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Firefighters' Retirement System of Louisiana

Investment Market Update
(As of July 31, 2016)

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Index Performance Summary as of 07/29/2016

	2009	2010	2011	2012	2013	2014	2015	Q1	Q2	July	YTD
Barclays US STRIPS 20+ Yr	-36.0%	10.9%	58.5%	3.0%	-21.0%	46.4%	-3.7%	11.4%	9.6%	3.9%	26.7%
FTSE NAREIT Equity REITs	28.0%	28.0%	8.3%	18.1%	2.5%	30.1%	3.2%	6.0%	7.0%	4.2%	18.1%
Barclays US Govt/Credit Long	1.9%	10.2%	22.5%	8.8%	-8.8%	19.3%	-3.3%	7.3%	6.5%	2.6%	17.2%
Barclays US Long Credit	16.8%	10.7%	17.1%	12.7%	-6.6%	16.4%	-4.6%	6.8%	6.7%	2.8%	17.1%
Alerian MLP	76.4%	35.9%	13.9%	4.8%	27.6%	4.8%	-32.6%	-4.2%	19.7%	0.6%	15.3%
JPM GBI-EM Global Div	22.0%	15.7%	-1.8%	16.8%	-9.0%	-5.7%	-14.9%	11.0%	2.7%	0.6%	14.7%
JPM EMBI Global Diversified	29.8%	12.2%	7.3%	17.4%	-5.3%	7.4%	1.2%	5.0%	5.0%	1.8%	12.3%
Barclays US Corporate HY	58.2%	15.1%	5.0%	15.8%	7.4%	2.5%	-4.5%	3.4%	5.5%	2.7%	12.0%
MSCI EM	78.5%	18.9%	-18.4%	18.2%	-2.6%	-2.2%	-14.9%	5.7%	0.7%	5.0%	11.8%
Citi WGBI	2.6%	5.2%	6.4%	1.6%	-4.0%	-0.5%	-3.6%	7.1%	3.4%	0.5%	11.3%
Russell 2500	34.4%	26.7%	-2.5%	17.9%	36.8%	7.1%	-2.9%	0.4%	3.6%	5.2%	9.4%
Russell 2000	27.2%	26.9%	-4.2%	16.3%	38.8%	4.9%	-4.4%	-1.5%	3.8%	6.0%	8.3%
Russell 1000	28.4%	16.1%	1.5%	16.4%	33.1%	13.2%	0.9%	1.2%	2.5%	3.8%	7.7%
S&P 500	26.5%	15.1%	2.1%	16.0%	32.4%	13.7%	1.4%	1.3%	2.5%	3.7%	7.7%
Bloomberg Commodity	18.9%	16.8%	-13.3%	-1.1%	-9.5%	-17.0%	-24.7%	0.4%	12.8%	-5.1%	7.5%
Barclays US Agg Bond	5.9%	6.5%	7.8%	4.2%	-2.0%	6.0%	0.5%	3.0%	2.2%	0.6%	6.0%
Credit Suisse Leveraged Loan	44.9%	10.0%	1.8%	9.4%	6.2%	2.1%	-0.4%	1.3%	2.9%	1.4%	5.7%
MSCI ACWI	34.6%	12.7%	-7.3%	16.1%	22.8%	4.2%	-2.4%	0.2%	1.0%	4.3%	5.6%
Barclays Municipal	12.9%	2.4%	10.7%	6.8%	-2.6%	9.1%	3.3%	1.7%	2.6%	0.1%	4.4%
Barclays US Agg Interm	6.5%	6.1%	6.0%	3.6%	-1.0%	4.1%	1.2%	2.3%	1.4%	0.3%	4.1%
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%	1.7%
MSCI EAFE	31.8%	7.8%	-12.1%	17.3%	22.8%	-4.9%	-0.8%	-3.0%	-1.5%	5.1%	0.4%
Credit Suisse Hedge Fund	18.6%	10.9%	-2.5%	7.7%	9.7%	4.1%	-0.7%	-2.2%	0.6%	-0.1%	-1.6%

Source: Morningstar Direct



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Market Environment

After a rocky end to the second quarter, global equities bounced back in July and posted gains in most major markets. As Brexit shockwaves dissipated, equity volatility subsided and international equities surged amid a supportive central banking backdrop. The MSCI EAFE returned 5.1% as the European Central Bank and Bank of Japan both continued expansive asset purchasing programs. The MSCI EM Index extended its rally, returning 5.0% on the month as positive flows offset declining commodity prices and investors pursued higher returning assets. In the US, the Russell 2000 gained 6.0% compared to the S&P 500 return of 3.7% as investors favored a risk-on posture for the month.

In fixed income markets, investors continued to search for positive yielding assets. Much of the developed bond world is awash in negative yields as 10 year German and Japanese government bonds finished the month at negative 12 and 19 basis points, respectively. Despite the negative yields, the Citi WGBI Index rose 0.5% as central bank buying and demand for safe assets pushed prices higher. The 10 year Treasury fell marginally during July, down three basis points to 1.46%. The global interest rate environment provided a solid background for core fixed income returns as the Barclays US Aggregate Index gained 0.6%. Further out on the risk spectrum, US high yield issues returned 2.7%, extending their year-to-date rally. Emerging market bond issues also rallied as the search for yield drove positive asset flows to the space.

Market Outlook

We continue to see evidence of broad positive economic activity in the US. Nevertheless, we believe higher-than-average US equity valuations and an ever-extending rally provide an opportune time for investors to trim their domestic equity exposure and allocate marginal equity risk internationally. We believe drastic actions by central banks in Europe and Japan provide a supportive environment for equity returns and we continue to see better alpha opportunities down the cap spectrum and through global mandates. Our overweight recommendation for non-US developed market equity does not come without caution.

We recognize the potential for further political interruption or a central bank misstep and encourage investors to maintain a 50% hedge on non-US developed currency exposure. Despite the year-to-date rally, we continue to believe emerging equities offer a long-term return premium relative to developed markets and advocate maintaining exposure to the space. In fixed income, we recommend investors obtain duration exposure domestically as we see few compelling opportunities in the developed world outside of the US. Furthermore, we encourage investors to consider a dedicated TIPS allocation to complement US duration exposure, as record low inflation expectations offer an inexpensive entry point.

As the summer months wind down, we remind investors to remain diligent and trim assets that have recently outperformed expectations, such as US equities and developed market government bonds. NEPC strongly believes a disciplined rebalance approach best serves investors ability to maintain a diversified portfolio and weather a multitude of economic environments over the long term.

Firefighters' Retirement System of Louisiana Investment Performance Flash Report

July 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	1,390,222,517	100.0	100.0	2.8	4.9	2.8	0.1	2.9	3.2	3.0	5.6	Sep-92
<i>Policy Index</i>				3.0	7.0	3.0	3.3	6.2	--	--	--	Sep-92
<i>Allocation Index</i>				2.7	6.6	2.7	3.1	5.5	--	--	--	Sep-92
Total Equity Composite	774,992,067	58.0	55.7	4.4	5.0	4.4	-1.5	5.6	6.6	5.5	7.0	Sep-92
<i>MSCI/ACWI</i>				4.3	5.6	4.3	-0.4	5.9	6.6	4.6	7.2	Sep-92
Domestic Equity Composite	378,768,340	27.0	27.2	3.6	7.4	3.6	3.0	7.7	8.9	7.4	7.5	Sep-92
<i>Russell 3000</i>				4.0	7.7	4.0	4.4	10.6	13.0	7.8	9.4	Sep-92
<i>Mellon Stock Index Fund</i>	267,857,929		19.3	3.7	7.6	3.7	5.6	--	--	--	10.3	Nov-13
<i>S&P 500</i>				3.7	7.7	3.7	5.6	11.2	13.4	7.7	10.4	Nov-13
SMID Cap Composite	110,910,411	8.0	8.0	3.4	7.0	3.4	-3.4	0.7	--	--	5.2	Oct-12
<i>Russell 2500</i>				5.2	9.4	5.2	1.5	8.2	11.5	8.2	13.1	Oct-12
<i>Energy Opportunities Fund</i>	22,090,070		1.6	-3.3	9.0	-3.3	-5.1	-10.8	-8.1	--	-1.9	Jul-07
<i>OlH/XLE Blended Energy Benchmark</i>				-2.4	10.0	-2.4	-3.7	-8.9	-6.1	--	-1.9	Jul-07
SMID Cap Composite ex Energy	88,820,341	--	6.4	5.2	6.5	5.2	-3.0	4.8	--	--	9.0	Oct-12
<i>Russell 2500</i>				5.2	9.4	5.2	1.5	8.2	11.5	8.2	13.1	Oct-12
<i>Advisory Research SMID</i>	34,005,476		2.4	5.3	5.8	5.3	-4.4	3.2	7.0	--	12.2	Jun-09
<i>Russell 2500 Value</i>				4.6	12.8	4.6	6.4	7.7	11.4	7.1	15.7	Jun-09
<i>Rothschild U.S. SMID Core</i>	54,814,865		3.9	5.1	7.0	5.1	-2.1	--	--	--	-1.1	Jul-15
<i>Russell 2500</i>				5.2	9.4	5.2	1.5	8.2	11.5	8.2	1.2	Jul-15
International Equity Composite	208,236,686	16.0	15.0	6.0	1.8	6.0	-6.2	2.2	--	--	4.5	Oct-12
<i>MSCI/ACWI ex USA</i>				4.9	3.9	4.9	-5.5	1.3	1.4	2.3	3.7	Oct-12
<i>LSV International Equity Value</i>	102,051,720		7.3	5.5	2.5	5.5	-5.7	2.1	1.8	1.8	5.0	Oct-04
<i>MSCI Custom Benchmark</i>				4.9	3.9	4.9	-5.5	1.3	1.4	1.4	4.4	Oct-04
<i>Fisher All Foreign Equity</i>	106,184,966		7.6	6.4	1.3	6.4	-6.6	2.4	1.9	3.7	6.3	Oct-04
<i>MSCI/ACWI ex USA</i>				4.9	3.9	4.9	-5.5	1.3	1.4	2.3	5.4	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.



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July 31, 2016

Firefighters' Retirement System of Louisiana Investment Performance Flash Report

July 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	130,201,924	10.0	9.4	3.8	-0.7	3.8	-9.2	6.4	--	--	9.7	Oct-12
MSCI ACWI				4.3	5.6	4.3	-0.4	5.9	6.6	4.6	8.3	Oct-12
Thornburg Global Opportunities	63,633,931		4.6	3.2	-4.9	3.2	-13.8	10.3	9.7	8.3	10.6	Oct-04
MSCI ACWI				4.3	5.6	4.3	-0.4	5.9	6.6	4.6	6.4	Oct-04
Mellon Global Equity	66,529,443		4.8	4.3	--	4.3	--	--	--	--	3.9	May-16
MSCI ACWI				4.3	5.6	4.3	-0.4	5.9	6.6	4.6	3.8	May-16
Emerging Markets Equity	57,785,117	5.0	4.2	5.4	11.1	5.4	-1.0	--	--	--	-2.9	Oct-13
MSCI Emerging Markets				5.0	11.8	5.0	-0.7	-0.3	-2.7	3.9	-1.9	Oct-13
Acadian Emerging Markets Equity	37,255,596		2.7	6.6	13.2	6.6	-0.2	--	--	--	-2.8	Dec-13
MSCI Emerging Markets				5.0	11.8	5.0	-0.7	-0.3	-2.7	3.9	-3.2	Dec-13
OFI Emerging Markets	20,529,521		1.5	3.4	7.4	3.4	-2.3	--	--	--	-4.6	Jan-14
MSCI Emerging Markets				5.0	11.8	5.0	-0.7	-0.3	-2.7	3.9	-2.8	Jan-14
Total Fixed Income Composite	317,318,725	24.0	22.8	0.7	6.4	0.7	4.7	0.9	--	--	0.7	Oct-12
Total Fixed Income Custom Benchmark				0.6	7.2	0.6	5.0	2.0	2.2	4.4	1.0	Oct-12
Core Fixed Income	265,723,766	20.0	19.1	0.7	5.0	0.7	4.8	2.8	3.0	--	3.0	Dec-10
Barclays Aggregate				0.6	6.0	0.6	5.9	4.2	3.6	5.1	3.7	Dec-10
Orleans Core Fixed Income	67,436,022		4.9	0.9	7.0	0.9	6.6	4.1	3.5	5.4	6.0	Aug-92
Barclays Aggregate				0.6	6.0	0.6	5.9	4.2	3.6	5.1	5.8	Aug-92
Blackrock US Debt	148,905,799		10.7	0.6	6.0	0.6	6.0	--	--	--	4.3	Nov-14
Barclays Aggregate				0.6	6.0	0.6	5.9	4.2	3.6	5.1	4.2	Nov-14
Standish	49,381,944		3.6	0.7	-0.4	0.7	--	--	--	--	-1.5	Oct-15
3-Month LIBOR + 4%				0.4	2.7	0.4	4.5	4.4	4.4	5.4	3.8	Oct-15
Emerging Markets Debt	51,594,959	4.0	3.7	0.6	14.3	0.6	4.4	--	--	--	-6.2	Nov-13
JP Morgan GBI EM Global Diversified TR USD				0.4	14.4	0.4	5.0	-3.3	-2.4	5.3	-4.6	Nov-13
Stone Harbor	51,594,959		3.7	0.6	14.3	0.6	4.4	--	--	--	-6.2	Nov-13
JP Morgan GBI EM Global Diversified TR USD				0.4	14.4	0.4	5.0	-3.3	-2.4	5.3	-4.6	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 \$38,549.86 in terminated manager account.

Acadian Emerging Markets Equity is preliminary as of 7/31/2016.



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July 31, 2016

Firefighters' Retirement System of Louisiana

Investment Performance Flash Report

July 31, 2016

	Market Value (\$)	Policy %	% of Portfolio	1 Mo (%)	YTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Return (%)	Since
GAA Composite	140,080,026	10.0	10.1	2.0	6.9	2.0	1.1	--	--	--	1.6	Apr-14
<i>60% MSCI World (Net) / 40% CITI WGBI</i>				2.7	7.6	2.7	4.4	5.1	5.2	4.9	2.8	Apr-14
Blackrock Global Allocation	71,487,022		5.1	3.3	3.9	3.3	0.1	--	--	--	2.0	Apr-14
<i>60% MSCI World (Net) / 40% CITI WGBI</i>				2.7	7.6	2.7	4.4	5.1	5.2	4.9	2.8	Apr-14
AQR Global Risk Premium – EL	41,442,379		3.0	0.3	11.6	0.3	2.9	--	--	--	1.4	May-14
<i>60% MSCI World (Net) / 40% CITI WGBI</i>				2.7	7.6	2.7	4.4	5.1	5.2	4.9	2.5	May-14
Putnam Risk Parity	27,150,625		2.0	1.3	7.8	1.3	0.9	--	--	--	-1.0	Jul-14
<i>60% MSCI World (Net) / 40% CITI WGBI</i>				2.7	7.6	2.7	4.4	5.1	5.2	4.9	1.3	Jul-14
Total Alternative Composite	149,687,479	8.0	10.8	0.0	0.7	0.0	-0.3	-3.7	-2.0	0.3	1.0	Jun-05
Private Equity Composite	43,954,962	4.0	3.2	0.0	-0.5	0.0	-1.8	-12.6	-4.6	-0.5	-5.3	Jul-05
<i>Cambridge Associates US All PE</i>				0.0	0.3	0.0	-0.6	9.8	10.4	10.4	11.8	Jul-05
Murphree Venture (\$2,000,000)	1,543,478		0.1	0.0	-2.5	0.0	0.9	2.0	1.5	-0.2	-0.5	Sep-05
Louisiana Fund I (\$1,000,000)	2,087,160		0.2	0.0	0.0	0.0	0.0	0.5	2.5	0.1	-6.1	Jul-05
DTC Private Equity II-Q, L.P. (\$7,500,000)	2,829,359		0.2	0.0	1.0	0.0	-0.5	8.6	9.2	5.9	5.5	Feb-06
Greenspring Associates (\$9,230,000)	5,296,115		0.4	0.0	-9.1	0.0	-13.6	17.0	17.1	9.9	6.5	Feb-06
DCM Private Equity II (\$7,500,000)	2,998,270		0.2	0.0	-5.6	0.0	-6.3	-3.1	0.2	-0.6	-1.5	Feb-06
FECF II (\$20,000,000)	1,182,696		0.1	0.0	-17.3	0.0	-26.3	18.2	10.3	--	9.1	Mar-08
FECF III (\$20,000,000)	3,061,839		0.2	0.0	4.3	0.0	7.6	32.8	28.5	--	18.6	Jul-09
GA Crossover Fund (\$25,000,000)	9,956,474		0.7	0.0	1.8	0.0	1.9	17.9	21.6	--	14.8	Jan-08
CCMP Capital Investors III (\$15,000,000)	7,941,116		0.6	0.0	5.5	0.0	6.0	--	--	--	8.5	Oct-14
Landmark Equity Partners XV (\$25,000,000)	7,058,455		0.5	0.0	1.4	0.0	-0.4	--	--	--	16.4	Dec-14

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Fiscal YTD ends June 30th.

Private Equity valuations are as of 12/31/2015 adjusted for cash flows.

Firefighters' Retirement System of Louisiana

Investment Performance Flash Report

July 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	105,732,517	4.0	7.6	0.0	1.2	0.0	0.4	4.8	5.6	--	4.7	Dec-09
<i>NCREIF Property Index</i>				0.0	4.3	0.0	10.6	11.6	11.5	7.4	11.4	Dec-09
Americus Fund II (\$13,168,000)	774,243		0.1	0.0	4.4	0.0	-34.6	-11.4	-4.0	3.1	3.6	Dec-05
Sentinel Real Estate Fund (\$30,000,000)	34,533,790		2.5	0.0	1.5	0.0	8.8	11.5	17.6	5.8	6.0	Feb-06
JP Morgan India (\$8,990,000)	4,603,226		0.3	0.0	-0.4	0.0	-3.7	-2.6	-2.1	--	-13.0	Apr-07
Timbervest Crossover Fund (\$16,000,000)	10,632,959		0.8	0.0	1.0	0.0	-7.3	-2.7	-0.1	--	-0.2	Apr-08
AEW Partners VI LP (\$20,000,000)	11,981,285		0.9	0.0	0.3	0.0	13.7	17.0	17.1	--	13.2	Mar-10
AEW Core Property (\$12,000,000)	13,339,961		1.0	0.0	1.8	0.0	8.0	--	--	--	8.8	May-15
FRS-GA (Georgia)	4,754,758		0.3	0.0	0.0	0.0	0.0	-4.5	-2.7	--	-8.3	Jun-08
FRS-LB I (NLTP AZ)	4,482,019		0.3	0.0	0.0	0.0	0.0	1.5	-26.8	--	-19.2	Jun-07
FRS-LB III (ST George UT)	5,277,740		0.4	0.0	0.0	0.0	0.0	0.0	-1.0	--	1.6	Jun-08
ASB Real Estate Fund	3,031,698		0.2	0.0	1.6	0.0	--	--	--	--	1.6	Jan-16
Heitman America Real Estate Trust	12,320,837		0.9	0.0	2.2	0.0	--	--	--	--	5.8	Nov-15
Total Cash (\$9 MM)	8,144,221	--	0.6	0.0	0.2	0.0	0.2	0.1	0.1	1.2	3.0	Jun-92
<i>91 Day T-Bills</i>				0.0	0.2	0.0	0.2	0.1	0.1	0.9	2.6	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 12/31/2015 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

July 31, 2016

Total Cash Flow Summary

Month Ending July 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	\$0	\$2,311,079	\$37,255,596
Advisory Research SMID	\$32,306,260	\$0	\$0	\$0	\$0	\$1,699,216	\$34,005,476
AEW Core Property (\$12,000,000)	\$13,339,961	\$0	\$0	\$0	\$0	\$0	\$13,339,961
AEW Partners VI LP (\$20,000,000)	\$11,981,285	\$0	\$0	\$0	\$0	\$0	\$11,981,285
Americus Fund II (\$13,168,000)	\$813,843	-\$39,600	\$0	-\$39,600	\$0	\$0	\$774,243
AQR Global Risk Premium – EL	\$41,311,508	\$0	\$0	\$0	-\$32,118	\$130,871	\$41,442,379
ASB Real Estate Fund	\$3,031,698	\$0	\$0	\$0	\$0	\$0	\$3,031,698
Blackrock Global Allocation	\$69,213,303	\$0	\$0	\$0	\$0	\$2,273,718	\$71,487,022
Blackrock US Debt	\$147,959,644	\$0	\$0	\$0	\$0	\$946,155	\$148,905,799
Cash/Clearing Account	\$4,966,116	-\$1,607,992	\$403,825	-\$1,204,167	\$0	\$1,509	\$3,763,458
CCMP Capital Investors III (\$15,000,000)	\$7,941,116	\$0	\$0	\$0	\$0	\$0	\$7,941,116
DCM Private Equity II (\$7,500,000)	\$2,998,270	\$0	\$0	\$0	\$0	\$0	\$2,998,270
DTC Private Equity II-Q, L.P. (\$7,500,000)	\$2,829,359	\$0	\$0	\$0	\$0	\$0	\$2,829,359
Energy Opportunities Fund	\$22,851,429	\$0	\$0	\$0	\$0	-\$761,359	\$22,090,070
FECP II (\$20,000,000)	\$1,182,696	\$0	\$0	\$0	\$0	\$0	\$1,182,696
FECP III (\$20,000,000)	\$3,112,904	-\$51,065	\$0	-\$51,065	\$0	\$0	\$3,061,839
Fisher All Foreign Equity	\$99,751,388	\$0	\$0	\$0	\$0	\$6,433,578	\$106,184,966
FRS-GA (Georgia)	\$4,754,758	\$0	\$0	\$0	\$0	\$0	\$4,754,758
FRS-LB I (NLTP AZ)	\$4,482,019	\$0	\$0	\$0	\$0	\$0	\$4,482,019
FRS-LB III (ST George UT)	\$5,277,740	\$0	\$0	\$0	\$0	\$0	\$5,277,740
GA Crossover Fund (\$25,000,000)	\$9,956,474	\$0	\$0	\$0	\$0	\$0	\$9,956,474
Greenspring Associates (\$9,230,000)	\$5,460,158	-\$164,043	\$0	-\$164,043	\$0	\$0	\$5,296,115
Heitman America Real Estate Trust	\$12,320,837	\$0	\$0	\$0	\$0	\$0	\$12,320,837
JP Morgan India (\$8,990,000)	\$4,603,226	\$0	\$0	\$0	\$0	\$0	\$4,603,226
Landmark Equity Partners XV (\$25,000,000)	\$7,174,572	-\$149,117	\$33,000	-\$116,117	\$0	\$0	\$7,058,455

Firefighters' Retirement System of Louisiana

Current Monthly Breakdown of Change in Value

July 31, 2016

	Month Ending July 31, 2016							Ending Market Value
	Beginning Market Value	Withdrawals	Contributions	Net Cash Flow	Fees	Net Investment Change		
Liquidating - BlackRock Global Focused	\$38,504	\$0	\$0	\$0	\$0	\$46	\$38,550	
Louisiana Asset Management Pool	\$4,379,144	\$0	\$0	\$0	\$0	\$1,620	\$4,380,763	
Louisiana Fund I (\$1,000,000)	\$2,087,160	\$0	\$0	\$0	\$0	\$0	\$2,087,160	
LSV International Equity Value	\$96,703,747	\$0	\$0	\$0	\$0	\$5,347,973	\$102,051,720	
Mellon Global Equity	\$63,767,414	\$0	\$0	\$0	\$0	\$2,762,028	\$66,529,443	
Mellon Stock Index Fund	\$258,331,649	\$0	\$0	\$0	\$0	\$9,526,280	\$267,857,929	
Murphree Venture (\$2,000,000)	\$1,543,478	\$0	\$0	\$0	\$0	\$0	\$1,543,478	
OFI Emerging Markets	\$19,860,080	\$0	\$0	\$0	-\$14,713	\$669,441	\$20,529,521	
Orleans Core Fixed Income	\$66,864,691	\$0	\$0	\$0	\$0	\$571,332	\$67,436,022	
Putnam Risk Parity	\$26,791,354	\$0	\$0	\$0	\$0	\$359,271	\$27,150,625	
Rothschild U.S. SMID Core	\$52,150,941	\$0	\$0	\$0	\$0	\$2,663,923	\$54,814,865	
Sentinel Real Estate Fund (\$30,000,000)	\$34,533,790	\$0	\$0	\$0	\$0	\$0	\$34,533,790	
Standish	\$49,048,765	\$0	\$0	\$0	\$0	\$333,179	\$49,381,944	
Stone Harbor	\$51,284,146	\$0	\$0	\$0	-\$36,546	\$310,813	\$51,594,959	
Thornburg Global Opportunities	\$61,655,743	\$0	\$0	\$0	\$0	\$1,978,188	\$63,633,931	
Timbervest Crossover Fund (\$16,000,000)	\$10,632,959	\$0	\$0	\$0	\$0	\$0	\$10,632,959	
Total	\$1,354,238,649	-\$2,011,817	\$436,825	-\$1,574,992	-\$83,377	\$37,558,860	\$1,390,222,517	

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 July 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	-\$2,744,404	\$37,255,596
Advisory Research SMID	--	-\$42,800,000	\$34,937,469	-\$7,862,531	\$41,868,007	\$34,005,476
AEW Core Property (\$12,000,000)	--	\$0	\$12,000,000	\$12,000,000	\$1,339,961	\$13,339,961
AEW Partners VI LP (\$20,000,000)	--	-\$16,539,762	\$18,420,450	\$1,880,688	\$10,100,597	\$11,981,285
Americus Fund II (\$13,168,000)	--	-\$15,693,930	\$12,044,774	-\$3,649,156	\$4,423,399	\$774,243
AQR Global Risk Premium – EL	--	\$0	\$40,100,000	\$40,100,000	\$1,342,379	\$41,442,379
ASB Real Estate Fund	--	\$0	\$3,005,332	\$3,005,332	\$26,366	\$3,031,698
Blackrock Global Allocation	--	\$0	\$67,313,341	\$67,313,341	\$4,173,681	\$71,487,022
Blackrock US Debt	--	-\$50,000,000	\$188,523,977	\$138,523,977	\$10,381,821	\$148,905,799
Cash/Clearing Account	--	-\$1,875,496,733	\$1,876,143,737	\$647,005	\$3,116,453	\$3,763,458
CCMP Capital Investors III (\$15,000,000)	--	-\$129,294	\$7,349,812	\$7,220,518	\$720,598	\$7,941,116
Commonwealth	--	-\$9,671,012	\$30,000,000	\$20,328,988	-\$20,328,988	--
DCM Private Equity II (\$7,500,000)	--	-\$5,689,972	\$8,340,318	\$2,650,346	\$347,924	\$2,998,270
DTC Private Equity II-Q, L.P. (\$7,500,000)	--	-\$6,337,500	\$5,476,825	-\$860,675	\$3,690,034	\$2,829,359
Energy Opportunities Fund	--	-\$28,002,876	\$50,000,000	\$21,997,124	\$92,946	\$22,090,070
FECF II (\$20,000,000)	--	-\$21,500,400	\$19,188,998	-\$2,311,402	\$3,494,098	\$1,182,696
FECF III (\$20,000,000)	--	-\$28,307,138	\$19,278,952	-\$9,028,186	\$12,090,025	\$3,061,839
Fisher All Foreign Equity	--	-\$55,165,618	\$117,000,000	\$61,834,383	\$44,350,583	\$106,184,966
FRS-GA (Georgia)	--	\$0	\$9,416,075	\$9,416,075	-\$4,661,317	\$4,754,758
FRS-LB I (NLTP AZ)	--	\$0	\$24,900,208	\$24,900,208	-\$20,418,189	\$4,482,019
FRS-LB III (ST George UT)	--	\$0	\$4,646,040	\$4,646,040	\$631,700	\$5,277,740
GA Crossover Fund (\$25,000,000)	--	-\$37,753,221	\$25,000,000	-\$12,753,221	\$22,709,695	\$9,956,474
Greenspring Associates (\$9,230,000)	--	-\$10,478,480	\$8,491,600	-\$1,986,880	\$7,282,995	\$5,296,115
Heitman America Real Estate Trust	--	\$0	\$12,000,000	\$12,000,000	\$320,837	\$12,320,837
JP Morgan India (\$8,990,000)	--	-\$2,256,002	\$8,307,355	\$6,051,353	-\$1,448,127	\$4,603,226

Cash flow statistics exclude management fees and expenses.

Firefighters' Retirement System of Louisiana

Since Inception Breakdown of Change in Value

	Beginning Market Value	Ending July 31, 2016			Net Investment Change	Ending Market Value
		Withdrawals	Contributions	Net Cash Flow		
Landmark Equity Partners XV (\$25,000,000)	--	-\$3,881,930	\$9,591,329	\$5,709,399	\$1,349,056	\$7,058,455
Liquidating - BlackRock Global Focused	--	-\$59,537,748	\$46,831,964	-\$12,705,785	\$12,744,335	\$38,550
Louisiana Asset Management Pool	--	-\$944,296,689	\$943,990,965	-\$305,724	\$4,686,488	\$4,380,763
Louisiana Fund I (\$1,000,000)	--	\$0	\$1,010,000	\$1,010,000	\$1,077,160	\$2,087,160
LSV International Equity Value	--	-\$17,281,912	\$103,500,000	\$86,218,088	\$15,833,632	\$102,051,720
Mellon Global Equity	--	\$0	\$62,000,000	\$62,000,000	\$4,529,443	\$66,529,443
Mellon Stock Index Fund	--	-\$80,000,000	\$275,274,245	\$195,274,245	\$72,583,684	\$267,857,929
Murphree Venture (\$2,000,000)	--	-\$848,459	\$2,058,578	\$1,210,119	\$333,359	\$1,543,478
OFI Emerging Markets	--	-\$8,500,000	\$31,500,000	\$23,000,000	-\$2,470,479	\$20,529,521
Orleans Core Fixed Income	\$0	-\$91,022,995	\$126,099,081	\$35,076,086	\$32,359,936	\$67,436,022
Putnam Risk Parity	--	\$0	\$27,400,000	\$27,400,000	-\$249,375	\$27,150,625
Rothschild U.S. SMID Core	--	\$0	\$55,500,000	\$55,500,000	-\$685,135	\$54,814,865
Sentinel Real Estate Fund (\$30,000,000)	--	-\$12,841,417	\$30,000,000	\$17,158,583	\$17,375,207	\$34,533,790
Standish	--	\$0	\$50,120,902	\$50,120,902	-\$738,958	\$49,381,944
Stone Harbor	--	\$0	\$63,000,000	\$63,000,000	-\$11,405,041	\$51,594,959
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	\$71,496,241	\$63,633,931
Timbervest Crossover Fund (\$16,000,000)	--	-\$5,568,000	\$13,600,000	\$8,032,000	\$2,600,959	\$10,632,959
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.
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- 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.