# INVESTMENT MARKET UPDATE

(AS OF FEBRUARY 29, 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	2019	Feb	YTD
S&P 500	15.1%	2.1%	16.0%	32.4%	13.7%	1.4%	12.0%	21.8%	-4.4%	31.5%	-8.2%	-8.3%
Russell 1000	16.1%	1.5%	16.4%	33.1%	13.2%	0.9%	12.1%	21.7%	-4.8%	31.4%	-8.2%	-8.1%
Russell 2000	26.9%	-4.2%	16.3%	38.8%	4.9%	-4,4%	21.3%	14.6%	-11.0%	25,5%	-8.4%	-11.4%
Russell 2500	26,7%	-2.5%	17.9%	36.8%	7.1%	-2.9%	17.6%	16.8%	-10.0%	27.8%	-8.4%	-10.2%
MSCI EAFE	7.8%	-12.1%	17.3%	22,8%	-4.9%	-0.8%	1.0%	25.0%	-13,8%	22.0%	-9.0%	-10.9%
MSCI EM	18.9%	-18.4%	18.2%	-2.6%	-2.2%	-14.9%	11.2%	37.3%	-14.6%	18.4%	-5.3%	-9.7%
MSCI ACWI	12.7%	-7.3%	16.1%	22,8%	4.2%	-2.4%	7.9%	24.0%	-9.4%	26.6%	-8.1%	-9.1%
Private Equity	19.8%	9.5%	12.6%	22.3%	14.6%	10.4%	10.3%	21.0%	13.1%	11.0%	-	11.0%
BC TIPS	6.3%	13.6%	7.0%	-8.6%	3.6%	-1.4%	4.7%	3.0%	-1.3%	8.4%	1.4%	3.5%
BC Municipal	2.4%	10.7%	6.8%	-2.6%	9.1%	3.3%	0.2%	5.4%	1.3%	7.5%	1.3%	3.1%
BC Muni High Yield	7.8%	9,2%	18.1%	-5.5%	13.8%	1.8%	3.0%	9.7%	4.8%	10.7%	2.1%	4.6%
BC US Corporate HY	15.1%	5.0%	15.8%	7.4%	2.5%	-4.5%	17.1%	7.5%	-2.1%	14.3%	-1.4%	-1.4%
BC US Agg Bond	6.5%	7.8%	4.2%	-2.0%	6.0%	0.5%	2.6%	3.5%	0.0%	8.7%	1.8%	3.8%
BC Global Agg	5.5%	5.6%	4.3%	-2.6%	0.6%	-3.2%	2.1%	7.4%	-1.2%	6.8%	0.7%	2.0%
BC Long Treasuries	9.4%	29.9%	3.6%	-12.7%	25.1%	-1.2%	1.3%	8.5%	-1.8%	14.8%	6.7%	14.0%
BC US Long Credit	10.7%	17.1%	12.7%	-6.6%	16.4%	-4.6%	10.2%	12.2%	-6.8%	23.4%	2.0%	6.1%
BC US STRIPS 20+ Yr	10.9%	58.5%	3.0%	-21.0%	46.4%	-3.7%	1.4%	13.7%	-4.1%	20.9%	9.3%	19.7%
JPM GBI-EM Global Div	15.7%	-1.8%	16.8%	-9.0%	-5.7%	-14.9%	9.9%	15.2%	-6.2%	13.5%	-3.4%	-4.7%
JPM EMBI Glob Div	12.2%	7.3%	17.4%	-5.3%	7.4%	1.2%	10.2%	10.3%	-4.3%	15.0%	-1.0%	0.5%
CS Hedge Fund	10,9%	-2,5%	7.7%	9.7%	4.1%	-0.7%	1,2%	7.1%	-3.2%	9.3%		0.2%
BBG Commodity	16.8%	-13.3%	-1.1%	-9.5%	-17.0%	-24.7%	11.8%	1.7%	-11.2%	7.7%	-5.0%	-12.0%
Alerian MLP	35.9%	13.9%	4.8%	27.6%	4.8%	-32.6%	18.3%	-6.5%	-12.4%	6.6%	-14.0%	-18.9%
FTSE NAREIT Equity REITs	28.0%	8.3%	18.1%	2.5%	30.1%	3.2%	8.5%	5.2%	-4.6%	26.0%	-8.0%	-6.9%

Source: FactSet, Barclays, Thomson One \*Private Equity return represents calendar year pooled IRR and is subject to a one quarter lag



## **MARKET COMMENTARY – FEBRUARY 2020**

#### **Market Environment**

February marked a particularly volatile month for capital markets with fears intensifying over the new coronavirus (COVID-19) turning into a pandemic as the number of new cases appearing outside of China outpaced those within China. In response, the CBOE Volatility Index shot up to 40.11, a new high since 2015.

Global equities were the hardest hit amid a wave of risk aversion, reflecting heightened uncertainty around future earnings and the growth outlook for multinational corporations; the S&P 500 declined 8.2% last month but is still in the black at 8.2% on a trailing one-year basis following the tremendous gains of 2019. Losses extended to international and emerging market equities as well, leading to declines of 9.0% and 5.3%, according to the MSCI EAFE and MSCI Emerging Markets indexes, respectively.

Within fixed income, global yields plunged. Treasury yields hit record lows across the curve, with the 10-year and 30-year bonds declining 37 and 34 basis points, respectively. In response, the Barclays US Treasury and Barclays US Long Treasury Indexes increased 2.7% and 6.7%, respectively, during the month. As markets digested the potential economic impact of the virus, futures markets priced in a significant response by the Federal Reserve; Fed Funds Futures contracts now anticipate three cuts to occur during 2020 compared to only one expected cut as of the end of 2019. Credit spreads widened with lower-quality securities bearing the brunt; the Barclays US Corporate High Yield option-adjusted spread increased 110 basis points to 5%, corresponding to a 1.4% decline in returns for February.

In real assets, commodities ended broadly lower reflecting uncertain demand. Energy was the most affected with spot WTI crude oil declining 12.3% for the month with year-to-date losses totaling 26%. Additionally, gold, which typically rallies when equities fall, suffered its largest daily decline since 2013 and ended the month in the red, underscoring the broader market volatility.

With uncertainty around the full economic impact of the coronavirus, we anticipate heightened market volatility in the near term. To this end, we encourage investors to maintain a diversified portfolio to help weather further selloffs. Additionally, we advise investors to use this opportunity to realize significant gains in government debt, deploying these as dry powder in the event of further market dislocation.



## **INVESTMENT PERFORMANCE FLASH REPORT**

Investment Performance Summary - Net of Fees												
	Market Value (\$)	Policy %	% of Portfolio	1 Mo (%)	3 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Plan Composite	1,751,649,516	100.0	100.0	-3.7	-2.1	1.8	5.6	5.7	4.5	5.5	5.7	Sep-92
Policy Index				-4.0	-2.0	1.5	6.2	6.9	5.9	-	122	Sep-92
Allocation Index				-3.8	-1.9	1.7	6.2	6.7	5.7			Sep-92
Total Equity Composite	829,556,971	49.0	47.4	-7.9	-6.6	-1.7	1.7	4.9	4.4	8.4	7.0	Sep-92
MSCI ACWI		8		-8.1	-5.9	-1.0	3.9	7.0	5.5	8.1	7.3	Sep-92
Domestic Equity Composite	370,161,114	21.5	21.1	-8.8	-7.0	-0.3	4.3	6.7	6.8	10.7	7.7	Sep-92
Russell 3000				-8.2	-5.6	1.2	6.9	9.3	8.7	12.5	9.6	Sep-92
Mellon Stock Index Fund	285,810,659		16.3	-8.2	-5.5	1.7	8.2	9.8	9.2		10.8	Nov-13
S&P 500				-8.2	-5.5	1.8	8.2	9.9	9.2	12.7	10.8	Nov-13
SMID Cap Composite	84,347,823	5.5	4.8	-10.8	-11.7	-6,6	-7.1	0.8	2.6	- 0.	6.8	Oct-12
Russell 2500				-8.4	-8.3	-3.8	-1.8	5.1	5.8	11.2	10.4	Oct-12
Rothschild U.S. SMID Core	42,920,011		2.5	-10.4	-10.5	-6.2	-5.4	2.8			4.4	Jul-15
Russell 2500				-8.4	-8.3	-3.8	-1.8	5.1	5.8	11.2	6.0	Jul-15
QMA SMID	41,427,812		2.4	-11.2	-12.9	-7.1	-8.8		-	000 B	-6.4	Jul-18
Russell 2500				-8.4	-8.3	-3.8	-1.8	5.1	<u>5.8</u>	11.2	-1.3	Jul-18
International Equity Composite	202,363,384	12.0	11.6	-8.1	-7.5	-4.2	-0.9	3.7	2.2	-	4.9	Oct-12
MSCI ACWI ex USA				-7.9	-6.5	-4.1	-0.7	4.2	2.2	4.3	4.4	Oct-12
LSV International Equity Value	97,714,971		5.6	-8.8	-8.7	-5.3	-4.6	2.0	1.9	5.2	5.0	Oct-04
MSCI Custom Benchmark				-7.9	-6.5	-4.1	-0.7	4.2	2.2	4.3	4.6	Oct-04
Fisher All Foreign Equity	104,648,412		6.0	-7.6	-6.4	-3.2	2.8	5.5	2.5	5.8	6.2	Oct-04
MSCI ACWI ex USA				-7.9	-6.5	-4.1	-0.7	4.2	2.2	4.3	5.3	Oct-04

Rothschild U.S. SMID Core, and QMA SMID are preliminary as of 02/29/2020, 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.

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.



## **INVESTMENT PERFORMANCE FLASH REPORT**

	Market Value (\$)	Policy %	% of Portfolio	1 Mo (%)	3 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Global Equity Composite	167,791,850	10.0	9.6	-6.6	-6.1	-0.7	1.2	2.7	2.2		7.7	Oct-12
MSCI ACWI				-8.1	-5.9	-1.0	3.9	7.0	5.5	8.1	8.2	Oct-12
Thornburg Global Opportunities	287,513		0.0	5.6	6.3	14.9	17.3	6.3	4.0	10.7	10.2	Oct-04
MSCI ACWI				-8.1	-5.9	-1.0	3.9	7.0	5.5	8.1	6.8	Oct-04
Boston Partners Global Equity	92,516,095		5.3	-10.0	-10.1	-6.5	-4.7	1.6			4.7	Nov-16
MSCI ACWI				-8.1	-5.9	-1.0	3.9	7.0	5.5	8.1	8.9	Nov-16
State Street ACWI Index Fund	74,980,241		4.3	-8.0	-5.8		(222)	222			1.3	Sep-19
MSCI ACWI				-8.1	-5.9	-1.0	3.9	7.0	5.5	8.1	1.1	Sep-19
Emerging Markets Equity	89,240,623	5.5	5.1	-5.6	-3.5	-3.6	-2.2	3.8	2.2		1.8	Oct-13
MSCI Emerging Markets				-5.3	-3.0	-3.3	-1.9	4.9	2.7	3.2	2.6	Oct-13
Acadian Emerging Markets Equity	58,315,550		3.3	-5.9	-3.5	-4.5	-4.6	1.8	1.1		1.2	Dec-13
MSCI Emerging Markets			a.	-5.3	-3.0	-3.3	-1.9	4.9	2.7	3.2	2.2	Dec-13
OFI Emerging Markets	30,925,073		1.8	-5.1	-3.5	-1.7	2.6	8.3	4.5	-	3.0	Jan-14
MSCI Emerging Markets				-5.3	-3.0	-3.3	-1.9	4.9	2.7	3.2	2.4	Jan-14
Total Fixed Income Composite	555,246,346	31.0	31.7	1.7	3.6	6.5	11.6	6.0	3.9		2.6	Oct-12
Total Fixed Income Custom Benchmark				0.7	2.9	4.9	10.1	4.8	3.1	3.2	2.2	Oct-12
Core Fixed Income	498,690,950	23.0	28.5	1.7	3.6	6.2	11.6	6.4	4.4		3.8	Dec-10
BBgBarc US Aggregate TR				1.8	3.7	6.3	11.7	5.0	3.6	3.9	3.6	Dec-10
Orleans Core Fixed Income	98,679,979		5.6	1.3	3.2	6.0	11.4	5.0	3.7	4.1	5.7	Aug-92
BBgBarc US Aggregate TR				1.8	3.7	6.3	11.7	5.0	3.6	3.9	5.5	Aug-92
Blackrock US Debt	400,010,971		22.8	1.8	3.7	6.3	11.7	5.0	3.6	1	3.7	Nov-14
BBgBarc US Aggregate TR				1.8	3.7	6.3	11.7	5.0	3.6	3.9	3.7	Nov-14
US TIPS Composite	56,555,396	3.0	3.2	1.4	3.9	5.7	10.7				8.2	Oct-18
Blackrock US TIPS Index	56,555,396		3.2	1,4	3,9	5,7	10.7			1000	8.2	Oct-18
BBgBarc US TIPS TR				1.4	3.9	5.7	10.8	4.1	2.9	3.7	8.2	Oct-18

Results for periods longer than one year are annualized.

Fiscal YTD ends June 30th.

Global Equity 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 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. Returns are net of manager fees.



## **INVESTMENT PERFORMANCE FLASH REPORT**

	Market Value (\$)	Policy %	% of Portfolio	1 Mo (%)	3 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
GAA Composite	173,015,368	10.0	9.9	-3.4	-0.6	3.0	9.2	5.6	3.9		4.1	Apr-14
60% MSCI World (Net) / 40% FTSE WGBI				-4.7	-2.6	1.0	6.4	6.4	4.9	6.3	4.6	Apr-14
Blackrock Global Allocation	88,608,280		5.1	-4.3	-1.5	2.8	7.0	5.2	4.0		4.2	Apr-14
60% MSCI World (Net) / 40% FTSE WGBI				-4.7	-2.6	1.0	6.4	6.4	4.9	6.3	4.6	Apr-14
AQR Global Risk Premium – EL	84,407,088		4.8	-2.5	0.4	3.2	12.1	6.3	3.8		4.1	May-14
60% MSCI World (Net) / 40% FTSE WGBI				-4.7	-2.6	1.0	6.4	6.4	4.9	6.3	4.5	May-14
Total Alternative Composite	183,631,337	10.0	10.5	0.0	1.6	3.3	3.7	6.2	5.3	2.0	2.4	Jun-05
Private Equity Composite	71,334,144	4.0	4.1	0.0	2.3	6.3	2.9	8.2	6.6	2.5	-2.0	Jul-05
Cambridge Associates US All PE (1 Qtr Lag)				0.0	1.3	4.8	8.0	14.2	11.4	14.0	13.1	Jul-05
Murphree Venture (\$2,000,000)	531,565		0.0	0.0	-19.7	-24.1	-23.8	-31.1	-20.6	-8.3	-7.5	Sep-05
Louisiana Fund I (\$1,000,000)	1,432,178		0.1	0.0	-0.1	-0.2	-17.3	-10.1	-7.2	-2.9	-7.1	Jul-05
DTC Private Equity II-Q, L.P. (\$7,500,000)	1,154,559		0.1	0.0	-2.4	-0.6	-5.5	6.5	4.6	9.5	5.6	Feb-06
Greenspring Associates III (\$9,230,000)	3,752,690		0.2	0.0	11.7	28.0	19.8	10.0	8.3	14.5	7.4	Feb-06
DCM Private Equity II (\$7,500,000)	1,025,688		0.1	0.0	-4.2	-6.1	-10.7	-3.8	-4.7	1.6	-2.0	Feb-06
FECP II (\$20,000,000)	37,466		0.0	0.0	9,4	71.5	54.6	48.4	16.2	15.2	14,1	Mar-08
GA Crossover Fund (\$25,000,000)	2,924,704		0.2	0.0	0.1	-11.0	-17.1	-0.5	5.3	14.7	11.4	Jan-08
CCMP Capital Investors III (\$15,000,000)	13,386,632		0.8	0.0	2.6	5.6	0.8	7.8	10.6		9.7	Oct-14
Landmark Equity Partners XV (\$25,000,000)	10,671,805		0.6	0.0	7.4	11.9	3.5	14.6	10.5		14.2	Dec-14
Harbourvest IV (\$20,000,000)	18,028,243		1.0	0.0	0.4	10.2	15.2	13.0			11.6	Nov-16
Mesirow (\$35,000,000)	14,955,811		0.9	0.0	0.4	0.8	-3.1				-2.5	Dec-18
HarbourVest Partners XI Buyout (\$35,000,000)	3,432,803		0.2	0.0	5.7	5.7	5.7				4.9	Jan-19

Results for periods longer than one year are annualized. Fiscal YTD ends June 30th. Private Equity valuations are as of 12/31/2019 and cash adjusted to date. Harbourvest IV was funded 10/01/2016.



# **INVESTMENT PERFORMANCE FLASH REPORT**

	Market Value (\$)	Policy %	% of Portfolio	1 Mo (%)	3 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Real Estate Composite	112,297,193	6.0	6.4	0.0	1.3	1.6	3.9	5.2	4.8	5.1	5.0	Dec-09
NCREIF Property Index 1 Qtr. Lag				0.0	1.4	2.9	6.2	6.8	8.6	9.8	9.2	Dec-09
Sentinel Real Estate Fund (\$30,000,000)	37,861,213		2.2	0.0	2.4	4.0	7.5	7.9	8.4	13.0	6.5	Feb-06
JP Morgan India (\$8,990,000)	1,108,014		0.1	0.0	-15.1	-43,5	-43.5	-27.8	-18.3	-8.6	-16.2	Apr-07
Timbervest Crossover Fund (\$16,000,000)	6,333,265		0.4	0.0	-2.0	1.3	1.9	-3.7	-3.7	-1.1	-1.2	Apr-08
AEW Partners VI LP (\$20,000,000)	777,138		0.0	0.0	47.7	50.2	52.4	29.3	22.8	18 - V. ( <u>1</u>	17.9	Mar-10
AEW Core Property (\$12,000,000)	16,719,753		1.0	0.0	1.4	2.8	5.9	6.5			7.1	May-15
FRS-GA (Georgia)	3,463,043		0.2	0.0	0.0	0,0	0.0	-10.1	-6.0	-9.8	-8.4	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	-10.9	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	14,495,747		0.8	0.0	-0.6	0.8	4.4	5.3	-		4.8	Jan-16
Heitman America Real Estate Trust	14,942,364		0.9	0.0	2.7	2.1	3.9	6.3		1	6.5	Nov-15
Total Cash (\$9 MM)	10,199,494		0.6	0.2	0.4	1.3	2.1	1.7	1.1	0.6	2.8	Jun-92
91 Day T-Bills				0.1	0.4	1.1	1.9	1.7	1.1	0.6	2.4	Jun-92

Results for periods longer than one year are annualized. Fiscal YTD ends June 30th. Real Estate valuations are as of 12/31/2019 and cash adjusted to date. FRS – LB I is part of the Real Estate Composite as of 12/1/2012.



## **CURRENT MONTH CHANGE IN VALUE**

		Total Cash Flow	v Summary				
			Month E	nding February 29, 20	20		
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Fees	Net Investment Change	Ending Market Value
Acadian Emerging Markets Equity	\$61,973,235	\$0	\$0	\$0	\$0	-\$3,657,685	\$58,315,550
AEW Core Property (\$12,000,000)	\$16,719,753	\$0	\$0	\$0	\$0	\$0	\$16,719,753
AEW Partners VI LP (\$20,000,000)	\$777,138	\$0	\$0	\$0	\$0	\$0	\$777,138
AQR Global Risk Premium – EL	\$86,542,801	\$0	\$0	\$0	-\$66,822	-\$2,135,713	\$84,407,088
ASB Real Estate Fund	\$14,495,747	\$0	\$0	\$0	\$0	\$0	\$14,495,747
Blackrock Global Allocation	\$92,543,668	\$0	\$0	\$0	\$0	-\$3,935,388	\$88,608,280
Blackrock US Debt	\$392,896,124	\$0	\$0	\$0	\$0	\$7,114,847	\$400,010,971
Blackrock US TIPS Index	\$55,784,794	\$0	\$0	\$0	\$0	\$770,601	\$56,555,396
Boston Partners Global Equity	\$102,766,526	\$0	\$0	\$0	-\$41,673	-\$10,250,430	\$92,516,095
Cash/Clearing Account	\$4,316,757	\$45,873,486	-\$44,642,798	\$1,230,688	\$0	\$17,969	\$5,565,414
CCMP Capital Investors III (\$15,000,000)	\$13,340,541	\$46,091	\$0	\$46,091	\$0	\$0	\$13,386,632
DCM Private Equity II (\$7,500,000)	\$1,025,688	\$0	\$0	\$0	\$0	\$0	\$1,025,688
DTC Private Equity II-Q, L.P. (\$7,500,000)	\$1,154,559	\$0	\$0	\$0	\$0	\$0	\$1,154,559
Energy Opportunities Fund	\$2,629	\$0	\$0	\$0	\$0	\$3	\$2,633
FECP II (\$20,000,000)	\$37,466	\$0	\$0	\$0	\$0	\$0	\$37,466
Fisher All Foreign Equity	\$113,197,405	\$0	\$0	\$0	\$0	-\$8,548,992	\$104,648,412
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)	\$3,924,704	\$0	-\$1,000,000	-\$1,000,000	\$0	\$0	\$2,924,704
Greenspring Associates III (\$9,230,000)	\$3,752,690	\$0	\$0	\$0	\$0	\$0	\$3,752,690
Harbourvest IV (\$20,000,000)	\$18,028,243	\$0	\$0	\$0	\$0	\$0	\$18,028,243
HarbourVest Partners XI Buyout (\$35,000,000)	\$3,432,803	\$0	\$0	\$0	\$0	\$0	\$3,432,803



# **CURRENT MONTH CHANGE IN VALUE**

			Month E	Ending February 29, 20	020		
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Fees	Net Investment Change	Ending Market Value
Heitman America Real Estate Trust	\$14,942,364	\$0	\$0	\$0	\$0	\$0	\$14,942,364
JP Morgan India (\$8,990,000)	\$1,108,014	\$0	\$0	\$0	\$0	\$0	\$1,108,014
Landmark Equity Partners XV (\$25,000,000)	\$10,435,761	\$236,044	\$0	\$236,044	\$0	\$0	\$10,671,805
Liquidating - BlackRock Global Focused	\$8,003	\$0	\$0	\$0	\$0	-\$3	\$8,000
Louisiana Asset Management Pool	\$4,628,056	\$0	\$0	\$0	\$0	\$6,025	\$4,634,081
Louisiana Fund I (\$1,000,000)	\$1,432,178	\$0	\$0	\$0	\$0	\$0	\$1,432,178
LSV International Equity Value	\$107,115,096	\$0	-\$309	-\$309	\$0	-\$9,399,816	\$97,714,971
Mellon Stock Index Fund	\$317,254,673	\$0	-\$6,000,000	-\$6,000,000	\$0	-\$25,444,014	\$285,810,659
Mesirow (\$35,000,000)	\$12,855,811	\$2,100,000	\$0	\$2,100,000	\$0	\$0	\$14,955,811
Murphree Venture (\$2,000,000)	\$531,565	\$0	\$0	\$0	\$0	\$0	\$531,565
OFI Emerging Markets	\$32,575,005	\$0	\$0	\$0	-\$22,163	-\$1,649,932	\$30,925,073
Orleans Core Fixed Income	\$97,443,903	\$0	\$0	\$0	\$0	\$1,236,076	\$98,679,979
QMA SMID	\$46,641,380	\$0	\$0	\$0	-\$61,950	-\$5,213,568	\$41,427,812
Rothschild U.S. SMID Core	\$47,912,684	\$0	\$0	\$0	-\$84,642	-\$4,992,673	\$42,920,011
Sentinel Real Estate Fund (\$30,000,000)	\$37,861,213	\$0	\$0	\$0	\$0	\$0	\$37,861,213
State Street ACWI Index Fund	\$39,113,351	\$39,000,000	\$0	\$39,000,000	\$0	-\$3,133,110	\$74,980,241
Thornburg Global Opportunities	\$37,282,696	\$0	-\$38,862,698	-\$38,862,698	\$0	\$1,867,515	\$287,513
Timbervest Crossover Fund (\$16,000,000)	\$6,333,265	\$0	\$0	\$0	\$0	\$0	\$6,333,265
Total	\$1,822,247,988	\$87,255,621	-\$90,505,806	-\$3,250,184	-\$277,250	-\$67,348,287	\$1,751,649,516

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).



# **CURRENT FYTD CHANGE IN VALUE**

		Total Cash Flow	w Summary				
			Fiscal YTE	Ending February 29	9, 2020		
	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	-\$338,020	-\$2,772,406	\$58,315,550
AEW Core Property (\$12,000,000)	\$16,269,443	\$0	\$0	\$0	\$0	\$450,310	\$16,719,753
AEW Partners VI LP (\$20,000,000)	\$8,874,888	\$0	-\$9,846,919	-\$9,846,919	\$0	\$1,749,169	\$777,138
AQR Global Risk Premium – EL	\$81,793,968	\$0	\$0	\$0	-\$534,723	\$2,613,120	\$84,407,088
ASB Real Estate Fund	\$14,375,136	\$0	\$0	\$0	\$0	\$120,611	\$14,495,747
Blackrock Global Allocation	\$86,219,909	\$0	\$0	\$0	\$0	\$2,388,371	\$88,608,280
Blackrock US Debt	\$296,301,894	\$80,000,000	\$0	\$80,000,000	\$0	\$23,709,077	\$400,010,971
Blackrock US TIPS Index	\$53,502,426	\$0	\$0	\$0	\$0	\$3,052,970	\$56,555,396
Boston Partners Global Equity	\$98,946,150	\$0	-\$400,867	-\$400,867	-\$358,303	-\$6,029,188	\$92,516,095
Cash/Clearing Account	\$10,592,120	\$181,496,850	-\$186,719,580	-\$5,222,730	\$0	\$196,024	\$5,565,414
CCMP Capital Investors III (\$15,000,000)	\$15,762,009	\$46,091	-\$3,134,513	-\$3,088,422	\$0	\$713,045	\$13,386,632
DCM Private Equity II (\$7,500,000)	\$1,190,696	\$0	-\$95,792	-\$95,792	\$0	-\$69,215	\$1,025,688
DTC Private Equity II-Q, L.P. (\$7,500,000)	\$1,311,002	\$0	-\$150,000	-\$150,000	\$0	-\$6,443	\$1,154,559
Energy Opportunities Fund	\$33	\$0	\$0	\$0	\$0	\$2,599	\$2,633
FECP II (\$20,000,000)	\$197,102	\$0	-\$294,412	-\$294,412	\$0	\$134,776	\$37,466
Fisher All Foreign Equity	\$108,054,069	\$0	-\$630	-\$630	-\$477,847	-\$3,405,027	\$104,648,412
FRS-GA (Georgia)	\$3,463,900	\$0	\$0	\$0	\$0	-\$857	\$3,463,043
FRS-LB I (NLTP AZ)	\$7,380,981	\$0	\$0	\$0	\$0	-\$65,871	\$7,315,110
FRS-LB III (ST George UT)	\$9,288,030	\$0	\$0	\$0	\$0	-\$6,484	\$9,281,546
GA Crossover Fund (\$25,000,000)	\$4,408,965	\$0	-\$1,000,000	-\$1,000,000	\$0	-\$484,261	\$2,924,704
Greenspring Associates III (\$9,230,000)	\$3,098,632	\$0	-\$166,140	-\$166,140	\$0	\$820,198	\$3,752,690
Harbourvest IV (\$20,000,000)	\$17,901,972	\$0	-\$1,540,000	-\$1,540,000	\$0	\$1,666,271	\$18,028,243
HarbourVest Partners XI Buyout (\$35,000,000)	\$154,001	\$3,150,000	\$0	\$3,150,000	\$0	\$128,802	\$3,432,803



## **CURRENT FYTD CHANGE IN VALUE**

			Fiscal YT	D Ending February 29	, 2020		
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Fees	Net Investment Change	Ending Market Value
Heitman America Real Estate Trust	\$14,962,989	\$0	-\$320,339	-\$320,339	\$0	\$299,714	\$14,942,364
JP Morgan India (\$8,990,000)	\$1,962,601	\$0	\$0	\$0	\$0	-\$854,587	\$1,108,014
Landmark Equity Partners XV (\$25,000,000)	\$9,208,194	\$1,006,990	-\$651,247	\$355,743	\$0	\$1,107,868	\$10,671,805
Liquidating - BlackRock Global Focused	\$8,142	\$0	\$0	\$0	\$0	-\$142	\$8,000
Louisiana Asset Management Pool	\$4,574,500	\$0	\$0	\$0	\$0	\$59,580	\$4,634,081
Louisiana Fund I (\$1,000,000)	\$1,435,336	\$0	\$0	\$0	\$0	-\$3,158	\$1,432,178
LSV International Equity Value	\$103,194,258	\$0	-\$1,470	-\$1,470	-\$544,209	-\$5,477,817	\$97,714,971
Mellon Stock Index Fund	\$290,644,592	\$38,152	-\$11,000,000	-\$10,961,848	-\$79,357	\$6,127,914	\$285,810,659
Mesirow (\$35,000,000)	\$8,397,499	\$6,475,000	\$0	\$6,475,000	\$0	\$83,312	\$14,955,811
Murphree Venture (\$2,000,000)	\$700,593	\$0	\$0	\$0	\$0	-\$169,028	\$531,565
OFI Emerging Markets	\$31,465,066	\$0	\$0	\$0	-\$180,943	-\$539,992	\$30,925,073
Orleans Core Fixed Income	\$93,124,492	\$0	\$0	\$0	-\$60,971	\$5,555,488	\$98,679,979
QMA SMID	\$44,604,801	\$0	\$0	\$0	-\$178,230	-\$3,176,988	\$41,427,812
Rothschild U.S. SMID Core	\$45,743,366	\$0	\$0	\$0	-\$242,823	-\$2,823,356	\$42,920,011
Sentinel Real Estate Fund (\$30,000,000)	\$37,587,805	\$0	-\$1,189,990	-\$1,189,990	\$0	\$1,463,398	\$37,861,213
State Street ACWI Index Fund	-	\$74,000,000	\$0	\$74,000,000	-\$10,276	\$980,241	\$74,980,241
Thornburg Global Opportunities	\$60,232,986	\$0	-\$63,863,771	-\$63,863,771	-\$149,003	\$3,918,298	\$287,513
Timbervest Crossover Fund (\$16,000,000)	\$6,661,868	\$0	-\$416,000	-\$416,000	\$0	\$87,397	\$6,333,265
Z TERMINATED - Stone Harbor	\$79,483,138	\$0	-\$81,027,382	-\$81,027,382	\$0	\$1,544,244	- <sup>1</sup>
Total	\$1,734,167,508	\$346,213,083	-\$361,819,052	-\$15,605,969	-\$3,154,704	\$33,087,977	\$1,751,649,516

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).



## SINCE INCEPTION CHANGE IN VALUE

	Total C	ash Flow Summa	ary			
			Ending Februa	ry 29, 2020		
	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	\$3,315,550	\$58,315,550
AEW Core Property (\$12,000,000)	-	\$12,000,000	\$0	\$12,000,000	\$4,719,753	\$16,719,753
AEW Partners VI LP (\$20,000,000)		\$18,420,450	-\$33,898,363	-\$15,477,913	\$16,255,051	\$777,138
AQR Global Risk Premium – EL		\$101,500,000	-\$30,700,000	\$70,800,000	\$13,607,088	\$84,407,088
ASB Real Estate Fund		\$12,216,279	-\$141,910	\$12,074,369	\$2,421,378	\$14,495,747
Blackrock Global Allocation	1949 - 19 <sup>40</sup> - 1949 - 1949	\$68,682,390	\$0	\$68,682,390	\$19,925,889	\$88,608,280
Blackrock US Debt		\$407,536,521	-\$58,500,000	\$349,036,521	\$50,974,450	\$400,010,971
Blackrock US TIPS Index	L.	\$50,016,034	-\$4,805	\$50,011,229	\$6,544,167	\$56,555,396
Boston Partners Global Equity		\$80,939,406	-\$1,731,015	\$79,208,390	\$13,307,705	\$92,516,095
Cash/Clearing Account	lan al 👘 😐 .	\$2,590,896,800	-\$2,589,182,513	\$1,714,288	\$3,851,126	\$5,565,414
CCMP Capital Investors III (\$15,000,000)		\$13,421,953	-\$4,742,087	\$8,679,866	\$4,706,766	\$13,386,632
DCM Private Equity II (\$7,500,000)		\$8,232,280	-\$7,403,910	\$828,370	\$197,318	\$1,025,688
DTC Private Equity II-Q, L.P. (\$7,500,000)		\$5,480,845	-\$8,437,500	-\$2,956,655	\$4,111,214	\$1,154,559
Energy Opportunities Fund		\$50,039,277	-\$44,450,083	\$5,589,194	-\$5,586,562	\$2,633
FECP II (\$20,000,000)		\$19,188,998	-\$22,596,774	-\$3,407,776	\$3,445,242	\$37,466
Fisher All Foreign Equity	-	\$117,180,807	-\$80,308,187	\$36,872,620	\$67,775,792	\$104,648,412
FRS-GA (Georgia)	The second of the	\$9,416,075	\$0	\$9,416,075	-\$5,953,032	\$3,463,043
FRS-LB I (NLTP AZ)	- 5112 E	\$24,900,208	\$0	\$24,900,208	-\$17,585,098	\$7,315,110
FRS-LB III (ST George UT)	L 2Y RLI RIO	\$6,878,923	\$0	\$6,878,923	\$2,402,623	\$9,281,546
GA Crossover Fund (\$25,000,000)		\$25,000,000	-\$47,276,687	-\$22,276,687	\$25,201,391	\$2,924,704
Greenspring Associates III (\$9,230,000)	1997 (State 1992)	\$8,491,600	-\$13,277,908	-\$4,786,308	\$8,538,998	\$3,752,690
Harbourvest IV (\$20,000,000)		\$17,325,303	-\$4,447,769	\$12,877,534	\$5,150,709	\$18,028,243

Cash flow statistics exclude management fees and expenses.



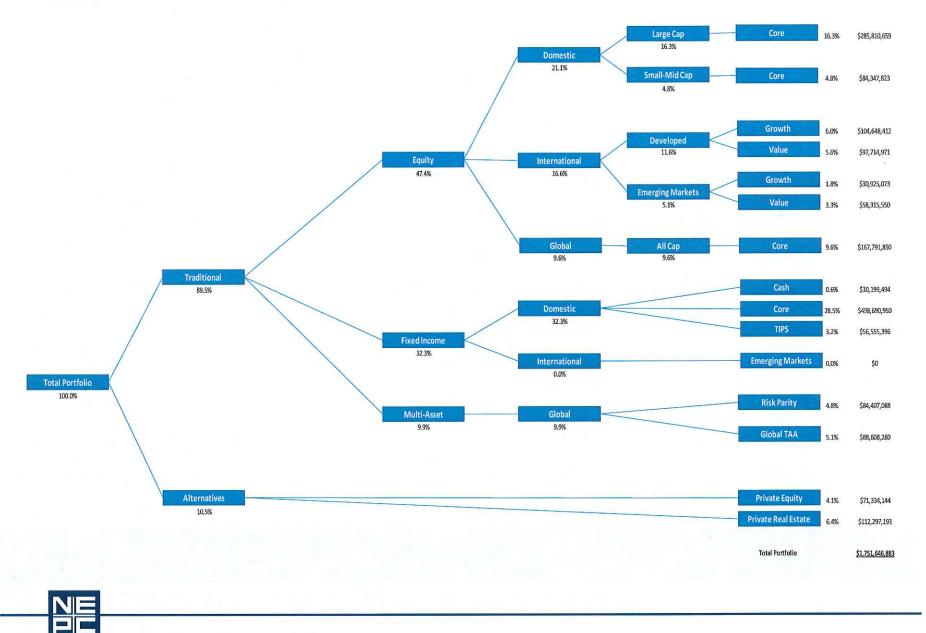
# **SINCE INCEPTION CHANGE IN VALUE**

			Ending Februa	ry 29, 2020		S. S. M. C. Marken
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Net Investment Change	Ending Market Value
HarbourVest Partners XI Buyout (\$35,000,000)	-	\$3,150,000	\$0	\$3,150,000	\$282,803	\$3,432,803
Heitman America Real Estate Trust		\$12,000,000	-\$320,339	\$11,679,661	\$3,262,703	\$14,942,364
JP Morgan India (\$8,990,000)		\$8,307,355	-\$3,814,303	\$4,493,052	-\$3,385,038	\$1,108,014
Landmark Equity Partners XV (\$25,000,000)	a	\$18,804,165	-\$13,642,320	\$5,161,845	\$5,509,960	\$10,671,805
Liquidating - BlackRock Global Focused		\$46,832,890	-\$59,572,953	-\$12,740,063	\$12,748,064	\$8,000
Louisiana Asset Management Pool		\$943,990,965	-\$944,296,689	-\$305,724	\$4,939,805	\$4,634,081
Louisiana Fund I (\$1,000,000)		\$1,010,000	\$0	\$1,010,000	\$422,178	\$1,432,178
LSV International Equity Value	-	\$103,818,122	-\$42,314,883	\$61,503,239	\$36,211,732	\$97,714,971
Mellon Stock Index Fund	A CONTRACT OF THE	\$275,513,975	-\$175,500,001	\$100,013,974	\$185,796,685	\$285,810,659
Mesirow (\$35,000,000)		\$15,153,620	\$0	\$15,153,620	-\$197,809	\$14,955,811
Murphree Venture (\$2,000,000)		\$2,058,578	-\$848,459	\$1,210,119	-\$678,554	\$531,565
OFI Emerging Markets		\$37,500,000	-\$11,500,000	\$26,000,000	\$4,925,073	\$30,925,073
Orleans Core Fixed Income	\$0	\$146,099,081	-\$91,022,995	\$55,076,086	\$43,603,893	\$98,679,979
QMA SMID		\$46,715,738	\$0	\$46,715,738	-\$5,287,926	\$41,427,812
Rothschild U.S. SMID Core		\$55,500,000	-\$27,500,000	\$28,000,000	\$14,920,011	\$42,920,011
Sentinel Real Estate Fund (\$30,000,000)		\$30,000,000	-\$19,158,431	\$10,841,569	\$27,019,644	\$37,861,213
State Street ACWI Index Fund		\$74,000,000	\$0	\$74,000,000	\$980,241	\$74,980,241
Thornburg Global Opportunities	· · · · · · · · · · · · · · · · · · ·	\$47,500,000	-\$134,170,030	-\$86,670,030	\$86,957,542	\$287,513
Timbervest Crossover Fund (\$16,000,000)		\$13,600,000	-\$8,679,895	\$4,920,105	\$1,413,160	\$6,333,265

Cash flow statistics exclude management fees and expenses.



## **ASSET ALLOCATION DECISION TREE**



#### **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.



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