

INVESTMENT MARKET UPDATE

(AS OF OCTOBER 31, 2019)



Firefighters' Retirement System of Louisiana

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

CALENDAR YEAR INDEX PERFORMANCE

	2010	2011	2012	2013	2014	2015	2016	2017	2018	Oct	YTD
S&P 500	15.1%	2.1%	16.0%	32.4%	13.7%	1.4%	12.0%	21.8%	-4.4%	2.2%	23.2%
Russell 1000	16.1%	1.5%	16.4%	33.1%	13.2%	0.9%	12.1%	21.7%	-4.8%	2.1%	23.1%
Russell 2000	26.9%	-4.2%	16.3%	38.8%	4.9%	-4.4%	21.3%	14.6%	-11.0%	2.6%	17.2%
Russell 2500	26.7%	-2.5%	17.9%	36.8%	7.1%	-2.9%	17.6%	16.8%	-10.0%	1.9%	20.0%
MSCI EAFE	7.8%	-12.1%	17.3%	22.8%	-4.9%	-0.8%	1.0%	25.0%	-13.8%	3.6%	16.9%
MSCI EM	18.9%	-18.4%	18.2%	-2.6%	-2.2%	-14.9%	11.2%	37.3%	-14.6%	4.2%	10.4%
MSCI ACWI	12.7%	-7.3%	16.1%	22.8%	4.2%	-2.4%	7.9%	24.0%	-9.4%	2.7%	19.4%
Private Equity	19.8%	9.5%	12.6%	22.3%	14.6%	10.4%	10.3%	21.0%	13.1%	-	4.9%
BC TIPS	6.3%	13.6%	7.0%	-8.6%	3.6%	-1.4%	4.7%	3.0%	-1.3%	0.3%	7.9%
BC Municipal	2.4%	10.7%	6.8%	-2.6%	9.1%	3.3%	0.2%	5.4%	1.3%	0.2%	6.9%
BC Muni High Yield	7.8%	9.2%	18.1%	-5.5%	13.8%	1.8%	3.0%	9.7%	4.8%	0.2%	9.9%
BC US Corporate HY	15.1%	5.0%	15.8%	7.4%	2.5%	-4.5%	17.1%	7.5%	-2.1%	0.3%	11.7%
BC US Agg Bond	6.5%	7.8%	4.2%	-2.0%	6.0%	0.5%	2.6%	3.5%	0.0%	0.3%	8.8%
BC Global Agg	5.5%	5.6%	4.3%	-2.6%	0.6%	-3.2%	2.1%	7.4%	-1.2%	0.7%	7.0%
BC Long Treasuries	9.4%	29.9%	3.6%	-12.7%	25.1%	-1.2%	1.3%	8.5%	-1.8%	-0.9%	18.7%
BC US Long Credit	10.7%	17.1%	12.7%	-6.6%	16.4%	-4.6%	10.2%	12.2%	-6.8%	0.5%	22.6%
BC US STRIPS 20+ Yr	10.9%	58.5%	3.0%	-21.0%	46.4%	-3.7%	1.4%	13.7%	-4.1%	-1.4%	26.6%
JPM GBI-EM Global Div	15.7%	-1.8%	16.8%	-9.0%	-5.7%	-14.9%	9.9%	15.2%	-6.2%	2.9%	11.0%
JPM EMBI Glob Div	12.2%	7.3%	17.4%	-5.3%	7.4%	1.2%	10.2%	10.3%	-4.3%	0.3%	13.3%
CS Hedge Fund	10.9%	-2.5%	7.7%	9.7%	4.1%	-0.7%	1.2%	7.1%	-3.2%	-	6.7%
BBG Commodity	16.8%	-13.3%	-1.1%	-9.5%	-17.0%	-24.7%	11.8%	1.7%	-11.2%	2.0%	5.2%
Alerian MLP	35.9%	13.9%	4.8%	27.6%	4.8%	-32.6%	18.3%	-6.5%	-12.4%	-6.2%	4.2%
FTSE NAREIT Equity REITs	28.0%	8.3%	18.1%	2.5%	30.1%	3.2%	8.5%	5.2%	-4.6%	1.4%	28.7%

Source: FactSet, Barclays, Thomson One

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



MARKET COMMENTARY – OCTOBER 2019

Market Environment

Investors embraced risk assets in October amid more accommodative monetary policies from the Federal Reserve and the European Central Bank, and renewed optimism around the outcomes of Brexit, and the trade war between the United States and China. In equities, international and emerging markets led the way with the MSCI EAFE Index and MSCI Emerging Markets Index returning 3.6% and 4.2%, respectively; the outperformance underscored a softness in the US dollar and improving sentiment around trade which has weighed heavily on many export-heavy economies in 2019. In the US, the S&P 500 Index hit a new high, up 2.2% for the month and 23.2% for the year so far.

Following the Fed's third rate cut this year, the short end of the US Treasury curve moved slightly lower. That said, the curve still steepened at the 10- and 30-year points, which increased one- and five-basis points, respectively. Outside the US, yields moved higher with 10-year German and Japanese bonds rising by 17- and nine-basis points, respectively. In emerging markets, the JPM EMBI Global Diversified Index increased 0.3% last month, in response to spread compression of 15 basis points. Within local emerging debt, the JPM GBI-EM Global Diversified Index was up 2.9% in October, reflecting modest currency strength relative to the US dollar.

In real assets, MLPs faced a difficult October with negative fund flows and significant regulatory changes. Performance between MLPs and C-Corps has continued to diverge, with the Alerian MLP Index down 6.2% for the month, while the Alerian Midstream Energy Index lost 3.8%.

As 2019 draws to a close, we remain cautious on risk assets given their robust performance so far this year. To this end, we maintain our recommendations to rebalance overall equity exposure and reduce return-seeking credit.



Firefighters' Retirement System of Louisiana

INVESTMENT PERFORMANCE FLASH REPORT

Investment Performance Summary - Net of Fees

	Market Value (\$)	Policy %	% of Portfolio	1 Mo (%)	Fiscal YTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Plan Composite	1,777,083,999	100.0	100.0	1.6	2.4	13.6	10.0	8.0	5.1	5.9	5.8	Sep-92
Policy Index				1.8	2.2	14.8	11.6	9.1	6.5	--	--	Sep-92
Allocation Index				1.6	2.3	14.2	11.5	8.8	6.2	--	--	Sep-92
Total Equity Composite	875,051,714	49.0	49.2	2.8	2.5	17.9	10.1	9.9	6.0	9.4	7.2	Sep-92
MSCI ACWI				2.7	2.7	19.4	12.6	11.3	7.1	8.8	7.6	Sep-92
Domestic Equity Composite	393,243,759	21.5	22.1	2.0	3.2	21.7	11.0	12.4	8.3	12.0	7.9	Sep-92
Russell 3000				2.2	3.3	22.7	13.5	14.5	10.3	13.6	9.8	Sep-92
Mellon Stock Index Fund	301,998,794		17.0	2.2	3.9	23.1	14.3	14.9	10.7	--	11.8	Nov-13
S&P 500				2.2	3.9	23.2	14.3	14.9	10.8	13.7	11.8	Nov-13
SMID Cap Composite	91,242,346	5.5	5.1	1.6	1.0	16.9	4.8	8.9	5.1	--	8.4	Oct-12
Russell 2500				1.9	0.6	20.0	8.8	11.7	8.0	13.1	11.6	Oct-12
Rothschild U.S. SMID Core	46,065,129		2.6	1.4	0.7	16.6	4.8	10.9	--	--	6.5	Jul-15
Russell 2500				1.9	0.6	20.0	8.8	11.7	8.0	13.1	7.6	Jul-15
QMA SMID	45,177,216		2.5	1.9	1.3	17.2	4.9	--	--	--	-1.8	Jul-18
Russell 2500				1.9	0.6	20.0	8.8	11.7	8.0	13.1	1.8	Jul-18
International Equity Composite	215,511,704	12.0	12.1	3.9	2.0	16.1	10.7	8.3	4.5	--	6.1	Oct-12
MSCI ACWI ex USA				3.5	1.6	15.5	11.3	8.1	3.8	4.9	5.5	Oct-12
LSV International Equity Value	106,444,544		6.0	4.3	3.2	14.2	8.5	7.8	4.1	5.8	5.7	Oct-04
MSCI Custom Benchmark				3.5	1.6	15.5	11.3	8.1	3.8	4.8	5.1	Oct-04
Fisher All Foreign Equity	109,067,160		6.1	3.4	0.9	18.1	13.0	8.8	5.0	6.3	6.6	Oct-04
MSCI ACWI ex USA				3.5	1.6	15.5	11.3	8.1	3.8	4.9	5.9	Oct-04

Rothschild U.S. SMID Core and QMA SMID are preliminary as of 10/31/2019, 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 (%)	Fiscal YTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Global Equity Composite	174,320,127	10.0	9.8	2.8	3.4	16.2	6.7	7.6	4.2	--	8.7	Oct-12
<i>MSCI ACWI</i>				2.7	2.7	19.4	12.6	11.3	7.1	8.8	9.1	Oct-12
Thornburg Global Opportunities	35,517,379		2.0	4.5	3.6	18.5	8.6	5.8	4.3	9.5	9.7	Oct-04
<i>MSCI ACWI</i>				2.7	2.7	19.4	12.6	11.3	7.1	8.8	7.2	Oct-04
Boston Partners Global Equity	101,509,959		5.7	2.3	2.5	14.0	5.0	8.6	--	--	8.6	Nov-16
<i>MSCI ACWI</i>				2.7	2.7	19.4	12.6	11.3	7.1	8.8	11.3	Nov-16
State Street ACWI Index Fund	37,284,765		2.1	2.8	--	--	--	--	--	--	4.9	Sep-19
<i>MSCI ACWI</i>				2.7	2.7	19.4	12.6	11.3	7.1	8.8	4.9	Sep-19
Emerging Markets Equity	91,976,123	5.5	5.2	3.7	-0.6	10.7	10.6	6.5	1.8	--	2.4	Oct-13
<i>MSCI Emerging Markets</i>				4.2	-0.2	10.4	11.9	7.4	2.9	3.8	3.3	Oct-13
Acadian Emerging Markets Equity	60,301,097		3.4	3.2	-1.3	7.9	6.9	5.1	1.3	--	1.8	Dec-13
<i>MSCI Emerging Markets</i>				4.2	-0.2	10.4	11.9	7.4	2.9	3.8	2.8	Dec-13
OFI Emerging Markets	31,675,026		1.8	4.6	0.7	16.4	18.4	9.6	3.4	--	3.6	Jan-14
<i>MSCI Emerging Markets</i>				4.2	-0.2	10.4	11.9	7.4	2.9	3.8	3.1	Jan-14
Total Fixed Income Composite	535,762,460	31.0	30.1	0.3	2.8	9.6	12.3	4.5	3.1	--	2.2	Oct-12
<i>Total Fixed Income Custom Benchmark</i>				0.8	2.4	9.2	12.2	3.5	2.4	3.2	1.9	Oct-12
Core Fixed Income	481,411,931	23.0	27.1	0.3	2.6	9.0	11.6	4.9	4.0	--	3.5	Dec-10
<i>BBgBarc US Aggregate TR</i>				0.3	2.6	8.8	11.5	3.3	3.2	3.7	3.4	Dec-10
Orleans Core Fixed Income	95,477,704		5.4	0.3	2.5	9.6	11.6	3.6	3.3	4.0	5.7	Aug-92
<i>BBgBarc US Aggregate TR</i>				0.3	2.6	8.8	11.5	3.3	3.2	3.7	5.4	Aug-92
Blackrock US Debt	385,934,227		21.7	0.3	2.6	8.9	11.6	3.3	3.3	--	3.3	Nov-14
<i>BBgBarc US Aggregate TR</i>				0.3	2.6	8.8	11.5	3.3	3.2	3.7	3.2	Nov-14
US TIPS Composite	54,350,529	3.0	3.1	0.3	1.6	7.8	8.9	--	--	--	6.8	Oct-18
Blackrock US TIPS Index	54,350,529		3.1	0.3	1.6	7.8	8.9	--	--	--	6.8	Oct-18
<i>BBgBarc US TIPS TR</i>				0.3	1.6	7.9	9.0	2.4	2.3	3.4	6.8	Oct-18

Thornburg Global Opportunities is preliminary as of 10/31/2019, and subject to change when finalized.

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 (%)	Fiscal YTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
GAA Composite	172,890,052	10.0	9.7	1.5	2.9	16.4	12.4	7.2	4.5	--	4.4	Apr-14
60% MSCI World (Net) / 40% FTSE WGBI				1.7	2.5	15.1	12.0	8.2	5.5	6.5	5.1	Apr-14
Blackrock Global Allocation	88,744,718		5.0	2.3	2.9	14.1	11.0	7.0	4.7	--	4.5	Apr-14
60% MSCI World (Net) / 40% FTSE WGBI				1.7	2.5	15.1	12.0	8.2	5.5	6.5	5.1	Apr-14
AQR Global Risk Premium – EL	84,145,334		4.7	0.7	2.9	18.2	15.7	7.6	4.2	--	4.3	May-14
60% MSCI World (Net) / 40% FTSE WGBI				1.7	2.5	15.1	12.0	8.2	5.5	6.5	5.0	May-14
Total Alternative Composite	176,370,340	10.0	9.9	0.0	0.0	2.3	1.9	5.5	4.9	2.2	2.3	Jun-05
Private Equity Composite	65,204,980	4.0	3.7	0.0	0.0	3.5	0.5	7.4	6.6	3.1	-2.2	Jul-05
Cambridge Associates US All PE				0.0	0.0	9.7	7.8	14.2	11.4	14.0	12.7	Jul-05
Murphree Venture (\$2,000,000)	613,531		0.0	0.0	0.0	-4.6	-5.1	-25.9	-16.6	-6.3	-6.2	Sep-05
Louisiana Fund I (\$1,000,000)	1,433,550		0.1	0.0	0.0	-17.3	-17.3	-10.1	-7.3	-2.9	-7.2	Jul-05
DTC Private Equity II-Q, L.P. (\$7,500,000)	1,182,604		0.1	0.0	0.0	4.1	-2.9	6.9	5.0	9.6	5.8	Feb-06
Greenspring Associates III (\$9,230,000)	3,360,919		0.2	0.0	0.0	19.4	6.4	5.5	9.1	13.8	6.6	Feb-06
DCM Private Equity II (\$7,500,000)	1,091,265		0.1	0.0	0.0	-5.4	-6.6	-2.3	-4.8	1.2	-1.7	Feb-06
FECF II (\$20,000,000)	-97,310		0.0	0.0	0.0	61.9	40.5	40.3	9.3	14.0	13.5	Mar-08
GA Crossover Fund (\$25,000,000)	3,921,114		0.2	0.0	0.0	-11.1	-17.2	0.9	8.6	15.7	12.1	Jan-08
CCMP Capital Investors III (\$15,000,000)	13,005,177		0.7	0.0	0.0	4.6	-2.1	7.0	10.1	--	9.9	Oct-14
Landmark Equity Partners XV (\$25,000,000)	9,775,876		0.6	0.0	0.0	-4.2	-3.7	11.6	--	--	13.4	Dec-14
Harbourvest IV (\$20,000,000)	17,953,639		1.0	0.0	0.0	12.2	14.1	13.8	--	--	13.8	Nov-16
Mesirov (\$35,000,000)	11,410,614		0.6	0.0	0.0	-0.5	--	--	--	--	-5.8	Dec-18
HarbourVest Partners XI Buyout (\$35,000,000)	1,554,001		0.1	0.0	0.0	0.0	--	--	--	--	0.0	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 06/30/2019 and cash adjusted to date.



Firefighters' Retirement System of Louisiana

INVESTMENT PERFORMANCE FLASH REPORT

	Market Value (\$)	Policy %	% of Portfolio	1 Mo (%)	Fiscal YTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Real Estate Composite	111,165,360	6.0	6.3	0.0	0.0	1.6	2.5	4.7	4.9	--	5.0	Dec-09
<i>NCREIF Property Index</i>				0.0	1.4	4.8	6.2	6.8	8.6	9.8	9.9	Dec-09
Sentinel Real Estate Fund (\$30,000,000)	37,378,313		2.1	0.0	0.0	3.5	4.9	7.0	8.5	12.6	6.4	Feb-06
JP Morgan India (\$8,990,000)	1,305,554		0.1	0.0	0.0	-33.5	-33.5	-24.3	-16.0	-7.0	-15.7	Apr-07
Timbervest Crossover Fund (\$16,000,000)	6,883,712		0.4	0.0	0.0	4.4	3.9	-3.0	-3.2	-0.7	-1.1	Apr-08
AEW Partners VI LP (\$20,000,000)	-395,899		0.0	0.0	0.0	0.8	1.6	11.8	13.6	--	13.3	Mar-10
AEW Core Property (\$12,000,000)	16,482,514		0.9	0.0	0.0	2.8	4.4	6.0	--	--	7.3	May-15
FRS-GA (Georgia)	3,463,043		0.2	0.0	0.0	0.0	0.0	-10.1	-6.0	-9.8	-8.6	Jun-08
FRS-LB I (NLTP AZ)	7,315,110		0.4	0.0	0.0	-0.9	-0.9	17.9	11.3	-10.3	-11.2	Jun-07
FRS-LB III (ST George UT)	9,281,546		0.5	0.0	0.0	-0.1	-0.1	0.0	3.4	1.2	2.6	Jun-08
ASB Real Estate Fund	14,576,244		0.8	0.0	0.0	3.4	4.7	5.6	--	--	5.4	Jan-16
Heitman America Real Estate Trust	14,875,223		0.8	0.0	0.0	0.7	1.2	5.4	--	--	6.3	Nov-15
Total Cash (\$9 MM)	17,009,433	--	1.0	0.2	0.7	2.0	2.3	1.6	1.0	0.6	2.8	Jun-92
<i>91 Day T-Bills</i>				0.1	0.6	1.8	2.2	1.6	1.0	0.5	2.4	Jun-92

Results for periods longer than one year are annualized.
 Fiscal YTD ends June 30th.
 Real Estate valuations are as of 06/30/2019 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 October 31, 2019

	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Fees	Net Investment Change	Ending Market Value
Acadian Emerging Markets Equity	\$58,443,730	\$0	\$0	\$0	-\$110,752	\$1,857,368	\$60,301,097
AEW Core Property (\$12,000,000)	\$16,482,514	\$0	\$0	\$0	\$0	\$0	\$16,482,514
AEW Partners VI LP (\$20,000,000)	-\$395,899	\$0	\$0	\$0	\$0	\$0	-\$395,899
AQR Global Risk Premium – EL	\$83,557,493	\$0	\$0	\$0	-\$66,615	\$587,842	\$84,145,334
ASB Real Estate Fund	\$14,576,244	\$0	\$0	\$0	\$0	\$0	\$14,576,244
Blackrock Global Allocation	\$86,782,093	\$0	\$0	\$0	\$0	\$1,962,625	\$88,744,718
Blackrock US Debt	\$384,820,568	\$0	\$0	\$0	\$0	\$1,113,659	\$385,934,227
Blackrock US TIPS Index	\$54,212,988	\$0	\$0	\$0	\$0	\$137,542	\$54,350,529
Boston Partners Global Equity	\$99,181,786	\$0	\$0	\$0	-\$45,421	\$2,328,173	\$101,509,959
Cash/Clearing Account	\$13,827,159	\$2,062,114	-\$3,517,149	-\$1,455,035	\$0	\$29,306	\$12,401,430
CCMP Capital Investors III (\$15,000,000)	\$13,005,177	\$0	\$0	\$0	\$0	\$0	\$13,005,177
DCM Private Equity II (\$7,500,000)	\$1,091,265	\$0	\$0	\$0	\$0	\$0	\$1,091,265
DTC Private Equity II-Q, L.P. (\$7,500,000)	\$1,182,604	\$0	\$0	\$0	\$0	\$0	\$1,182,604
Energy Opportunities Fund	\$2,615	\$0	\$0	\$0	\$0	\$4	\$2,619
FECP II (\$20,000,000)	-\$97,310	\$0	\$0	\$0	\$0	\$0	-\$97,310
Fisher All Foreign Equity	\$105,438,978	\$0	\$0	\$0	-\$153,129	\$3,628,182	\$109,067,160
FRS-GA (Georgia)	\$3,463,043	\$0	\$0	\$0	\$0	\$0	\$3,463,043
FRS-LB I (NLTP AZ)	\$7,315,110	\$0	\$0	\$0	\$0	\$0	\$7,315,110
FRS-LB III (ST George UT)	\$9,281,546	\$0	\$0	\$0	\$0	\$0	\$9,281,546
GA Crossover Fund (\$25,000,000)	\$3,921,114	\$0	\$0	\$0	\$0	\$0	\$3,921,114
Greenspring Associates III (\$9,230,000)	\$3,360,919	\$0	\$0	\$0	\$0	\$0	\$3,360,919
Harbourvest IV (\$20,000,000)	\$17,953,639	\$0	\$0	\$0	\$0	\$0	\$17,953,639
HarbourVest Partners XI Buyout (\$35,000,000)	\$1,554,001	\$0	\$0	\$0	\$0	\$0	\$1,554,001



Firefighters' Retirement System of Louisiana

CURRENT MONTH CHANGE IN VALUE

	Month Ending October 31, 2019						
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Fees	Net Investment Change	Ending Market Value
Heitman America Real Estate Trust	\$14,875,223	\$0	\$0	\$0	\$0	\$0	\$14,875,223
JP Morgan India (\$8,990,000)	\$1,305,554	\$0	\$0	\$0	\$0	\$0	\$1,305,554
Landmark Equity Partners XV (\$25,000,000)	\$9,793,650	\$61,897	-\$79,671	-\$17,774	\$0	\$0	\$9,775,876
Liquidating - BlackRock Global Focused	\$7,912	\$0	\$0	\$0	\$0	\$111	\$8,024
Louisiana Asset Management Pool	\$4,600,394	\$0	\$0	\$0	\$0	\$7,610	\$4,608,004
Louisiana Fund I (\$1,000,000)	\$1,433,550	\$0	\$0	\$0	\$0	\$0	\$1,433,550
LSV International Equity Value	\$102,047,844	\$0	\$0	\$0	-\$176,478	\$4,396,701	\$106,444,544
Mellon Stock Index Fund	\$295,590,445	\$0	\$0	\$0	\$0	\$6,408,350	\$301,998,794
Mesirow (\$35,000,000)	\$9,835,614	\$1,575,000	\$0	\$1,575,000	\$0	\$0	\$11,410,614
Murphree Venture (\$2,000,000)	\$613,531	\$0	\$0	\$0	\$0	\$0	\$613,531
OFI Emerging Markets	\$30,284,945	\$0	\$0	\$0	-\$22,700	\$1,390,081	\$31,675,026
Orleans Core Fixed Income	\$95,161,452	\$0	\$0	\$0	-\$31,290	\$316,252	\$95,477,704
QMA SMID	\$44,352,654	\$0	\$0	\$0	\$0	\$824,563	\$45,177,216
Rothschild U.S. SMID Core	\$45,412,049	\$0	\$0	\$0	\$0	\$653,080	\$46,065,129
Sentinel Real Estate Fund (\$30,000,000)	\$37,762,927	\$0	-\$384,614	-\$384,614	\$0	\$0	\$37,378,313
State Street ACWI Index Fund	\$36,285,021	\$0	\$0	\$0	-\$1,864	\$999,745	\$37,284,765
Thornburg Global Opportunities	\$34,003,924	\$0	-\$1,073	-\$1,073	\$0	\$1,514,528	\$35,517,379
Timbervest Crossover Fund (\$16,000,000)	\$6,883,712	\$0	\$0	\$0	\$0	\$0	\$6,883,712
Total	\$1,749,211,776	\$3,699,011	-\$3,982,507	-\$283,496	-\$608,250	\$28,155,720	\$1,777,083,999

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 October 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	-\$786,859	\$60,301,097
AEW Core Property (\$12,000,000)	\$16,482,514	\$0	\$0	\$0	\$0	\$0	\$16,482,514
AEW Partners VI LP (\$20,000,000)	\$8,884,982	\$0	-\$9,280,881	-\$9,280,881	\$0	\$0	-\$395,899
AQR Global Risk Premium – EL	\$81,793,968	\$0	\$0	\$0	-\$264,399	\$2,351,367	\$84,145,334
ASB Real Estate Fund	\$14,576,244	\$0	\$0	\$0	\$0	\$0	\$14,576,244
Blackrock Global Allocation	\$86,219,909	\$0	\$0	\$0	\$0	\$2,524,809	\$88,744,718
Blackrock US Debt	\$296,301,894	\$80,000,000	\$0	\$80,000,000	\$0	\$9,632,333	\$385,934,227
Blackrock US TIPS Index	\$53,502,426	\$0	\$0	\$0	\$0	\$848,104	\$54,350,529
Boston Partners Global Equity	\$98,946,150	\$0	-\$130,870	-\$130,870	-\$177,301	\$2,694,679	\$101,509,959
Cash/Clearing Account	\$10,592,120	\$128,339,948	-\$126,679,652	\$1,660,296	\$0	\$149,013	\$12,401,430
CCMP Capital Investors III (\$15,000,000)	\$16,139,690	\$0	-\$3,134,513	-\$3,134,513	\$0	\$0	\$13,005,177
DCM Private Equity II (\$7,500,000)	\$1,164,748	\$0	-\$73,483	-\$73,483	\$0	\$0	\$1,091,265
DTC Private Equity II-Q, L.P. (\$7,500,000)	\$1,332,604	\$0	-\$150,000	-\$150,000	\$0	\$0	\$1,182,604
Energy Opportunities Fund	\$33	\$0	\$0	\$0	\$0	\$2,586	\$2,619
FECF II (\$20,000,000)	\$303,334	\$0	-\$294,412	-\$294,412	\$0	-\$106,232	-\$97,310
Fisher All Foreign Equity	\$108,054,069	\$0	-\$630	-\$630	-\$309,188	\$1,013,721	\$109,067,160
FRS-GA (Georgia)	\$3,463,043	\$0	\$0	\$0	\$0	\$0	\$3,463,043
FRS-LB I (NLTP AZ)	\$7,315,110	\$0	\$0	\$0	\$0	\$0	\$7,315,110
FRS-LB III (ST George UT)	\$9,281,546	\$0	\$0	\$0	\$0	\$0	\$9,281,546
GA Crossover Fund (\$25,000,000)	\$3,921,114	\$0	\$0	\$0	\$0	\$0	\$3,921,114
Greenspring Associates III (\$9,230,000)	\$3,527,059	\$0	-\$166,140	-\$166,140	\$0	\$0	\$3,360,919
Harbourvest IV (\$20,000,000)	\$19,493,639	\$0	-\$1,540,000	-\$1,540,000	\$0	\$0	\$17,953,639
HarbourVest Partners XI Buyout (\$35,000,000)	\$154,001	\$1,400,000	\$0	\$1,400,000	\$0	\$0	\$1,554,001



Firefighters' Retirement System of Louisiana

CURRENT FYTD CHANGE IN VALUE

	Fiscal YTD Ending October 31, 2019						
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Fees	Net Investment Change	Ending Market Value
Heitman America Real Estate Trust	\$14,875,223	\$0	\$0	\$0	\$0	\$0	\$14,875,223
JP Morgan India (\$8,990,000)	\$1,305,554	\$0	\$0	\$0	\$0	\$0	\$1,305,554
Landmark Equity Partners XV (\$25,000,000)	\$9,592,911	\$587,176	-\$404,211	\$182,965	\$0	\$0	\$9,775,876
Liquidating - BlackRock Global Focused	\$8,142	\$0	\$0	\$0	\$0	-\$119	\$8,024
Louisiana Asset Management Pool	\$4,574,500	\$0	\$0	\$0	\$0	\$33,503	\$4,608,004
Louisiana Fund I (\$1,000,000)	\$1,433,550	\$0	\$0	\$0	\$0	\$0	\$1,433,550
LSV International Equity Value	\$103,194,258	\$0	-\$1,161	-\$1,161	-\$352,581	\$3,251,447	\$106,444,544
Mellon Stock Index Fund	\$290,644,592	\$38,152	\$0	\$38,152	-\$38,152	\$11,316,050	\$301,998,794
Mesirow (\$35,000,000)	\$8,435,614	\$2,975,000	\$0	\$2,975,000	\$0	\$0	\$11,410,614
Murphree Venture (\$2,000,000)	\$662,306	\$0	-\$48,775	-\$48,775	\$0	\$0	\$613,531
OFI Emerging Markets	\$31,465,066	\$0	\$0	\$0	-\$88,176	\$209,960	\$31,675,026
Orleans Core Fixed Income	\$93,124,492	\$0	\$0	\$0	-\$60,813	\$2,353,213	\$95,477,704
QMA SMID	\$44,604,801	\$0	\$0	\$0	-\$58,083	\$572,415	\$45,177,216
Rothschild U.S. SMID Core	\$45,743,366	\$0	\$0	\$0	-\$79,368	\$321,763	\$46,065,129
Sentinel Real Estate Fund (\$30,000,000)	\$38,149,072	\$0	-\$770,759	-\$770,759	\$0	\$0	\$37,378,313
State Street ACWI Index Fund	--	\$35,000,000	\$0	\$35,000,000	-\$3,678	\$2,284,765	\$37,284,765
Stone Harbor	\$79,483,138	\$0	-\$81,027,382	-\$81,027,382	\$0	\$1,544,244	--
Thornburg Global Opportunities	\$60,232,986	\$0	-\$25,001,073	-\$25,001,073	-\$91,378	\$285,465	\$35,517,379
Timbervest Crossover Fund (\$16,000,000)	\$6,883,712	\$0	\$0	\$0	\$0	\$0	\$6,883,712
Total	\$1,736,951,437	\$248,340,276	-\$248,703,941	-\$363,665	-\$1,745,688	\$40,496,227	\$1,777,083,999

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						
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Net Investment Change	Ending Market Value
Acadian Emerging Markets Equity	--	\$65,000,000	-\$10,000,000	\$55,000,000	\$5,301,097	\$60,301,097
AEW Core Property (\$12,000,000)	--	\$12,000,000	\$0	\$12,000,000	\$4,482,514	\$16,482,514
AEW Partners VI LP (\$20,000,000)	--	\$18,420,450	-\$33,332,325	-\$14,911,875	\$14,515,976	-\$395,899
AQR Global Risk Premium – EL	--	\$101,500,000	-\$30,700,000	\$70,800,000	\$13,345,334	\$84,145,334
ASB Real Estate Fund	--	\$12,254,130	-\$141,910	\$12,112,220	\$2,464,024	\$14,576,244
Blackrock Global Allocation	--	\$68,682,390	\$0	\$68,682,390	\$20,062,327	\$88,744,718
Blackrock US Debt	--	\$407,536,521	-\$58,500,000	\$349,036,521	\$36,897,706	\$385,934,227
Blackrock US TIPS Index	--	\$50,016,034	-\$4,805	\$50,011,229	\$4,339,301	\$54,350,529
Boston Partners Global Equity	--	\$80,939,406	-\$1,461,019	\$79,478,387	\$22,031,572	\$101,509,959
Cash/Clearing Account	--	\$2,537,739,898	-\$2,529,142,584	\$8,597,314	\$3,804,115	\$12,401,430
CCMP Capital Investors III (\$15,000,000)	--	\$13,375,862	-\$4,742,087	\$8,633,775	\$4,371,402	\$13,005,177
DCM Private Equity II (\$7,500,000)	--	\$8,232,280	-\$7,381,601	\$850,679	\$240,585	\$1,091,265
DTC Private Equity II-Q, L.P. (\$7,500,000)	--	\$5,480,845	-\$8,437,500	-\$2,956,655	\$4,139,259	\$1,182,604
Energy Opportunities Fund	--	\$50,039,277	-\$44,450,083	\$5,589,194	-\$5,586,575	\$2,619
FCEP II (\$20,000,000)	--	\$19,188,998	-\$22,596,774	-\$3,407,776	\$3,310,466	-\$97,310
Fisher All Foreign Equity	--	\$117,180,807	-\$80,308,187	\$36,872,620	\$72,194,540	\$109,067,160
FRS-GA (Georgia)	--	\$9,416,075	\$0	\$9,416,075	-\$5,953,032	\$3,463,043
FRS-LB I (NLTP AZ)	--	\$24,900,208	\$0	\$24,900,208	-\$17,585,098	\$7,315,110
FRS-LB III (ST George UT)	--	\$6,878,923	\$0	\$6,878,923	\$2,402,623	\$9,281,546
GA Crossover Fund (\$25,000,000)	--	\$25,000,000	-\$46,276,687	-\$21,276,687	\$25,197,801	\$3,921,114
Greenspring Associates III (\$9,230,000)	--	\$8,491,600	-\$13,277,908	-\$4,786,308	\$8,147,227	\$3,360,919
Harbourvest IV (\$20,000,000)	--	\$17,325,303	-\$4,447,769	\$12,877,534	\$5,076,105	\$17,953,639

Cash flow statistics exclude management fees and expenses.



Firefighters' Retirement System of Louisiana

SINCE INCEPTION CHANGE IN VALUE

	Beginning Market Value	Ending October 31, 2019			Net Investment Change	Ending Market Value
		Contributions	Withdrawals	Net Cash Flow		
HarbourVest Partners XI Buyout (\$35,000,000)	--	\$1,400,000	\$0	\$1,400,000	\$154,001	\$1,554,001
Heitman America Real Estate Trust	--	\$12,000,000	\$0	\$12,000,000	\$2,875,223	\$14,875,223
JP Morgan India (\$8,990,000)	--	\$8,307,355	-\$3,814,303	\$4,493,052	-\$3,187,498	\$1,305,554
Landmark Equity Partners XV (\$25,000,000)	--	\$18,384,351	-\$13,395,284	\$4,989,067	\$4,786,809	\$9,775,876
Liquidating - BlackRock Global Focused	--	\$46,832,890	-\$59,572,953	-\$12,740,063	\$12,748,087	\$8,024
Louisiana Asset Management Pool	--	\$943,990,965	-\$944,296,689	-\$305,724	\$4,913,728	\$4,608,004
Louisiana Fund I (\$1,000,000)	--	\$1,010,000	\$0	\$1,010,000	\$423,550	\$1,433,550
LSV International Equity Value	--	\$103,818,122	-\$42,314,574	\$61,503,548	\$44,940,997	\$106,444,544
Mellon Stock Index Fund	--	\$275,513,975	-\$164,500,001	\$111,013,974	\$190,984,820	\$301,998,794
Mesirow (\$35,000,000)	--	\$11,653,620	\$0	\$11,653,620	-\$243,006	\$11,410,614
Murphree Venture (\$2,000,000)	--	\$2,058,578	-\$897,234	\$1,161,344	-\$547,813	\$613,531
OFI Emerging Markets	--	\$37,500,000	-\$11,500,000	\$26,000,000	\$5,675,026	\$31,675,026
Orleans Core Fixed Income	\$0	\$146,099,081	-\$91,022,995	\$55,076,086	\$40,401,618	\$95,477,704
QMA SMID	--	\$46,715,738	\$0	\$46,715,738	-\$1,538,522	\$45,177,216
Rothschild U.S. SMID Core	--	\$55,500,000	-\$27,500,000	\$28,000,000	\$18,065,129	\$46,065,129
Sentinel Real Estate Fund (\$30,000,000)	--	\$30,000,000	-\$18,739,200	\$11,260,800	\$26,117,513	\$37,378,313
State Street ACWI Index Fund	--	\$35,000,000	\$0	\$35,000,000	\$2,284,765	\$37,284,765
Stone Harbor	--	\$86,000,000	-\$81,027,382	\$4,972,618	-\$4,972,618	--
Thornburg Global Opportunities	--	\$47,500,000	-\$95,307,331	-\$47,807,331	\$83,324,710	\$35,517,379

Cash flow statistics exclude management fees and expenses.



Information Disclaimer

- Past performance is no guarantee of future results.
- All investments carry some level of risk. Diversification and other asset allocation techniques are not guaranteed to ensure profit or protect against losses.
- NEPC's source for portfolio pricing, calculation of accruals, and transaction information is the plan's custodian bank. Information on market indices and security characteristics is received from other sources external to NEPC. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.
- Some index returns displayed in this report or used in calculation of a policy, allocation or custom benchmark may be preliminary and subject to change.
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Reporting Methodology

- The client's custodian bank is NEPC's preferred data source unless otherwise directed. NEPC generally reconciles custodian data to manager data. If the custodian cannot provide accurate data, manager data may be used.
- Trailing time period returns are determined by geometrically linking the holding period returns, from the first full month after inception to the report date. Rates of return are annualized when the time period is longer than a year. Performance is presented gross and/or net of manager fees as indicated on each page.
- For managers funded in the middle of a month, the "since inception" return will start with the first full month, although actual inception dates and cash flows are taken into account in all Composite calculations.
- This report may contain forward-looking statements that are based on NEPC's estimates, opinions and beliefs, but NEPC cannot guarantee that any plan will achieve its targeted return or meet other goals.

