aug-92
Blackrock US Debt	142,553,927		10.2	-0.8	5.0	-0.3	4.4	--	--	--	3.2	Nov-14
Barclays Aggregate				-0.8	5.0	-0.3	4.4	3.5	2.9	4.6	3.2	Nov-14
Standish	50,129,150		3.6	0.0	1.0	2.1	-1.8	--	--	--	-0.1	Oct-15
3-Month LIBOR + 4%				0.4	3.9	1.6	4.7	4.4	4.4	5.3	4.7	Oct-15
Emerging Markets Debt	52,092,260	4.0	3.7	-0.8	15.4	1.6	10.0	-5.4	--	--	-5.4	Nov-13
JP Morgan GBI EM Global Diversified TR USD				-0.8	9.7	1.2	4.9	-5.5	-2.3	4.3	-5.5	Nov-13
Stone Harbor	52,092,260		3.7	-0.8	15.4	1.6	10.0	-5.4	--	--	-5.4	Nov-13
JP Morgan GBI EM Global Diversified TR USD				-0.8	9.7	1.2	4.9	-5.5	-2.3	4.3	-5.5	Nov-13

Results for periods longer than one year are annualized. Results are preliminary and subject to change. 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 \$8,965.77 in terminated manager account.

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



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October 31, 2016

Firefighters' Retirement System of Louisiana

Investment Performance Flash Report

October 31, 2016

	Market Value (\$)	Policy %	% of Portfolio	1 Mo (%)	YTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Return (%)	Since
GAA Composite	139,143,493	10.0	10.0	-1.6	6.1	1.2	2.7	--	--	--	1.2	Apr-14
60% MSCI World (Net) / 40% CITI WGBI				-2.5	5.2	0.4	3.3	2.6	5.5	4.1	1.6	Apr-14
Blackrock Global Allocation	71,376,777		5.1	-1.2	3.6	3.0	1.9	--	--	--	1.7	Apr-14
60% MSCI World (Net) / 40% CITI WGBI				-2.5	5.2	0.4	3.3	2.6	5.5	4.1	1.6	Apr-14
AQR Global Risk Premium – EL	40,744,402		2.9	-2.2	9.8	-1.4	4.2	--	--	--	0.6	May-14
60% MSCI World (Net) / 40% CITI WGBI				-2.5	5.2	0.4	3.3	2.6	5.5	4.1	1.3	May-14
Putnam Risk Parity	27,022,314		1.9	-1.8	7.3	0.9	2.4	--	--	--	-1.1	Jul-14
60% MSCI World (Net) / 40% CITI WGBI				-2.5	5.2	0.4	3.3	2.6	5.5	4.1	0.2	Jul-14
Total Alternative Composite	158,977,980	8.0	11.4	0.0	1.8	0.0	1.0	-3.5	-1.7	0.3	1.1	Jun-05
Private Equity Composite	44,588,296	4.0	3.2	0.0	2.8	0.0	3.6	-11.7	-4.0	-0.1	-4.9	Jul-05
Cambridge Associates US All PE				0.0	4.2	0.0	4.7	9.4	12.3	10.4	11.9	Jul-05
Murphree Venture (\$2,000,000)	717,528		0.1	0.0	-54.7	0.0	-52.6	-22.7	-12.8	-7.5	-7.1	Sep-05
Louisiana Fund I (\$1,000,000)	1,976,804		0.1	0.0	-5.3	0.0	-5.3	-1.3	1.4	0.0	-6.4	Jul-05
DTC Private Equity II-Q, L.P. (\$7,500,000)	2,704,493		0.2	0.0	-3.3	0.0	-2.4	6.4	9.0	5.5	5.0	Feb-06
Greenspring Associates (\$9,230,000)	4,803,179		0.3	0.0	-10.0	0.0	-10.0	14.3	16.9	9.8	6.3	Feb-06
DCM Private Equity II (\$7,500,000)	2,796,327		0.2	0.0	-7.5	0.0	-4.9	-4.8	0.2	-0.8	-1.7	Feb-06
FECF II (\$20,000,000)	1,081,588		0.1	0.0	-21.9	0.0	-28.0	16.3	11.5	--	8.1	Mar-08
FECF III (\$20,000,000)	2,998,472		0.2	0.0	7.1	0.0	8.1	33.0	27.4	--	18.4	Jul-09
GA Crossover Fund (\$25,000,000)	11,167,932		0.8	0.0	18.1	0.0	25.1	22.8	25.4	--	16.3	Jan-08
CCMP Capital Investors III (\$15,000,000)	9,642,433		0.7	0.0	17.1	0.0	16.8	--	--	--	12.9	Oct-14
Landmark Equity Partners XV (\$25,000,000)	6,699,540		0.5	0.0	2.6	0.0	-1.9	--	--	--	14.8	Dec-14

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

Fiscal YTD ends June 30th.

Private Equity valuations are as of 06/30/2016 adjusted for cash flows.

Firefighters' Retirement System of Louisiana

Investment Performance Flash Report

October 31, 2016

	Market Value (\$)	Policy %	% of Portfolio	1 Mo (%)	YTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Return (%)	Since
Real Estate Composite	114,389,684	4.0	8.2	0.0	1.5	0.0	-0.2	4.5	5.1	--	4.6	Dec-09
<i>NCREIF Property Index</i>				0.0	6.1	1.8	9.2	11.3	11.2	7.2	11.2	Dec-09
Americus Fund II (\$13,168,000)	542,781		0.0	0.0	-25.1	0.0	-52.9	-21.2	-10.3	-0.5	0.4	Dec-05
Sentinel Real Estate Fund (\$30,000,000)	34,904,270		2.5	0.0	3.8	0.0	8.3	10.8	15.9	5.8	6.1	Feb-06
JP Morgan India (\$8,990,000)	4,471,910		0.3	0.0	-3.0	0.0	-3.3	-0.4	-2.4	--	-13.0	Apr-07
Timbervest Crossover Fund (\$16,000,000)	10,190,135		0.7	0.0	0.4	0.0	-4.8	-2.3	-0.6	--	-0.3	Apr-08
AEW Partners VI LP (\$20,000,000)	12,151,343		0.9	0.0	1.8	0.0	12.6	16.7	17.5	--	12.9	Mar-10
AEW Core Property (\$12,000,000)	13,634,845		1.0	0.0	4.1	0.0	7.4	--	--	--	8.9	May-15
FRS-GA (Georgia)	4,762,850		0.3	0.0	0.2	0.0	0.2	-4.4	-2.7	--	-8.1	Jun-08
FRS-LB I (NLTP AZ)	4,463,550		0.3	0.0	-0.4	0.0	-0.4	1.3	-26.8	--	-18.8	Jun-07
FRS-LB III (ST George UT)	4,594,816		0.3	0.0	-12.9	0.0	-12.9	-4.5	-3.7	--	-0.1	Jun-08
ASB Real Estate Fund	12,199,135		0.9	0.0	2.4	0.0	--	--	--	--	2.4	Jan-16
Heitman America Real Estate Trust	12,474,049		0.9	0.0	3.4	0.0	7.1	--	--	--	7.1	Nov-15
Total Cash (\$9 MM)	8,479,705	--	0.6	0.0	0.3	0.1	0.3	0.1	0.1	1.1	2.9	Jun-92
<i>91 Day T-Bills</i>				0.0	0.2	0.1	0.3	0.1	0.1	0.7	2.5	Jun-92

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

Fiscal YTD ends June 30th.

Real Estate valuations are as of 06/30/2016 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

October 31, 2016

Total Cash Flow Summary

Month Ending October 31, 2016

	Beginning Market Value	Withdrawals	Contributions	Net Cash Flow	Fees	Net Investment Change	Ending Market Value
Acadian Emerging Markets Equity	\$38,302,157	\$0	\$0	\$0	-\$70,588	\$284,924	\$38,587,081
Advisory Research SMID	\$34,580,299	\$0	\$0	\$0	\$0	-\$646,229	\$33,934,071
AEW Core Property (\$12,000,000)	\$13,634,845	\$0	\$0	\$0	\$0	\$0	\$13,634,845
AEW Partners VI LP (\$20,000,000)	\$12,151,343	\$0	\$0	\$0	\$0	\$0	\$12,151,343
Americus Fund II (\$13,168,000)	\$542,781	\$0	\$0	\$0	\$0	\$0	\$542,781
AQR Global Risk Premium – EL	\$41,660,497	\$0	\$0	\$0	-\$32,256	-\$916,095	\$40,744,402
ASB Real Estate Fund	\$12,199,135	\$0	\$0	\$0	\$0	\$0	\$12,199,135
Blackrock Global Allocation	\$72,217,735	\$0	\$0	\$0	\$0	-\$840,958	\$71,376,777
Blackrock US Debt	\$143,651,089	\$0	\$0	\$0	\$0	-\$1,097,162	\$142,553,927
Cash/Clearing Account	\$6,735,722	-\$2,810,588	\$166,844	-\$2,643,744	\$0	\$1,431	\$4,093,410
CCMP Capital Investors III (\$15,000,000)	\$9,642,433	\$0	\$0	\$0	\$0	\$0	\$9,642,433
DCM Private Equity II (\$7,500,000)	\$2,796,327	\$0	\$0	\$0	\$0	\$0	\$2,796,327
DTC Private Equity II-Q, L.P. (\$7,500,000)	\$2,704,493	\$0	\$0	\$0	\$0	\$0	\$2,704,493
Energy Opportunities Fund	\$23,784,682	\$0	\$0	\$0	\$0	-\$1,526,525	\$22,258,157
FECP II (\$20,000,000)	\$1,081,588	\$0	\$0	\$0	\$0	\$0	\$1,081,588
FECP III (\$20,000,000)	\$3,071,645	-\$73,173	\$0	-\$73,173	\$0	\$0	\$2,998,472
Fisher All Foreign Equity	\$107,828,222	\$0	\$0	\$0	-\$156,384	-\$2,748,599	\$105,079,622
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	\$0	\$0	\$0	\$0	\$0	\$4,594,816
GA Crossover Fund (\$25,000,000)	\$11,167,932	\$0	\$0	\$0	\$0	\$0	\$11,167,932
Greenspring Associates (\$9,230,000)	\$4,803,179	\$0	\$0	\$0	\$0	\$0	\$4,803,179
Heitman America Real Estate Trust	\$12,474,049	\$0	\$0	\$0	\$0	\$0	\$12,474,049
JP Morgan India (\$8,990,000)	\$4,471,910	\$0	\$0	\$0	\$0	\$0	\$4,471,910
Landmark Equity Partners XV (\$25,000,000)	\$6,793,211	-\$93,671	\$0	-\$93,671	\$0	\$0	\$6,699,540

Firefighters' Retirement System of Louisiana

Current Monthly Breakdown of Change in Value

October 31, 2016

	Month Ending October 31, 2016							Ending Market Value
	Beginning Market Value	Withdrawals	Contributions	Net Cash Flow	Fees	Net Investment Change		
Liquidating - BlackRock Global Focused	\$8,275	\$0	\$926	\$926	\$0	-\$236	\$8,966	
Louisiana Asset Management Pool	\$4,384,205	\$0	\$0	\$0	\$0	\$2,090	\$4,386,295	
Louisiana Fund I (\$1,000,000)	\$1,976,804	\$0	\$0	\$0	\$0	\$0	\$1,976,804	
LSV International Equity Value	\$105,332,957	\$0	\$0	\$0	-\$181,913	-\$105,319	\$105,227,637	
Mellon Global Equity	\$67,206,945	\$0	\$0	\$0	\$0	-\$1,020,445	\$66,186,500	
Mellon Stock Index Fund	\$268,283,931	\$0	\$0	\$0	\$0	-\$4,884,320	\$263,399,610	
Murphree Venture (\$2,000,000)	\$717,528	\$0	\$0	\$0	\$0	\$0	\$717,528	
OFI Emerging Markets	\$21,619,754	\$0	\$0	\$0	-\$15,522	\$38,254	\$21,658,007	
Orleans Core Fixed Income	\$67,446,406	\$0	\$0	\$0	-\$23,806	-\$496,705	\$66,949,702	
Putnam Risk Parity	\$27,509,896	\$0	\$0	\$0	-\$16,213	-\$487,582	\$27,022,314	
Rothschild U.S. SMID Core	\$55,531,430	\$0	\$0	\$0	\$0	-\$2,106,200	\$53,425,230	
Sentinel Real Estate Fund (\$30,000,000)	\$34,904,270	\$0	\$0	\$0	\$0	\$0	\$34,904,270	
Standish	\$50,048,622	\$0	\$62,104	\$62,104	-\$62,104	\$18,423	\$50,129,150	
Stone Harbor	\$52,527,398	\$0	\$0	\$0	-\$36,899	-\$435,138	\$52,092,260	
Thornburg Global Opportunities	\$65,534,546	\$0	\$0	\$0	\$0	\$724,852	\$66,259,398	
Timbervest Crossover Fund (\$16,000,000)	\$10,190,135	\$0	\$0	\$0	\$0	\$0	\$10,190,135	
Total	\$1,413,339,593	-\$2,977,432	\$229,874	-\$2,747,558	-\$595,684	-\$16,241,539	\$1,394,350,496	

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

October 31, 2016

Total Cash Flow Summary

Fiscal YTD Ending October 31, 2016

	Beginning Market Value	Withdrawals	Contributions	Net Cash Flow	Fees	Net Investment Change	Ending Market Value
Acadian Emerging Markets Equity	\$34,944,517	\$0	\$0	\$0	-\$133,827	\$3,642,564	\$38,587,081
Advisory Research SMID	\$32,306,260	\$0	\$0	\$0	-\$53,504	\$1,627,811	\$33,934,071
AEW Core Property (\$12,000,000)	\$13,634,845	\$0	\$0	\$0	\$0	\$0	\$13,634,845
AEW Partners VI LP (\$20,000,000)	\$12,151,343	\$0	\$0	\$0	\$0	\$0	\$12,151,343
Americus Fund II (\$13,168,000)	\$582,381	-\$39,600	\$0	-\$39,600	\$0	\$0	\$542,781
AQR Global Risk Premium – EL	\$41,311,508	\$0	\$0	\$0	-\$128,542	-\$567,106	\$40,744,402
ASB Real Estate Fund	\$12,168,888	\$0	\$30,247	\$30,247	\$0	\$0	\$12,199,135
Blackrock Global Allocation	\$69,213,303	\$0	\$113,993	\$113,993	-\$113,993	\$2,049,481	\$71,376,777
Blackrock US Debt	\$147,959,644	-\$5,000,000	\$14,716	-\$4,985,284	-\$14,716	-\$420,433	\$142,553,927
Cash/Clearing Account	\$4,966,116	-\$11,189,362	\$10,310,643	-\$878,719	\$0	\$6,012	\$4,093,410
CCMP Capital Investors III (\$15,000,000)	\$8,812,564	\$0	\$829,869	\$829,869	\$0	\$0	\$9,642,433
DCM Private Equity II (\$7,500,000)	\$2,933,335	-\$137,008	\$0	-\$137,008	\$0	\$0	\$2,796,327
DTC Private Equity II-Q, L.P. (\$7,500,000)	\$2,704,493	\$0	\$0	\$0	\$0	\$0	\$2,704,493
Energy Opportunities Fund	\$22,851,429	\$0	\$0	\$0	-\$57,129	-\$593,272	\$22,258,157
FECP II (\$20,000,000)	\$1,117,338	-\$35,750	\$0	-\$35,750	\$0	\$0	\$1,081,588
FECP III (\$20,000,000)	\$3,122,710	-\$124,238	\$0	-\$124,238	\$0	\$0	\$2,998,472
Fisher All Foreign Equity	\$99,751,388	\$0	\$0	\$0	-\$276,688	\$5,328,234	\$105,079,622
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	\$0	\$0	\$0	\$0	\$0	\$4,594,816
GA Crossover Fund (\$25,000,000)	\$11,666,189	-\$498,257	\$0	-\$498,257	\$0	\$0	\$11,167,932
Greenspring Associates (\$9,230,000)	\$5,398,918	-\$595,739	\$0	-\$595,739	\$0	\$0	\$4,803,179
Heitman America Real Estate Trust	\$12,474,049	\$0	\$0	\$0	\$0	\$0	\$12,474,049
JP Morgan India (\$8,990,000)	\$4,471,910	\$0	\$0	\$0	\$0	\$0	\$4,471,910
Landmark Equity Partners XV (\$25,000,000)	\$7,246,880	-\$738,946	\$191,606	-\$547,340	\$0	\$0	\$6,699,540

Firefighters' Retirement System of Louisiana

Current Fiscal YTD Breakdown of Change in Value

October 31, 2016

	Fiscal YTD Ending October 31, 2016							Ending Market Value
	Beginning Market Value	Withdrawals	Contributions	Net Cash Flow	Fees	Net Investment Change		
Liquidating - BlackRock Global Focused	\$38,504	-\$30,333	\$926	-\$29,406	\$0	-\$132	\$8,966	
Louisiana Asset Management Pool	\$4,379,144	\$0	\$0	\$0	\$0	\$7,151	\$4,386,295	
Louisiana Fund I (\$1,000,000)	\$1,976,804	\$0	\$0	\$0	\$0	\$0	\$1,976,804	
LSV International Equity Value	\$96,703,747	\$0	\$0	\$0	-\$43,025	\$8,523,890	\$105,227,637	
Mellon Global Equity	\$63,767,414	\$0	\$5,854	\$5,854	-\$5,854	\$2,413,232	\$66,186,500	
Mellon Stock Index Fund	\$258,331,649	\$0	\$0	\$0	-\$19,024	\$5,067,961	\$263,399,610	
Murphree Venture (\$2,000,000)	\$717,528	\$0	\$0	\$0	\$0	\$0	\$717,528	
OFI Emerging Markets	\$19,860,080	\$0	\$0	\$0	-\$60,848	\$1,797,927	\$21,658,007	
Orleans Core Fixed Income	\$66,864,691	\$0	\$0	\$0	-\$47,458	\$85,011	\$66,949,702	
Putnam Risk Parity	\$26,791,354	\$0	\$0	\$0	-\$16,213	\$230,960	\$27,022,314	
Rothschild U.S. SMID Core	\$52,150,941	\$0	\$0	\$0	-\$88,879	\$1,274,289	\$53,425,230	
Sentinel Real Estate Fund (\$30,000,000)	\$35,289,933	-\$385,663	\$0	-\$385,663	\$0	\$0	\$34,904,270	
Standish	\$49,048,765	\$0	\$62,104	\$62,104	-\$62,104	\$1,018,280	\$50,129,150	
Stone Harbor	\$51,284,146	\$0	\$0	\$0	-\$147,154	\$808,114	\$52,092,260	
Thornburg Global Opportunities	\$61,655,743	\$0	\$0	\$0	-\$83,342	\$4,603,655	\$66,259,398	
Timbervest Crossover Fund (\$16,000,000)	\$10,574,135	-\$384,000	\$0	-\$384,000	\$0	\$0	\$10,190,135	
Total	\$1,365,045,805	-\$19,158,896	\$11,559,958	-\$7,598,938	-\$1,352,299	\$36,903,628	\$1,394,350,496	

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 October 31, 2016					
	Beginning Market Value	Withdrawals	Contributions	Net Cash Flow	Net Investment Change	Ending Market Value
Acadian Emerging Markets Equity	--	\$0	\$40,000,000	\$40,000,000	-\$1,412,919	\$38,587,081
Advisory Research SMID	--	-\$42,800,000	\$34,937,469	-\$7,862,531	\$41,796,602	\$33,934,071
AEW Core Property (\$12,000,000)	--	\$0	\$12,000,000	\$12,000,000	\$1,634,845	\$13,634,845
AEW Partners VI LP (\$20,000,000)	--	-\$16,539,762	\$18,420,450	\$1,880,688	\$10,270,655	\$12,151,343
Americus Fund II (\$13,168,000)	--	-\$15,693,930	\$12,044,774	-\$3,649,156	\$4,191,937	\$542,781
AQR Global Risk Premium – EL	--	\$0	\$40,100,000	\$40,100,000	\$644,402	\$40,744,402
ASB Real Estate Fund	--	\$0	\$12,035,580	\$12,035,580	\$163,556	\$12,199,135
Blackrock Global Allocation	--	\$0	\$67,427,334	\$67,427,334	\$3,949,443	\$71,376,777
Blackrock US Debt	--	-\$55,000,000	\$188,538,693	\$133,538,693	\$9,015,233	\$142,553,927
Cash/Clearing Account	--	-\$1,885,078,102	\$1,886,050,556	\$972,453	\$3,120,957	\$4,093,410
CCMP Capital Investors III (\$15,000,000)	--	-\$129,294	\$8,179,681	\$8,050,387	\$1,592,046	\$9,642,433
Commonwealth	--	-\$9,671,012	\$30,000,000	\$20,328,988	-\$20,328,988	--
DCM Private Equity II (\$7,500,000)	--	-\$5,826,980	\$8,340,318	\$2,513,338	\$282,989	\$2,796,327
DTC Private Equity II-Q, L.P. (\$7,500,000)	--	-\$6,337,500	\$5,476,825	-\$860,675	\$3,565,168	\$2,704,493
Energy Opportunities Fund	--	-\$28,002,876	\$50,000,000	\$21,997,124	\$261,032	\$22,258,157
FECP II (\$20,000,000)	--	-\$21,536,150	\$19,188,998	-\$2,347,152	\$3,428,740	\$1,081,588
FECP III (\$20,000,000)	--	-\$28,380,311	\$19,206,359	-\$9,173,952	\$12,172,424	\$2,998,472
Fisher All Foreign Equity	--	-\$55,165,618	\$117,000,000	\$61,834,383	\$43,245,240	\$105,079,622
FRS-GA (Georgia)	--	\$0	\$9,416,075	\$9,416,075	-\$4,653,225	\$4,762,850
FRS-LB I (NLTP AZ)	--	\$0	\$24,900,208	\$24,900,208	-\$20,436,658	\$4,463,550
FRS-LB III (ST George UT)	--	\$0	\$4,646,040	\$4,646,040	-\$51,224	\$4,594,816
GA Crossover Fund (\$25,000,000)	--	-\$38,251,478	\$25,000,000	-\$13,251,478	\$24,419,410	\$11,167,932
Greenspring Associates (\$9,230,000)	--	-\$10,910,176	\$8,491,600	-\$2,418,576	\$7,221,755	\$4,803,179
Heitman America Real Estate Trust	--	\$0	\$12,000,000	\$12,000,000	\$474,049	\$12,474,049
JP Morgan India (\$8,990,000)	--	-\$2,256,002	\$8,307,355	\$6,051,353	-\$1,579,442	\$4,471,910

Cash flow statistics exclude management fees and expenses.

Firefighters' Retirement System of Louisiana

Since Inception Breakdown of Change in Value

	Beginning Market Value	Ending October 31, 2016				Ending Market Value
		Withdrawals	Contributions	Net Cash Flow	Net Investment Change	
Landmark Equity Partners XV (\$25,000,000)	--	-\$4,471,759	\$9,749,935	\$5,278,176	\$1,421,364	\$6,699,540
Liquidating - BlackRock Global Focused	--	-\$59,568,081	\$46,832,890	-\$12,735,191	\$12,744,157	\$8,966
Louisiana Asset Management Pool	--	-\$944,296,689	\$943,990,965	-\$305,724	\$4,692,019	\$4,386,295
Louisiana Fund I (\$1,000,000)	--	\$0	\$1,010,000	\$1,010,000	\$966,804	\$1,976,804
LSV International Equity Value	--	-\$17,281,912	\$103,500,000	\$86,218,088	\$19,009,549	\$105,227,637
Mellon Global Equity	--	\$0	\$62,005,854	\$62,005,854	\$4,180,646	\$66,186,500
Mellon Stock Index Fund	--	-\$80,000,001	\$275,274,245	\$195,274,245	\$68,125,365	\$263,399,610
Murphree Venture (\$2,000,000)	--	-\$848,459	\$2,058,578	\$1,210,119	-\$492,591	\$717,528
OFI Emerging Markets	--	-\$8,500,000	\$31,500,000	\$23,000,000	-\$1,341,993	\$21,658,007
Orleans Core Fixed Income	\$0	-\$91,022,995	\$126,099,081	\$35,076,086	\$31,873,616	\$66,949,702
Putnam Risk Parity	--	\$0	\$27,400,000	\$27,400,000	-\$377,686	\$27,022,314
Rothschild U.S. SMID Core	--	\$0	\$55,500,000	\$55,500,000	-\$2,074,770	\$53,425,230
Sentinel Real Estate Fund (\$30,000,000)	--	-\$13,227,081	\$30,000,000	\$16,772,919	\$18,131,350	\$34,904,270
Standish	--	\$0	\$50,183,006	\$50,183,006	-\$53,857	\$50,129,150
Stone Harbor	--	\$0	\$63,000,000	\$63,000,000	-\$10,907,740	\$52,092,260
The Clinton Group Magnolia	--	-\$70,657,406	\$25,000,000	-\$45,657,406	\$45,657,406	--
Thornburg Global Opportunities	--	-\$55,362,310	\$47,500,000	-\$7,862,310	\$74,121,708	\$66,259,398
Timbervest Crossover Fund (\$16,000,000)	--	-\$5,952,000	\$13,600,000	\$7,648,000	\$2,542,135	\$10,190,135
Z TERMINATED - Argonaut Aggressive Global	--	-\$14,450,777	\$10,000,000	-\$4,450,777	\$4,450,777	--

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.