



Firefighters' Retirement System of Louisiana

#### MONTHLY PERFORMANCE REPORT

FIREFIGHTERS' RETIREMENT SYSTEM OF LOUISIANA

#### OCTOBER 31, 2021

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	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Oct	YTD
S&P 500	2.1%	16.0%	32.4%	13.7%	1.4%	12.0%	21.8%	-4.4%	31.5%	18.4%	7.0%	24.0%
Russell 1000	1.5%	16.4%	33.1%	13.2%	0.9%	12.1%	21.7%	-4.8%	31.4%	21.0%	6.9%	23.2%
Russell 2000	-4.2%	16.3%	38.8%	4.9%	-4.4%	21.3%	14.6%	-11.0%	25.5%	20.0%	4.3%	17.2%
Russell 2500	-2.5%	17.9%	36.8%	7.1%	-2.9%	17.6%	16.8%	-10.0%	27.8%	20.0%	4.9%	19.4%
MSCI EAFE	-12.1%	17.3%	22.8%	-4.9%	-0.8%	1.0%	25.0%	-13.8%	22.0%	7.8%	2.5%	11.0%
MSCI EM	-18.4%	18.2%	-2.6%	-2.2%	-14.9%	11.2%	37.3%	-14.6%	18.4%	18.3%	1.0%	-0.3%
MSCI ACWI	-7.3%	16.1%	22.8%	4.2%	-2.4%	7.9%	24.0%	-9.4%	26.6%	16.3%	5.1%	16.8%
Private Equity	9.5%	12.6%	22.3%	14.6%	10.4%	10.3%	21.0%	13.1%	17.2%	38.2%	-	9.7%
BBG TIPS	13.6%	7.0%	-8.6%	3.6%	-1.4%	4.7%	3.0%	-1.3%	8.4%	11.0%	1.1%	4.7%
BBG Municipal	10.7%	6.8%	-2.6%	9.1%	3.3%	0.2%	5.4%	1.3%	7.5%	5.2%	-0.3%	0.5%
BBG Muni High Yield	9.2%	18.1%	-5.5%	13.8%	1.8%	3.0%	9.7%	4.8%	10.7%	4.9%	-0.4%	6.1%
BBG US Corporate HY	5.0%	15.8%	7.4%	2.5%	-4.5%	17.1%	7.5%	-2.1%	14.3%	7.1%	-0.2%	4.4%
BBG US Agg Bond	7.8%	4.2%	-2.0%	6.0%	0.5%	2.6%	3.5%	0.0%	8.7%	7.5%	0.0%	-1.6%
BBG Global Agg	5.6%	4.3%	-2.6%	0.6%	-3.2%	2.1%	7.4%	-1.2%	6.8%	9.2%	-0.2%	-4.3%
BBG Long Treasuries	29.9%	3.6%	-12.7%	25.1%	-1.2%	1.3%	8.5%	-1.8%	14.8%	17.7%	1.9%	-5.8%
BBG US Long Credit	17.1%	12.7%	-6.6%	16.4%	-4.6%	10.2%	12.2%	-6.8%	23.4%	13.3%	1.5%	-1.2%
BBG US STRIPS 20+ Yr	58.5%	3.0%	-21.0%	46.4%	-3.7%	1.4%	13.7%	-4.1%	20.9%	24.0%	3.9%	-6.6%
JPM GBI-EM Global Div	-1.8%	16.8%	-9.0%	-5.7%	-14.9%	9.9%	15.2%	-6.2%	13.5%	2.7%	-1.3%	-7.6%
JPM EMBI Glob Div	7.3%	17.4%	-5.3%	7.4%	1.2%	10.2%	10.3%	-4.3%	15.0%	5.3%	0.0%	-1.3%
CS Hedge Fund	0.5%	5.9%	10.0%	5.4%	0.2%	-0.6%	7.2%	-1.1%	6.3%	4.1%	0.0%	11.3%
BBG Commodity	-13.3%	-1.1%	-9.5%	-17.0%	-24.7%	11.8%	1.7%	-11.2%	7.7%	-3.1%	2.6%	32.5%
Alerian Midstream	-	-	-	16.4%	-37.3%	33.8%	-2.4%	-13.3%	24.0%	-23.4%	6.1%	47.4%
FTSE NAREIT Equity REITs	8.3%	18.1%	2.5%	30.1%	3.2%	8.5%	5.2%	-4.6%	26.0%	-8.0%	7.6%	32.5%

\*PRIVATE EQUITY RETURN REPRESENTS CALENDAR YEAR POOLED IRR AND IS SUBJECT TO A ONE QUARTER LAG SOURCE: FACTSET, BARCLAYS, THOMSON ONE



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	2,311,096,730	100.0	100.0	2.6	2.4	12.0	25.0	12.6	10.3	7.1	6.3	Sep-92
Policy Index				2.8	2.7	10.4	22.4	13.0	10.9			Sep-92
Allocation Index				2.9	2.5	10.6	22.7	12.9	10.7			Sep-92
Total Equity Composite	1,321,918,648	56.0	57.2	4.4	2.7	17.5	40.1	16.1	13.5	10.9	8.0	Sep-92
MSCI ACWI				5.1	4.0	16.8	37.3	17.5	14.7	11.3	8.4	Sep-92
Domestic Equity Composite	663,771,124	27.5	28.7	6.5	6.3	23.0	44.1	19.1	16.6	13.3	8.9	Sep-92
Russell 3000				6.8	6.7	22.8	43.9	21.6	18.9	16.1	10.9	Sep-92
Mellon Stock Index Fund	499,431,719		21.6	7.0	7.6	24.0	42.9	21.5	18.9		15.0	Nov-13
S&P 500				7.0	7.6	24.0	42.9	21.5	18.9	16.2	15.0	Nov-13
SMID Cap Composite	164,339,405	7.0	7.1	4.8	2.4	20.4	48.6	12.8	12.0		10.2	Oct-12
Russell 2500			_	4.9	2.1	19.4	49.4	18.4	16.3	14.2	14.1	Oct-12
Rothschild U.S. SMID Core	43,618,877		1.9	4.9	1.4	20.6	49.7	13.8	13.9		10.1	Jul-15
Russell 2500			_	4.9	2.1	19.4	49.4	18.4	16.3	14.2	12.4	Jul-15
QMA SMID	31,180,606		1.3	4.6	4.9	29.1	58.5	14.5			10.5	Jul-18
Russell 2500				4.9	2.1	19.4	49.4	18.4	16.3	14.2	14.3	Jul-18
Blackrock Russell 2500 Index Fund	89,539,922		3.9	4.9	2.1						16.5	Feb-21
Russell 2500				4.9	2.1	19.4	49.4	18.4	16.3	14.2	16.6	Feb-21
International Equity Composite	266,181,861	11.5	11.5	2.4	0.3	12.3	37.7	13.2	10.7		7.9	Oct-12
MSCI ACWI ex USA				2.4	-0.7	8.4	29.7	12.0	9.8	6.7	6.9	Oct-12
LSV International Equity Value	124,325,547		5.4	0.8	-0.3	12.9	39.8	9.1	8.4	6.7	6.1	Oct-04
MSCI Custom Benchmark				2.4	-0.7	8.4	29.7	12.0	9.8	6.7	5.9	Oct-04
Fisher All Foreign Equity	141,856,314		6.1	3.8	0.9	12.0	36.2	17.2	12.9	8.5	8.0	Oct-04
MSCI ACWI ex USA				2.4	-0.7	8.4	29.7	12.0	9.8	6.7	6.6	Oct-04

Rothschild US SMID Core and QMASMID are prelim as of 10/31/2021.

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.

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.

Policy Index is comprised of 20.5% S&P 500, 7% Russell 2500, 11.5% MSCI ACWI ex USA, 7% MSCI Emerging Markets, 10% MSCI ACWI, 19% Bloomberg US Aggregate TR, 3% Bloomberg US TIPS TR, 3.5% EMD Custom Benchmark, 6.5% 60% MSCI World (Net) / 40% FTSE WGBI, 5% C|A US All PE (1 Qtr Lag), 6% NCREIF Property Index 1 Qtr. Lag and 1% C|A US Infrastructure (1 Qtr Lag).



	Market Value (\$)	Policy %	% of Portfolio	1 Mo (%)	Fiscal YTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Global Equity Composite	235,510,253	10.0	10.2	3.7	2.6	18.3	43.4	14.7	11.9		10.8	Oct-12
MSCI ACWI				5.1	4.0	16.8	37.3	17.5	14.7	11.3	11.4	Oct-12
Boston Partners Global Equity	135,106,664		5.8	2.7	1.5	20.3	50.1	11.8	11.2		11.2	Nov-16
MSCI ACWI				5.1	4.0	16.8	37.3	17.5	14.7	11.3	14.7	Nov-16
State Street ACWI Index Fund	100,378,945		4.3	5.1	4.0	17.0	37.5				21.3	Sep-19
MSCI ACWI				5.1	4.0	16.8	37.3	17.5	14.7	11.3	21.0	Sep-19
Emerging Markets Equity	156,455,410	7.0	6.8	0.1	-7.2	3.5	21.8	12.0	8.9		4.9	Oct-13
MSCI Emerging Markets				1.0	-7.2	-0.3	17.0	12.3	9.4	4.9	5.5	Oct-13
Acadian Emerging Markets Equity	107,561,645		4.7	-0.9	-7.1	6.1	24.3	11.1	8.3		4.6	Dec-13
MSCI Emerging Markets				1.0	-7.2	-0.3	17.0	12.3	9.4	4.9	5.2	Dec-13
Invesco Oppenheimer Developing Markets	48,893,765		2.1	2.1	-7.3	-1.2	17.2	13.8	10.4		5.6	Jan-14
MSCI Emerging Markets				1.0	-7.2	-0.3	17.0	12.3	9.4	4.9	5.5	Jan-14
Total Fixed Income Composite	567,581,019	25.5	24.6	0.0	0.0	-1.3	0.3	6.3	4.1		2.5	Oct-12
Total Fixed Income Custom Benchmark				-0.2	-0.6	-2.2	0.6	5.7	3.1	2.4	2.1	Oct-12
Core Fixed Income	422,085,146	19.0	18.3	0.0	0.0	-1.5	-0.3	5.7	4.1	3.5	3.4	Dec-10
Bloomberg US Aggregate TR				0.0	0.0	-1.6	-0.5	5.6	3.1	3.0	3.3	Dec-10
Orleans Core Fixed Income	101,034,701		4.4	0.0	-0.1	-1.3	0.3	5.7	3.3	3.2	5.5	Aug-92
Bloomberg US Aggregate TR				0.0	0.0	-1.6	-0.5	5.6	3.1	3.0	5.2	Aug-92
Blackrock US Debt	321,050,445		13.9	0.0	0.0	-1.6	-0.5	5.6	3.1		3.1	Nov-14
Bloomberg US Aggregate TR				0.0	0.0	-1.6	-0.5	5.6	3.1	3.0	3.1	Nov-14
US TIPS Composite	68,624,731	3.0	3.0									
Blackrock US TIPS Index	68,624,731		3.0	1.1	2.9	4.6	7.0	8.3			7.6	Oct-18
Bloomberg US TIPS TR				1.1	2.9	4.7	7.1	8.4	4.7	3.0	7.6	Oct-18
Emerging Markets Debt	76,871,141	3.5	3.3									
Wellington Blended Opportunistic EMD	76,871,141		3.3	-0.6	-2.3	-4.7	3.6				9.5	May-20
EMD Custom Benchmark				-0.7	-2.5	-4.5	2.6				8.1	May-20

Boston Partners Global Equity is prelim as of 10/31/2021.

State Street ACWI Index Fund and Orleans Core Fixed Income are estimated based off their benchmarks as of 10/31/2021.

Thornburg Global Opportunities market value as of 10/31/2021 is \$22,245.

Results for periods longer than one year are annualized.

Global Equity Composite start date is 10/1/2012.

Total Fixed Income Custom Benchmark is comprised of the Bloomberg Aggregate from 10/1/2012 to 10/31/2013; 75% Bloomberg Aggregate/25% JPM GBI EM Diversified from 11/1/2013 to 2/29/2016; 85% Bloomberg Aggregate/15% JPM GBI EM Diversified from 3/1/2016 to 12/31/2018; 70% Bloomberg Aggregate/20% JPM GBI EM Diversified/ 10% Bloomberg US TIPS going forward. EMD Custom Benchmark is comprised of 50% JPMorgan EMBI Global Diversified/50% JPMorgan GBI-EM Global Diversified as of 05/01/2020.

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



	Market Value (\$)	Policy %	% of Portfolio	1 Mo (%)	Fiscal YTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
GAA Composite	121,234,638	6.5	5.2	2.7	1.4	8.9	21.4	13.0	9.6		6.6	Apr-14
60% MSCI World (Net) / 40% FTSE WGBI				3.2	2.7	8.5	21.2	12.7	10.2	7.8	7.2	Apr-14
Blackrock Global Allocation	121,234,638		5.2	3.1	1.1	8.0	22.5	14.6	10.7		7.5	Apr-14
60% MSCI World (Net) / 40% FTSE WGBI				3.2	2.7	8.5	21.2	12.7	10.2	7.8	7.2	Apr-14
Total Alternative Composite	249,298,780	11.0	10.8	0.0	7.5	25.3	30.4	11.4	10.0	4.0	3.8	Jun-05
Private Equity Composite	109,177,730	5.0	4.7	0.0	12.4	51.8	65.9	21.1	16.3	5.9	1.3	Jul-05
C A US All PE (1 Qtr Lag)				0.0	13.5	39.5	53.9	20.8	19.5	15.3	14.8	Jul-05
Murphree Venture (\$2,000,000)	157,125		0.0	0.0	-1.2	0.0	-2.0	-24.9	-28.3	-14.6	-10.0	Sep-05
Louisiana Fund I (\$1,000,000)	1,407,629		0.1	0.0	-0.3	-0.3	-0.5	-6.2	-6.3	-2.5	-6.4	Jul-05
DCM Private Equity II (\$7,500,000)	762,341		0.0	0.0	1.0	13.5	16.2	-4.3	-2.1	-1.0	-1.8	Feb-06
GA Crossover Fund (\$25,000,000)	3,707,106		0.2	0.0	-0.1	-0.8	-1.0	4.4	4.5	14.5	11.9	Jan-08
CCMP Capital Investors III (\$15,000,000)	16,101,844		0.7	0.0	22.5	98.9	103.8	31.7	22.9		19.9	Oct-14
Landmark Equity Partners XV (\$25,000,000)	11,185,151		0.5	0.0	6.6	41.4	51.1	13.1	15.3		15.2	Dec-14
Harbourvest IV (\$20,000,000)	22,934,283		1.0	0.0	14.1	57.3	84.1	31.6	22.0		22.0	Nov-16
Mesirow (\$35,000,000)	35,858,081		1.6	0.0	9.7	43.7	57.5				17.7	Dec-18
HarbourVest Partners XI Buyout (\$35,000,000)	17,064,169		0.7	0.0	16.5	54.8	75.5				24.7	Jan-19

Results for periods longer than one year are annualized. Fiscal YTD ends June 30th. Private Equity valuations are as of 09/30/2021. AQR Global Risk Premium - EL terminated in 10/2021.



	Market Value (\$)	Policy %	% of Portfolio	1 Mo (%)	Fiscal YTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Real Estate Composite	140,121,050	6.0	6.1	0.0	3.5	7.1	7.6	4.2	5.3	5.2	4.9	Dec-09
NCREIF Property Index 1 Qtr. Lag				0.0	3.6	6.6	7.4	5.5	6.1	8.8	8.6	Dec-09
Sentinel Real Estate Fund (\$30,000,000)	41,397,399		1.8	0.0	6.9	15.2	16.4	8.4	8.3	12.0	6.8	Feb-06
JP Morgan India (\$8,990,000)	492,231		0.0	0.0	-20.6	-24.8	-26.6	-36.9	-28.9	-16.7	-18.8	Apr-07
Timbervest Crossover Fund (\$16,000,000)	4,701,224		0.2	0.0	-0.1	-15.1	-15.1	-4.5	-5.1	-2.9	-2.1	Apr-08
AEW Partners VI LP (\$20,000,000)	275,923		0.0	0.0	0.3	22.2	21.2	41.7	31.1	24.1	20.4	Mar-10
AEW Core Property (\$12,000,000)	25,952,473		1.1	0.0	3.3	6.9	6.9	4.6	5.5		6.3	May-15
FRS-GA (Georgia)	3,211,185		0.1	0.0	-0.1	-0.1	-0.1	-2.5	-7.6	-5.2	-7.9	Jun-08
FRS-LB I (NLTP AZ)	7,323,163		0.3	0.0	0.3	0.3	0.3	-0.3	10.4	-10.1	-9.7	Jun-07
FRS-LB III (ST George UT)	9,281,137		0.4	0.0	0.0	0.0	0.0	0.0	6.3	1.2	2.2	Jun-08
ASB Real Estate Fund	23,795,892		1.0	0.0	1.7	5.2	5.3	4.7	5.0		4.7	Jan-16
Heitman America Real Estate Trust	23,690,422		1.0	0.0	3.9	8.8	9.9	3.8	5.3		5.6	Nov-15
Real Assets Composite		1.0										
Total Cash (\$9 MM)	51,063,646		2.2	0.0	0.0	0.0	0.2	1.1	1.1	0.6	2.6	Jun-92
91 Day T-Bills				0.0	0.0	0.0	0.0	1.0	1.1	0.6	2.3	Jun-92

Results for periods longer than one year are annualized. Fiscal YTD ends June 30th. FRS – LB I is part of the Real Estate Composite as of 12/1/2012.



## Firefighters' Retirement System of Louisiana CURRENT MONTH CHANGE IN VALUE

Total Cash Flow Summary										
			Month E	Ending October 31, 2	2021					
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Fees	Net Investment Change	Ending Market Value			
Acadian Emerging Markets Equity	\$97,814,423	\$20,000,000	-\$10,000,000	\$10,000,000	-\$190,865	-\$252,778	\$107,561,645			
AEW Core Property (\$12,000,000)	\$21,952,473	\$4,000,000	\$0	\$4,000,000	\$0	\$0	\$25,952,473			
AEW Partners VI LP (\$20,000,000)	\$275,923	\$0	\$0	\$0	\$0	\$0	\$275,923			
AQR Global Risk Premium – EL	\$45,466,249	\$0	-\$45,813,320	-\$45,813,320	\$0	\$347,071	\$0			
ASB Real Estate Fund	\$23,795,892	\$0	\$0	\$0	\$0	\$0	\$23,795,892			
Blackrock Global Allocation	\$117,633,724	\$0	\$0	\$0	\$0	\$3,600,914	\$121,234,638			
Blackrock Russell 2500 Index Fund	\$85,350,772	\$0	\$0	\$0	\$0	\$4,189,150	\$89,539,922			
Blackrock US Debt	\$333,157,679	\$0	-\$12,000,000	-\$12,000,000	\$0	-\$107,234	\$321,050,445			
Blackrock US TIPS Index	\$67,862,863	\$0	\$0	\$0	\$0	\$761,868	\$68,624,731			
Boston Partners Global Equity	\$131,466,126	\$0	\$0	\$0	-\$59,419	\$3,640,538	\$135,106,664			
Cash/Clearing Account	\$10,815,392	\$69,618,724	-\$34,023,644	\$35,595,079	\$0	\$0	\$46,410,472			
CCMP Capital Investors III (\$15,000,000)	\$16,101,844	\$0	\$0	\$0	\$0	\$0	\$16,101,844			
DCM Private Equity II (\$7,500,000)	\$762,341	\$0	\$0	\$0	\$0	\$0	\$762,341			
Fisher All Foreign Equity	\$136,640,866	\$0	\$0	\$0	\$0	\$5,215,448	\$141,856,314			
FRS-GA (Georgia)	\$3,211,185	\$0	\$0	\$0	\$0	\$0	\$3,211,185			
FRS-LB I (NLTP AZ)	\$7,323,163	\$0	\$0	\$0	\$0	\$0	\$7,323,163			
FRS-LB III (ST George UT)	\$9,281,137	\$0	\$0	\$0	\$0	\$0	\$9,281,137			
GA Crossover Fund (\$25,000,000)	\$3,707,106	\$0	\$0	\$0	\$0	\$0	\$3,707,106			
Harbourvest IV (\$20,000,000)	\$22,934,283	\$0	\$0	\$0	\$0	\$0	\$22,934,283			
HarbourVest Partners XI Buyout (\$35,000,000)	\$17,686,451	\$0	-\$622,282	-\$622,282	\$0	\$0	\$17,064,169			
Heitman America Real Estate Trust	\$15,690,422	\$8,000,000	\$0	\$8,000,000	\$0	\$0	\$23,690,422			
Invesco Oppenheimer Developing Markets	\$47,884,978	\$0	\$0	\$0	-\$35,041	\$1,008,787	\$48,893,765			
JP Morgan India (\$8,990,000)	\$492,231	\$0	\$0	\$0	\$0	\$0	\$492,231			

AQR Global Risk Premium - EL terminated in 10/2021.



# Firefighters' Retirement System of Louisiana CURRENT MONTH CHANGE IN VALUE

	Month Ending October 31, 2021									
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Fees	Net Investment Change	Ending Market Value			
Landmark Equity Partners XV (\$25,000,000)	\$11,925,542	\$0	-\$740,390	-\$740,390	\$0	\$0	\$11,185,151			
Liquidating - BlackRock Global Focused	\$2,403	\$0	\$0	\$0	\$0	-\$5	\$2,398			
Louisiana Asset Management Pool	\$4,653,032	\$0	\$0	\$0	\$0	\$142	\$4,653,174			
Louisiana Fund I (\$1,000,000)	\$1,407,629	\$0	\$0	\$0	\$0	\$0	\$1,407,629			
LSV International Equity Value	\$123,354,668	\$0	\$0	\$0	\$0	\$970,879	\$124,325,547			
Mellon Stock Index Fund	\$466,731,556	\$0	\$0	\$0	\$0	\$32,700,163	\$499,431,719			
Mesirow (\$35,000,000)	\$35,858,081	\$0	\$0	\$0	\$0	\$0	\$35,858,081			
Murphree Venture (\$2,000,000)	\$157,125	\$0	\$0	\$0	\$0	\$0	\$157,125			
Orleans Core Fixed Income	\$101,062,594	\$0	\$0	\$0	\$0	-\$27,893	\$101,034,701			
QMA SMID	\$29,822,098	\$0	\$0	\$0	\$0	\$1,358,508	\$31,180,606			
Rothschild U.S. SMID Core	\$41,596,810	\$0	\$0	\$0	\$0	\$2,022,067	\$43,618,877			
Sentinel Real Estate Fund (\$30,000,000)	\$41,840,131	\$0	-\$442,732	-\$442,732	\$0	\$0	\$41,397,399			
State Street ACWI Index Fund	\$95,504,128	\$0	\$0	\$0	-\$5,019	\$4,874,817	\$100,378,945			
Thornburg Global Opportunities	\$22,280	\$0	\$0	\$0	\$0	-\$35	\$22,245			
Timbervest Crossover Fund (\$16,000,000)	\$4,701,224	\$0	\$0	\$0	\$0	\$0	\$4,701,224			
Wellington Blended Opportunistic EMD	\$77,309,151	\$0	\$0	\$0	-\$35,233	-\$438,010	\$76,871,141			
Total	\$2,253,255,978	\$101,618,724	-\$103,642,368	-\$2,023,644	-\$325,577	\$59,864,397	\$2,311,096,730			

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 YTI	D Ending October 3	1, 2021					
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Fees	Net Investment Change	Ending Market Value			
Acadian Emerging Markets Equity	\$104,376,391	\$20,000,000	-\$10,000,000	\$10,000,000	-\$358,641	-\$6,814,746	\$107,561,645			
AEW Core Property (\$12,000,000)	\$17,254,814	\$8,000,000	\$0	\$8,000,000	\$0	\$697,659	\$25,952,473			
AEW Partners VI LP (\$20,000,000)	\$275,140	\$0	\$0	\$0	\$0	\$783	\$275,923			
AQR Global Risk Premium – EL	\$45,208,154	\$0	-\$45,813,320	-\$45,813,320	-\$110,004	\$605,166	\$0			
ASB Real Estate Fund	\$23,401,835	\$0	\$0	\$0	\$0	\$394,057	\$23,795,892			
Blackrock Global Allocation	\$119,800,240	\$163,574	\$0	\$163,574	-\$163,574	\$1,270,824	\$121,234,638			
Blackrock Russell 2500 Index Fund	\$87,704,911	\$4,084	\$0	\$4,084	-\$4,084	\$1,830,928	\$89,539,922			
Blackrock US Debt	\$336,859,610	\$30,477	-\$16,000,000	-\$15,969,523	-\$30,477	\$160,358	\$321,050,445			
Blackrock US TIPS Index	\$66,704,105	\$8,044	\$0	\$8,044	-\$8,044	\$1,912,582	\$68,624,731			
Boston Partners Global Equity	\$133,005,764	\$0	-\$175,274	-\$175,274	-\$234,443	\$2,276,174	\$135,106,664			
Cash/Clearing Account	\$15,254,236	\$79,283,136	-\$48,126,929	\$31,156,206	\$0	\$29	\$46,410,472			
CCMP Capital Investors III (\$15,000,000)	\$13,750,237	\$0	-\$602,012	-\$602,012	\$0	\$2,953,619	\$16,101,844			
DCM Private Equity II (\$7,500,000)	\$820,113	\$0	-\$66,032	-\$66,032	\$0	\$8,260	\$762,341			
Fisher All Foreign Equity	\$140,615,686	\$0	\$0	\$0	-\$216,483	\$1,240,628	\$141,856,314			
FRS-GA (Georgia)	\$3,214,385	\$0	\$0	\$0	\$0	-\$3,200	\$3,211,185			
FRS-LB I (NLTP AZ)	\$7,298,899	\$0	\$0	\$0	\$0	\$24,264	\$7,323,163			
FRS-LB III (ST George UT)	\$9,281,276	\$0	\$0	\$0	\$0	-\$139	\$9,281,137			
GA Crossover Fund (\$25,000,000)	\$3,711,481	\$0	\$0	\$0	\$0	-\$4,375	\$3,707,106			
Harbourvest IV (\$20,000,000)	\$22,936,749	\$0	-\$3,214,694	-\$3,214,694	\$0	\$3,212,228	\$22,934,283			
HarbourVest Partners XI Buyout (\$35,000,000)	\$13,938,423	\$1,341,577	-\$622,282	\$719,295	\$0	\$2,406,451	\$17,064,169			
Heitman America Real Estate Trust	\$15,097,116	\$8,000,000	\$0	\$8,000,000	\$0	\$593,306	\$23,690,422			
Invesco Oppenheimer Developing Markets	\$52,716,049	\$0	\$0	\$0	-\$139,379	-\$3,822,284	\$48,893,765			
JP Morgan India (\$8,990,000)	\$659,654	\$0	-\$39,891	-\$39,891	\$0	-\$127,531	\$492,231			



# Firefighters' Retirement System of Louisiana CURRENT FYTD CHANGE IN VALUE

	Fiscal YTD Ending October 31, 2021									
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Fees	Net Investment Change	Ending Market Value			
Landmark Equity Partners XV (\$25,000,000)	\$11,715,230	\$0	-\$1,275,432	-\$1,275,432	\$0	\$745,353	\$11,185,151			
Liquidating - BlackRock Global Focused	\$2,458	\$0	\$0	\$0	\$0	-\$60	\$2,398			
Louisiana Asset Management Pool	\$4,652,637	\$0	\$0	\$0	\$0	\$537	\$4,653,174			
Louisiana Fund I (\$1,000,000)	\$1,412,003	\$0	\$0	\$0	\$0	-\$4,374	\$1,407,629			
LSV International Equity Value	\$124,650,605	\$0	-\$6,750	-\$6,750	-\$218,836	-\$318,308	\$124,325,547			
Mellon Stock Index Fund	\$464,035,382	\$26,941	\$0	\$26,941	-\$26,941	\$35,369,395	\$499,431,719			
Mesirow (\$35,000,000)	\$30,053,064	\$2,625,000	\$0	\$2,625,000	\$0	\$3,180,017	\$35,858,081			
Murphree Venture (\$2,000,000)	\$159,033	\$0	\$0	\$0	\$0	-\$1,908	\$157,125			
Orleans Core Fixed Income	\$101,120,836	\$0	\$0	\$0	\$0	-\$86,135	\$101,034,701			
QMA SMID	\$29,735,518	\$0	\$0	\$0	-\$37,093	\$1,445,088	\$31,180,606			
Rothschild U.S. SMID Core	\$43,021,266	\$0	\$0	\$0	-\$75,008	\$597,611	\$43,618,877			
Sentinel Real Estate Fund (\$30,000,000)	\$39,574,137	\$0	-\$888,939	-\$888,939	\$0	\$2,712,201	\$41,397,399			
State Street ACWI Index Fund	\$96,490,729	\$0	-\$15,186	-\$15,186	-\$19,632	\$3,903,402	\$100,378,945			
Thornburg Global Opportunities	\$23,123	\$0	-\$325	-\$325	\$0	-\$553	\$22,245			
Timbervest Crossover Fund (\$16,000,000)	\$4,704,816	\$0	\$0	\$0	\$0	-\$3,592	\$4,701,224			
Wellington Blended Opportunistic EMD	\$78,528,311	\$0	\$0	\$0	-\$143,047	-\$1,657,170	\$76,871,141			
Total	\$2,263,764,418	\$119,482,832	-\$126,847,066	-\$7,364,233	-\$1,785,685	\$54,696,546	\$2,311,096,730			

Beginning Market Value may not match the Ending Market Value of the previous Flash report due to delayed reporting of private investments (private equity and real estate).



### Firefighters' Retirement System of Louisiana SINCE INCEPTION CHANGE IN VALUE

Total Cash Flow Summary										
			Ending Octobe	er 31, 2021						
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Net Investment Change	Ending Market Value				
Acadian Emerging Markets Equity		\$105,000,000	-\$20,000,000	\$85,000,000	\$22,561,645	\$107,561,645				
AEW Core Property (\$12,000,000)		\$20,000,000	\$0	\$20,000,000	\$5,952,473	\$25,952,473				
AEW Partners VI LP (\$20,000,000)		\$18,420,450	-\$34,766,288	-\$16,345,838	\$16,621,761	\$275,923				
AQR Global Risk Premium – EL		\$101,500,000	-\$126,513,320	-\$25,013,320	\$25,013,320	\$0				
ASB Real Estate Fund		\$20,216,279	-\$141,910	\$20,074,369	\$3,721,523	\$23,795,892				
Blackrock Global Allocation		\$69,374,430	\$0	\$69,374,430	\$51,860,208	\$121,234,638				
Blackrock Russell 2500 Index Fund		\$79,006,414	\$0	\$79,006,414	\$10,533,508	\$89,539,922				
Blackrock US Debt		\$407,695,448	-\$144,500,000	\$263,195,448	\$57,854,997	\$321,050,445				
Blackrock US TIPS Index		\$55,060,608	-\$4,805	\$55,055,803	\$13,568,928	\$68,624,731				
Boston Partners Global Equity		\$80,939,406	-\$2,566,555	\$78,372,851	\$56,733,813	\$135,106,664				
Cash/Clearing Account		\$2,986,462,776	-\$2,943,943,815	\$42,518,961	\$3,891,511	\$46,410,472				
CCMP Capital Investors III (\$15,000,000)		\$13,421,953	-\$12,238,372	\$1,183,581	\$14,918,263	\$16,101,844				
DCM Private Equity II (\$7,500,000)		\$8,278,452	-\$7,685,208	\$593,244	\$169,097	\$762,341				
DTC Private Equity II-Q, L.P. (\$7,500,000)		\$5,480,845	-\$9,481,234	-\$4,000,389	\$4,000,389					
Energy Opportunities Fund		\$50,039,277	-\$44,452,892	\$5,586,384	-\$5,586,384					
Fisher All Foreign Equity		\$121,180,807	-\$100,308,187	\$20,872,620	\$120,983,694	\$141,856,314				
FRS-GA (Georgia)		\$9,416,075	\$0	\$9,416,075	-\$6,204,890	\$3,211,185				
FRS-LB I (NLTP AZ)		\$24,900,208	\$0	\$24,900,208	-\$17,577,045	\$7,323,163				
FRS-LB III (ST George UT)		\$6,878,923	\$0	\$6,878,923	\$2,402,214	\$9,281,137				
GA Crossover Fund (\$25,000,000)		\$25,000,000	-\$47,276,687	-\$22,276,687	\$25,983,793	\$3,707,106				
Greenspring Associates III (\$9,230,000)		\$8,491,600	-\$15,605,865	-\$7,114,265	\$7,114,265					
Harbourvest IV (\$20,000,000)		\$17,325,303	-\$13,888,011	\$3,437,292	\$19,496,991	\$22,934,283				

Cash flow statistics exclude management fees and expenses.



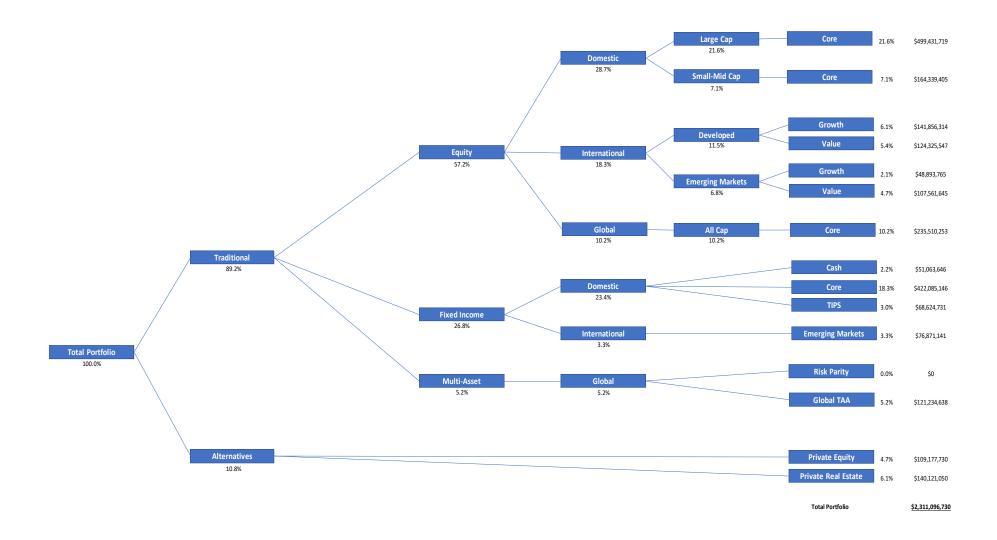
# Firefighters' Retirement System of Louisiana SINCE INCEPTION CHANGE IN VALUE

	Ending October 31, 2021									
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Net Investment Change	Ending Market Value				
HarbourVest Partners XI Buyout (\$35,000,000)		\$10,904,215	-\$855,637	\$10,048,578	\$7,015,591	\$17,064,169				
Heitman America Real Estate Trust		\$20,000,000	-\$423,708	\$19,576,292	\$4,114,130	\$23,690,422				
Invesco Oppenheimer Developing Markets		\$47,500,000	-\$11,500,000	\$36,000,000	\$12,893,765	\$48,893,765				
JP Morgan India (\$8,990,000)		\$8,307,355	-\$3,854,195	\$4,453,160	-\$3,960,929	\$492,231				
Landmark Equity Partners XV (\$25,000,000)		\$19,955,094	-\$17,414,501	\$2,540,594	\$8,644,558	\$11,185,151				
Liquidating - BlackRock Global Focused		\$46,832,890	-\$59,578,774	-\$12,745,884	\$12,748,282	\$2,398				
Louisiana Asset Management Pool		\$943,990,965	-\$944,296,689	-\$305,724	\$4,958,898	\$4,653,174				
Louisiana Fund I (\$1,000,000)		\$1,010,000	-\$23,904	\$986,096	\$421,533	\$1,407,629				
LSV International Equity Value		\$107,818,122	-\$52,322,286	\$55,495,836	\$68,829,712	\$124,325,547				
Mellon Stock Index Fund		\$310,627,329	-\$175,500,001	\$135,127,328	\$364,304,390	\$499,431,719				
Mesirow (\$35,000,000)		\$22,853,620	\$0	\$22,853,620	\$13,004,461	\$35,858,081				
Murphree Venture (\$2,000,000)		\$2,058,578	-\$1,009,818	\$1,048,760	-\$891,635	\$157,125				
Orleans Core Fixed Income	\$0	\$146,099,081	-\$91,022,995	\$55,076,086	\$45,958,615	\$101,034,701				
QMA SMID		\$51,715,738	-\$36,500,000	\$15,215,738	\$15,964,868	\$31,180,606				
Rothschild U.S. SMID Core		\$60,500,000	-\$55,000,000	\$5,500,000	\$38,118,877	\$43,618,877				
Sentinel Real Estate Fund (\$30,000,000)		\$30,000,000	-\$21,644,183	\$8,355,817	\$33,041,582	\$41,397,399				
State Street ACWI Index Fund		\$79,000,000	-\$20,031,009	\$58,968,991	\$41,409,954	\$100,378,945				
Thornburg Global Opportunities		\$47,500,000	-\$134,248,740	-\$86,748,740	\$86,770,985	\$22,245				
Timbervest Crossover Fund (\$16,000,000)		\$13,600,000	-\$9,607,895	\$3,992,105	\$709,119	\$4,701,224				
Wellington Blended Opportunistic EMD		\$75,000,000	\$0	\$75,000,000	\$1,871,141	\$76,871,141				

Cash flow statistics exclude management fees and expenses.



#### **ASSET ALLOCATION DECISION TREE**





#### **DISCLAIMERS & DISCLOSURES**

Past performance is no guarantee of future results.

Returns for pooled funds, e.g. mutual funds and collective investment trusts, are collected from third parties; they are not generally calculated by NEPC. Returns for separate accounts, with some exceptions, are calculated by NEPC. Returns are reported net of manager fees unless otherwise noted.

A "since inception" return, if reported, begins with the first full month after funding, although actual inception dates (e.g. the middle of a month) and the timing of cash flows are taken into account in Composite return calculations.

NEPC's preferred data source is the plan's custodian bank or record-keeper. If data cannot be obtained from one of the preferred data sources, data provided by investment managers may be used. Information on market indices and security characteristics is received from additional providers. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within. In addition, some index returns displayed in this report or used in calculation of a policy index, allocation index or other custom benchmark may be preliminary and subject to change.

All investments carry some level of risk. Diversification and other asset allocation techniques are not guaranteed to ensure profit or protect against losses.

The opinions presented herein represent the good faith views of NEPC as of the date of this presentation and are subject to change at any time. Neither fund performance nor universe rankings contained in this report should be considered a recommendation by NEPC.

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Source of private fund performance benchmark data: Cambridge Associates, via Refinitiv



