

# INVESTMENT MARKET UPDATE

(AS OF NOVEMBER 30, 2019)

## LOUISIANA MUNICIPAL POLICE EMPLOYEES' RETIREMENT SYSTEM

David Barnes, CFA, CAIA Senior Consultant

Rhett Humphreys, CFA, Partner



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

# CALENDAR YEAR INDEX PERFORMANCE

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Q1	Q2	Q3	Oct.	Nov.	YTD
S&P 500	26.5%	15.1%	2.1%	16.0%	32.4%	13.7%	1.4%	12.0%	21.8%	-4.4%	13.6%	4.3%	1.7%	2.2%	3.6%	27.6%
Russell 1000	28.4%	16.1%	1.5%	16.4%	33.1%	13.2%	0.9%	12.1%	21.7%	-4.8%	14.0%	4.2%	1.4%	2.1%	3.8%	27.7%
Russell 2000	27.2%	26.9%	-4.2%	16.3%	38.8%	4.9%	-4.4%	21.3%	14.6%	-11.0%	14.6%	2.1%	-2.4%	2.6%	4.1%	22.0%
Russell 2500	34.4%	26.7%	-2.5%	17.9%	36.8%	7.1%	-2.9%	17.6%	16.8%	-10.0%	15.8%	3.0%	-1.3%	1.9%	4.3%	25.1%
MSCI EAFE	31.8%	7.8%	-12.1%	17.3%	22.8%	-4.9%	-0.8%	1.0%	25.0%	-13.8%	10.0%	3.7%	-1.1%	3.6%	1.1%	18.2%
MSCI EM	78.5%	18.9%	-18.4%	18.2%	-2.6%	-2.2%	-14.9%	11.2%	37.3%	-14.6%	9.9%	0.6%	-4.2%	4.2%	-0.1%	10.2%
MSCI ACWI	34.6%	12.7%	-7.3%	16.1%	22.8%	4.2%	-2.4%	7.9%	24.0%	-9.4%	12.2%	3.6%	0.0%	2.8%	2.5%	22.4%
Private Equity*	13.7%	19.8%	9.5%	12.6%	22.3%	14.6%	10.4%	10.3%	21.0%	13.1%	4.9%	--	--	--	--	9.9%
BC TIPS	11.4%	6.3%	13.6%	7.0%	-8.6%	3.6%	-1.4%	4.7%	3.0%	-1.3%	3.2%	2.9%	1.3%	0.3%	0.2%	8.0%
BC Municipal Bond	12.9%	2.4%	10.7%	6.8%	-2.6%	9.1%	3.3%	0.2%	5.4%	1.3%	2.9%	2.1%	1.6%	0.2%	0.3%	7.2%
BC Muni High Yield	32.7%	7.8%	9.2%	18.1%	-5.5%	13.8%	1.8%	3.0%	9.7%	4.8%	3.8%	2.7%	2.8%	0.2%	0.4%	10.3%
BC US Corp High Yield	58.2%	15.1%	5.0%	15.8%	7.4%	2.5%	-4.5%	17.1%	7.5%	-2.1%	7.3%	2.5%	1.3%	0.3%	0.3%	12.1%
BC US Aggregate	5.9%	6.5%	7.8%	4.2%	-2.0%	6.0%	0.5%	2.6%	3.5%	0.0%	2.9%	3.1%	2.3%	0.3%	-0.1%	8.8%
BC Global Aggregate	6.9%	5.5%	5.6%	4.3%	-2.6%	0.6%	-3.2%	2.1%	7.4%	-1.2%	2.2%	3.3%	0.7%	0.7%	-0.8%	6.2%
BC Long Treasuries	-12.9%	9.4%	29.9%	3.6%	-12.7%	25.1%	-1.2%	1.3%	8.5%	-1.8%	4.7%	6.0%	7.9%	-0.9%	-0.5%	18.1%
BC US Long Credit	16.8%	10.7%	17.1%	12.7%	-6.6%	16.4%	-4.6%	10.2%	12.2%	-6.8%	7.9%	7.0%	5.6%	0.5%	0.5%	23.2%
BC US STRIPS 20+ Yr	-36.0%	10.9%	58.5%	3.0%	-20.9%	46.4%	-3.7%	1.4%	13.7%	-4.1%	6.3%	7.9%	12.0%	-1.4%	-0.3%	26.2%
JPM GBI-EM Global Div	22.0%	15.1%	-1.8%	16.8%	-9.0%	-5.7%	-14.9%	9.9%	15.2%	-6.2%	2.9%	5.6%	-0.8%	2.9%	-1.8%	9.0%
JPM EMBI Glob Div	29.8%	12.2%	7.3%	17.4%	-5.3%	7.4%	1.2%	10.2%	10.3%	-4.3%	7.0%	4.1%	1.5%	0.3%	-0.5%	12.8%
CS Leveraged Loan	45.0%	10.0%	1.8%	9.4%	6.2%	2.1%	-0.4%	9.9%	4.2%	1.1%	3.8%	1.6%	0.9%	-0.5%	0.6%	6.5%
CS Hedge Fund	18.6%	11.0%	-2.5%	7.7%	9.7%	4.2%	-0.7%	1.3%	7.1%	-3.2%	3.6%	2.4%	0.3%	0.3%	0.0%	6.7%
BBG Commodity	18.9%	16.8%	-13.3%	-1.1%	-9.5%	-17.0%	-24.7%	11.8%	1.7%	-11.2%	6.3%	-1.2%	-1.8%	2.0%	-2.6%	2.5%
Alerian MLP	76.4%	35.9%	13.9%	4.8%	27.6%	4.8%	-32.6%	18.3%	-6.5%	-12.4%	16.8%	0.1%	-5.0%	-6.2%	-5.8%	-1.8%
FTSE NAREIT Equity REITs	28.0%	27.9%	8.3%	18.1%	2.5%	30.1%	3.2%	8.5%	5.2%	-4.6%	16.3%	1.2%	7.8%	1.4%	-1.5%	26.8%

Source: Bloomberg, Barclays, Alerian, Nareit, MSCI, JP Morgan, Credit Suisse, Thomson One  
 \*Private Equity return represents calendar year pooled IRR and is subject to a one quarter lag



# MARKET COMMENTARY – NOVEMBER 2019

## Market Environment

Following a relatively quiet month, developed equities ended higher as improving economic data assuaged near-term fears of a slowdown. US markets led the way with the S&P 500 Index increasing 3.6% during the month, adding to year-to-date gains of 27.6% - putting it on track for the best calendar year return since 2013. Internationally, the MSCI EAFE Index ended up 1.1% as strengthening manufacturing data and a perceived lull in trade tensions boosted sentiment. Emerging market equities lagged their developed counterparts as weakening data out of China and uncertainty in Hong Kong weighed on returns for the region. As a result, the MSCI Emerging Markets Index declined 0.1% during the month.

In the absence of any major central bank announcements, global bond yields moved marginally higher. The US and German 10-year bonds increased nine and seven basis points, respectively. In response, the Barclays US Treasury Index declined 0.3% for the month. The long end of the curve, measured by the 30-year US bond, also increased two basis points to a yield of 2.20% - resulting in a 0.5% decline for the Barclays Long Treasury Index. In credit, spreads broadly declined. The Barclays US High Yield Index eked out a 0.3% monthly return as spreads on the index declined 22 basis points. Finally, in emerging markets, modest dollar strength impacted local-currency debt, resulting in a 1.8% loss in the JPM GBI-EM Global Diversified Index.

As we head into the final month of the year, we continue to express caution on risk assets given strong performance year-to-date and the potential for heightened volatility as part of the late stage US economic cycle. As such, we maintain our recommendation to reduce return-seeking credit exposure.



# Louisiana Municipal Police Employees' Retirement System

## TOTAL FUND PERFORMANCE DETAIL

Investment Performance Summary											
	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	YTD (%)	Fiscal YTD (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Total Fund Composite</b>	<b>2,207,997,159</b>	<b>100.0</b>	<b>100.0</b>	<b>1.3</b>	<b>14.8</b>	<b>3.0</b>	<b>7.8</b>	<b>5.2</b>	<b>7.8</b>	<b>5.1</b>	<b>Mar-98</b>
<i>Total Fund Policy Index</i>				<u>1.1</u>	<u>14.5</u>	<u>3.2</u>	<u>9.1</u>	<u>6.3</u>	<u>7.8</u>	--	Mar-98
Over/Under				0.2	0.3	-0.2	-1.3	-1.1	0.0		
<i>Total Fund Allocation Index</i>				<u>1.2</u>	<u>14.8</u>	<u>3.2</u>	<u>8.6</u>	<u>5.9</u>	--	--	Mar-98
<b>Total Equity Composite</b>	<b>1,135,671,172</b>	<b>51.4</b>	<b>48.5</b>	<b>2.6</b>	<b>21.0</b>	<b>4.4</b>	<b>10.6</b>	<b>6.5</b>	<b>9.3</b>	<b>5.3</b>	<b>Mar-98</b>
<i>MSCI ACWI</i>				<u>2.4</u>	<u>22.3</u>	<u>5.2</u>	<u>11.9</u>	<u>7.2</u>	<u>8.6</u>	<u>5.7</u>	Mar-98
Over/Under				0.2	-1.3	-0.8	-1.3	-0.7	0.7	-0.4	
<b>Total Domestic Equity Composite</b>	<b>575,499,949</b>	<b>26.1</b>	<b>24.0</b>	<b>4.0</b>	<b>26.5</b>	<b>6.4</b>	<b>12.6</b>	<b>9.6</b>	<b>12.9</b>	<b>6.7</b>	<b>Mar-98</b>
<i>Russell 3000</i>				<u>3.8</u>	<u>27.3</u>	<u>7.3</u>	<u>14.2</u>	<u>10.6</u>	<u>13.4</u>	<u>7.3</u>	Mar-98
Over/Under				0.2	-0.8	-0.9	-1.6	-1.0	-0.5	-0.6	
<b>Total Large Cap Equity Composite</b>	<b>408,308,179</b>	<b>18.5</b>	<b>17.0</b>	<b>3.7</b>	<b>26.4</b>	<b>5.7</b>	<b>14.6</b>	<b>10.5</b>	<b>13.1</b>	<b>6.8</b>	<b>Apr-98</b>
<i>Russell 1000</i>				<u>3.8</u>	<u>27.7</u>	<u>7.5</u>	<u>14.7</u>	<u>10.8</u>	<u>13.5</u>	<u>7.1</u>	Apr-98
Over/Under				-0.1	-1.3	-1.8	-0.1	-0.3	-0.4	-0.3	
AllianceBernstein S&P 500 Index Fund	119,520,202	5.4		3.6	27.6	7.6	14.8	10.9	13.3	7.1	Mar-98
<i>S&amp;P 500</i>				<u>3.6</u>	<u>27.6</u>	<u>7.7</u>	<u>14.9</u>	<u>11.0</u>	<u>13.4</u>	<u>7.2</u>	Mar-98
Over/Under				0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	
BMO Asset Management	132,561,227	6.0		3.2	17.5	3.8	8.9	6.8	11.7	8.3	Sep-08
<i>Russell 1000 Value</i>				<u>3.1</u>	<u>23.2</u>	<u>5.9</u>	<u>9.6</u>	<u>7.8</u>	<u>11.7</u>	<u>8.7</u>	Sep-08
Over/Under				0.1	-5.7	-2.1	-0.7	-1.0	0.0	-0.4	
INTECH	156,226,750	7.1		4.3	34.0	6.0	20.0	13.8	15.5	6.9	Nov-00
<i>Russell 1000 Growth</i>				<u>4.4</u>	<u>32.4</u>	<u>9.0</u>	<u>19.8</u>	<u>13.7</u>	<u>15.2</u>	<u>5.6</u>	Nov-00
Over/Under				-0.1	1.6	-3.0	0.2	0.1	0.3	1.3	



## Louisiana Municipal Police Employees' Retirement System

# TOTAL FUND PERFORMANCE DETAIL

	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	YTD (%)	Fiscal YTD (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Total Small Cap Equity Composite</b>	<b>167,191,770</b>	<b>7.6</b>	<b>7.0</b>	<b>4.6</b>	<b>26.5</b>	<b>8.1</b>	<b>8.4</b>	<b>7.8</b>	<b>12.5</b>	<b>2.6</b>	<b>Apr-98</b>
<i>Russell 2000</i>				<u>4.1</u>	<u>22.0</u>	<u>4.3</u>	<u>8.6</u>	<u>8.2</u>	<u>12.4</u>	<u>7.2</u>	<i>Apr-98</i>
Over/Under				0.5	4.5	3.8	-0.2	-0.4	0.1	-4.6	
LSV	82,093,978	3.7		2.4	17.9	4.5	2.6	6.2	12.2	9.7	Sep-01
<i>Russell 2000 Value</i>				<u>2.3</u>	<u>18.3</u>	<u>4.2</u>	<u>5.0</u>	<u>6.8</u>	<u>11.0</u>	<u>8.4</u>	<i>Sep-01</i>
Over/Under				0.1	-0.4	0.3	-2.4	-0.6	1.2	1.3	
Mellon Small Cap Growth Index Fund	85,068,510	3.9		--	--	--	--	--	--	--	Dec-19
<i>Russell 2000 Growth</i>				<u>5.9</u>	<u>25.6</u>	<u>4.4</u>	<u>12.2</u>	<u>9.5</u>	<u>13.7</u>	--	<i>Dec-19</i>
Over/Under				5.9	25.6	4.4	12.2	9.5	13.7	--	<i>Dec-19</i>
<b>Total International Equity Composite</b>	<b>398,429,066</b>	<b>18.0</b>	<b>17.0</b>	<b>1.7</b>	<b>20.8</b>	<b>4.4</b>	<b>9.9</b>	<b>4.3</b>	<b>5.9</b>	<b>4.1</b>	<b>Mar-98</b>
<i>MSCI EAFE</i>				<u>1.1</u>	<u>18.2</u>	<u>3.6</u>	<u>9.6</u>	<u>4.3</u>	<u>5.3</u>	<u>4.4</u>	<i>Mar-98</i>
Over/Under				0.6	2.6	0.8	0.3	0.0	0.6	-0.3	
KBI	95,652,346	4.3		0.8	13.4	4.4	6.6	1.9	4.3	1.0	Sep-07
<i>MSCI EAFE Value</i>				<u>0.4</u>	<u>12.0</u>	<u>2.2</u>	<u>6.6</u>	<u>2.1</u>	<u>3.7</u>	<u>0.6</u>	<i>Sep-07</i>
Over/Under				0.4	1.4	2.2	0.0	-0.2	0.6	0.4	
William Blair	191,520,373	8.7		2.4	25.9	4.8	11.5	5.5	7.8	8.9	Aug-03
<i>MSCI ACWI ex USA Growth</i>				<u>1.5</u>	<u>22.3</u>	<u>4.3</u>	<u>11.9</u>	<u>5.7</u>	<u>6.1</u>	<u>7.6</u>	<i>Aug-03</i>
Over/Under				0.9	3.6	0.5	-0.4	-0.2	1.7	1.3	
Mellon MSCI EAFE Index Fund	111,141,278	5.0		1.1	18.5	3.6	10.0	4.6	--	4.4	Feb-14
<i>MSCI EAFE</i>				<u>1.1</u>	<u>18.2</u>	<u>3.6</u>	<u>9.6</u>	<u>4.3</u>	<u>5.3</u>	<u>4.1</u>	<i>Feb-14</i>
Over/Under				0.0	0.3	0.0	0.4	0.3		0.3	



## Louisiana Municipal Police Employees' Retirement System

# TOTAL FUND PERFORMANCE DETAIL

	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	YTD (%)	Fiscal YTD (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Total Emerging Markets Equities Composite</b>	<b>161,742,157</b>	<b>7.3</b>	<b>7.5</b>	<b>-0.1</b>	<b>6.1</b>	<b>-2.3</b>	<b>6.8</b>	<b>1.8</b>	<b>--</b>	<b>2.2</b>	<b>Apr-14</b>
<i>MSCI Emerging Markets</i>				<u>-0.1</u>	<u>10.2</u>	<u>-0.3</u>	<u>9.0</u>	<u>3.1</u>	<u>3.3</u>	<u>3.3</u>	<u>Apr-14</u>
Over/Under				0.0	-4.1	-2.0	-2.2	-1.3		-1.1	
Acadian Emerging Markets	100,065,502	4.5		0.2	8.3	-1.1	6.8	1.4	--	2.2	May-14
<i>MSCI Emerging Markets</i>				<u>-0.1</u>	<u>10.2</u>	<u>-0.3</u>	<u>9.0</u>	<u>3.1</u>	<u>3.3</u>	<u>3.3</u>	<u>May-14</u>
Over/Under				0.3	-1.9	-0.8	-2.2	-1.7		-1.1	
Mellon Emerging Markets Index Fund	61,676,656	2.8		--	--	--	--	--	--	--	Dec-19
<i>MSCI Emerging Markets</i>				<u>-0.1</u>	<u>10.2</u>	<u>-0.3</u>	<u>9.0</u>	<u>3.1</u>	<u>3.3</u>	--	<u>Dec-19</u>
Over/Under											
<b>Total Fixed Income Composite</b>	<b>726,115,697</b>	<b>32.9</b>	<b>33.5</b>	<b>-0.3</b>	<b>9.0</b>	<b>1.7</b>	<b>5.0</b>	<b>3.4</b>	<b>5.2</b>	<b>5.6</b>	<b>Mar-98</b>
<i>Total Fixed Income Policy Index</i>				<u>-0.3</u>	<u>9.3</u>	<u>2.1</u>	<u>4.9</u>	<u>3.3</u>	<u>4.1</u>	<u>5.2</u>	<u>Mar-98</u>
Over/Under				0.0	-0.3	-0.4	0.1	0.1	1.1	0.4	
Loomis Sayles	133,021,433	6.0		0.0	9.2	2.0	5.3	4.1	6.2	7.1	Oct-07
<i>BBgBarc US Aggregate TR</i>				<u>-0.1</u>	<u>8.8</u>	<u>2.5</u>	<u>4.1</u>	<u>3.1</u>	<u>3.6</u>	<u>4.3</u>	<u>Oct-07</u>
Over/Under				0.1	0.4	-0.5	1.2	1.0	2.6	2.8	
SSgA Bond Index Fund	351,680,360	15.9		-0.1	8.7	2.5	4.0	3.0	3.5	4.9	Mar-98
<i>BBgBarc US Aggregate TR</i>				<u>-0.1</u>	<u>8.8</u>	<u>2.5</u>	<u>4.1</u>	<u>3.1</u>	<u>3.6</u>	<u>4.9</u>	<u>Mar-98</u>
Over/Under				0.0	-0.1	0.0	-0.1	-0.1	-0.1	0.0	
Investec EMD LC Dynamic	107,744,644	4.9		-1.9	8.8	-0.3	6.1	-0.3	--	-0.1	Oct-14
<i>JP Morgan GBI EM Global Diversified TR USD</i>				<u>-1.8</u>	<u>9.0</u>	<u>0.2</u>	<u>6.3</u>	<u>0.7</u>	<u>2.2</u>	<u>0.7</u>	<u>Oct-14</u>
Over/Under				-0.1	-0.2	-0.5	-0.2	-1.0		-0.8	
Pacific	40,741,275	1.8		0.6	7.7	1.9	4.8	--	--	4.6	Mar-15
<i>Credit Suisse Leveraged Loans</i>				<u>0.6</u>	<u>6.5</u>	<u>1.0</u>	<u>4.3</u>	<u>4.0</u>	<u>5.3</u>	<u>4.1</u>	<u>Mar-15</u>
Over/Under				0.0	1.2	0.9	0.5			0.5	
Hotchkis & Wiley High Yield SMA	42,786,057	1.9		0.3	9.4	0.3	--	--	--	7.3	Dec-18
<i>BBgBarc US High Yield TR</i>				<u>0.3</u>	<u>12.1</u>	<u>1.9</u>	<u>6.3</u>	<u>5.4</u>	<u>7.7</u>	<u>9.7</u>	<u>Dec-18</u>
Over/Under				0.0	-2.7	-1.6				-2.4	
Orleans Capital Intermediate Investment Grade Fixed Income	50,141,929	2.3		0.0	--	--	--	--	--	0.3	Sep-19
<i>BBgBarc US Govt/Credit Int TR</i>				<u>-0.1</u>	<u>6.7</u>	<u>1.6</u>	<u>3.2</u>	<u>2.5</u>	<u>2.9</u>	<u>-0.1</u>	<u>Sep-19</u>
Over/Under				0.1						0.4	



## Louisiana Municipal Police Employees' Retirement System

# TOTAL FUND PERFORMANCE DETAIL

	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	YTD (%)	Fiscal YTD (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Total Hedge Funds Composite</b>	<b>84,981,804</b>	<b>3.8</b>	<b>5.0</b>	<b>0.0</b>	<b>5.3</b>	<b>-2.2</b>	<b>0.8</b>	<b>-0.8</b>	<b>2.6</b>	<b>1.8</b>	<b>Jun-07</b>
<i>HFRI Fund of Funds Composite Index</i>				<u>0.9</u>	<u>6.6</u>	<u>0.4</u>	<u>3.6</u>	<u>2.1</u>	<u>2.7</u>	<u>1.3</u>	<i>Jun-07</i>
Over/Under				-0.9	-1.3	-2.6	-2.8	-2.9	-0.1	0.5	
EnTrustPermal	84,971,672	3.8		0.0	5.3	-2.2	--	--	--	0.5	Apr-18
<i>HFRI FOF COMP</i>				<u>0.9</u>	<u>6.6</u>	<u>0.4</u>	<u>3.6</u>	<u>2.1</u>	<u>2.7</u>	<u>1.2</u>	<i>Apr-18</i>
Over/Under				-0.9	-1.3	-2.6				-0.7	
Och-Ziff	3,684	0.0		-3.5	-51.6	-31.2	-35.4	-27.7	-20.6	-16.7	Apr-07
Stark	6,447	0.0		5.2	-2.3	3.0	-24.7	-31.5	-22.0	-21.0	Apr-07
<b>Total Real Estate Composite</b>	<b>179,315,199</b>	<b>8.1</b>	<b>8.0</b>	<b>0.5</b>	<b>6.4</b>	<b>2.5</b>	<b>8.0</b>	<b>9.8</b>	<b>10.5</b>	<b>8.2</b>	<b>Aug-00</b>
<i>NCREIF ODCE Net</i>				<u>0.0</u>	<u>3.1</u>	<u>1.1</u>	<u>6.3</u>	<u>8.4</u>	<u>9.8</u>	<u>7.0</u>	<i>Aug-00</i>
Over/Under				0.5	3.3	1.4	1.7	1.4	0.7	1.2	
Principal Global Advisors	158,398,728	7.2		0.6	5.9	2.8	7.7	9.6	11.1	7.4	Jan-04
<i>NCREIF ODCE Net</i>				<u>0.0</u>	<u>3.1</u>	<u>1.1</u>	<u>6.3</u>	<u>8.4</u>	<u>9.8</u>	<u>7.0</u>	<i>Jan-04</i>
Over/Under				0.6	2.8	1.7	1.4	1.2	1.3	0.4	
Siguler Guff DREOF II (\$25.0 MM)	20,916,471	0.9		0.0	9.3	1.0	9.1	--	--	8.2	May-16
<i>NCREIF Property Index</i>				<u>0.0</u>	<u>4.8</u>	<u>1.4</u>	<u>6.8</u>	<u>8.6</u>	<u>9.8</u>	<u>6.7</u>	<i>May-16</i>
Over/Under				0.0	4.5	-0.4	2.3			1.5	



## Louisiana Municipal Police Employees' Retirement System

# TOTAL FUND PERFORMANCE DETAIL

	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	YTD (%)	Fiscal YTD (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Total Private Equity Composite</b>	<b>69,084,630</b>	<b>3.1</b>	<b>5.0</b>	<b>0.0</b>	<b>7.5</b>	<b>3.9</b>	<b>11.4</b>	<b>10.0</b>	<b>--</b>	<b>10.2</b>	<b>Oct-12</b>
<i>Cambridge Associates US All PE (1 Qtr Lag)</i>				<u>0.0</u>	<u>6.7</u>	<u>3.4</u>	<u>15.2</u>	<u>11.5</u>	<u>14.5</u>	<u>13.4</u>	<u>Oct-12</u>
Over/Under				0.0	0.8	0.5	-3.8	-1.5		-3.2	
Summit Partners Credit Fund (\$41.4 MM)	4,402,583	0.2		0.0	-8.5	3.1	4.7	6.1	--	7.5	Oct-12
Collier International Partners VII (\$15.0 MM)	13,507,570	0.6		0.0	2.6	4.7	19.1	--	--	23.5	Feb-16
Warburg Pincus (\$12.9 MM)	14,772,837	0.7		0.0	5.7	4.0	9.0	--	--	-1.3	Jan-16
HarbourVest Partners Co-Investment IV (\$12.5 MM)	11,191,667	0.5		0.0	14.9	9.8	--	--	--	12.8	Jan-17
J.F. Lehman Equity Investors IV, L.P. (\$12.5 MM)	11,395,828	0.5		0.0	26.8	1.6	--	--	--	25.4	Jan-17
GoldPoint Partners Co-Investment VI, L.P. (\$15.0 MM)	6,441,049	0.3		0.0	5.1	6.1	--	--	--	-0.2	Jan-18
Levine Leichtman Capital Partners VI, L.P. (\$12.5 MM)	5,596,937	0.3		0.0	2.3	3.2	--	--	--	1.5	Mar-18
HarbourVest Partners Co-Investment V	1,686,223	0.1		0.0	--	-15.7	--	--	--	-15.7	Jun-19
Warburg Pincus Global Growth Fund	89,935	0.0		0.0	--	-48.8	--	--	--	-62.5	Apr-19
<b>Cash Account</b>	<b>12,823,829</b>	<b>0.6</b>	<b>0.0</b>	<b>0.1</b>	<b>2.6</b>	<b>1.0</b>	<b>2.2</b>	<b>1.8</b>	<b>3.6</b>	<b>3.9</b>	<b>Mar-98</b>
Cash Account	12,823,829	0.6		0.1	2.6	1.0	2.2	1.8	3.6	3.9	Mar-98
91 Day T-Bills				<u>0.1</u>	<u>1.9</u>	<u>0.8</u>	<u>1.6</u>	<u>1.0</u>	<u>0.5</u>	<u>1.9</u>	<u>Mar-98</u>
Over/Under				0.0	0.7	0.2	0.6	0.8	3.1	2.0	





## Louisiana Municipal Police Employees' Retirement System

# TOTAL FUND PERFORMANCE DETAIL

- Performance is reported net of fees.
- Fiscal year ends June 30.
- Allocation Index is not available prior to February 2013.
- Policy index does not have history prior to 9/30/2000.
- MSCI ACWI ex U.S. Net Index is not available prior to 1/31/1999.
- BNY Mellon DB SL Emerging Markets SIF and BNYM DB SL Small Cap Growth Index Fund funded 11/2019. Performance will begin 12/1/2019.
- Performance for Pinnacle Associates is included in Total Small Cap Equity Composite performance.
- Total Fund Policy Index is 17% R1000, 7% R2000, 17% MSCI EAFE, 7.5% MSCI EM, 25% BC Agg, 1.5% BC HY, 1.5% CS Leverage Loan, 5.5% JPM GBI EM Diversified, 5% HFRI FOF Composite, 8% NCREIF, 5% Cambridge PE as of 6/1/2019.
- Total Fund Policy Index was 17% R1000, 7% R2500, 17% MSCI EAFE, 7.5% MSCI EM, 25% BC Agg, 1.5% BC HY, 1.5% CS Leverage Loan, 5.5% JPM GBI EM Diversified, 5% HFRI FOF Composite, 8% NCREIF, 5% Cambridge PE from 6/1/2019 through 10/31/2019.
- Total Fund Policy Index was 16% R1000, 8% R2500, 20% MSCI EAFE, 8% MSCI EM, 14% BC Agg, 2% BC HY, 2% CS Leverage Loan, 4% JPM GBI EM Diversified, 5% HFRI FOF Composite, 8% NCREIF, 2% CPI + 3%, 5% Cambridge PE, 6% Custom Global Equity/Global Bond Index (60% MSCI ACWI/40% Citi WGBI) from 3/1/2018 through 5/31/2019.
- Total Fund Policy Index was 30% R3000, 3% BC High Yield, 17% BC Agg, 10% NCREIF ODCE, 35% MSCI ACWI ex US, and 5% 91Day TBill + 400BPS from 2/1/2013 through 12/31/2013.
- Real Estate, Private Equity, and corresponding benchmarks are valued on a quarterly basis and updated as received.
- Summit Partners Credit Fund market value is based on reported 9/30/2019 value +/- capital calls and distributions.
- Siguler Guff was funded on 4/13/2016. Market values are based on reported 9/30/2019 value +/- capital calls and distributions.
- Cash account holds equity securities and is therefore not tied to the 91 Day T-Bill.
- International Equity composite market value includes \$115,068.97 from liquidating Alliance Bernstein Int'l Value.



## Louisiana Municipal Police Employees' Retirement System

# MONTHLY BREAKDOWN OF CHANGE IN VALUE

Cash Flow Summary				
	Beginning Market Value	Month Ending November 30, 2019		Ending Market Value
		Net Cash Flow	Net Investment Change	
Acadian Emerging Markets	\$99,839,269	\$0	\$226,233	\$100,065,502
AllianceBernstein Int'l Value	\$116,486	\$0	-\$1,417	\$115,069
AllianceBernstein S&P 500 Index Fund	\$115,358,577	\$0	\$4,161,624	\$119,520,202
BMO Asset Management	\$128,480,232	\$0	\$4,080,995	\$132,561,227
BNY Mellon DB SL Emerging Markets SIF	\$0	\$62,000,000	-\$323,344	\$61,676,656
BNYM DB SL Small Cap Growth Index Fund	\$0	\$82,000,000	\$3,068,510	\$85,068,510
Cash Account	\$14,555,769	-\$1,749,666	\$17,727	\$12,823,829
Coller International Partners VII (\$15.0 MM)	\$12,638,864	\$868,706	\$0	\$13,507,570
Dimensional Fund Advisors	\$62,718,941	-\$62,627,180	-\$91,761	--
Energy Opportunities Capital	\$4,821	\$0	\$6	\$4,827
EnTrustPermal	\$84,971,672	\$0	\$0	\$84,971,672
GoldPoint Partners Co-Investment VI, L.P. (\$15.0 MM)	\$6,441,049	\$0	\$0	\$6,441,049
HarbourVest Partners Co-Investment IV (\$12.5 MM)	\$11,191,667	\$0	\$0	\$11,191,667
HarbourVest Partners Co-Investment V	\$1,686,223	\$0	\$0	\$1,686,223
Hotchkis & Wiley High Yield SMA	\$42,654,175	\$0	\$131,881	\$42,786,057
INTECH	\$149,763,780	\$0	\$6,462,970	\$156,226,750



## Louisiana Municipal Police Employees' Retirement System

# MONTHLY BREAKDOWN OF CHANGE IN VALUE

	Month Ending November 30, 2019			
	Beginning Market Value	Net Cash Flow	Net Investment Change	Ending Market Value
Investec EMD LC Dynamic	\$109,845,911	\$0	-\$2,101,266	\$107,744,644
J.F. Lehman Equity Investors IV, L.P. (\$12.5 MM)	\$11,395,828	\$0	\$0	\$11,395,828
KBI	\$94,868,432	\$0	\$783,914	\$95,652,346
Levine Leichtman Capital Partners VI, L.P. (\$12.5 MM)	\$5,536,977	\$59,960	\$0	\$5,596,937
Loomis Sayles	\$132,965,608	\$0	\$55,825	\$133,021,433
LSV	\$80,150,229	\$0	\$1,943,749	\$82,093,978
Mellon MSCI EAFE Index Fund	\$109,885,946	\$13,215	\$1,242,117	\$111,141,278
Och-Ziff	\$3,819	\$0	-\$135	\$3,684
Orleans Capital Intermediate Investment Grade Fixed Income	\$50,143,876	\$0	-\$1,947	\$50,141,929
Pacific	\$40,498,285	\$0	\$242,990	\$40,741,275
Pinnacle Associates	\$85,266,240	-\$87,625,999	\$2,389,042	\$29,282
Principal Global Advisors	\$157,484,742	\$0	\$913,986	\$158,398,728
Siguler Guff DREOF II (\$25.0 MM)	\$20,916,471	\$0	\$0	\$20,916,471
SSgA Bond Index Fund	\$351,874,373	\$0	-\$194,013	\$351,680,360
Stark	\$6,128	\$0	\$319	\$6,447
Summit Partners Credit Fund (\$41.4 MM)	\$4,402,583	\$0	\$0	\$4,402,583
Warburg Pincus (\$12.9 MM)	\$14,772,837	\$0	\$0	\$14,772,837
Warburg Pincus Global Growth Fund	\$89,935	\$0	\$0	\$89,935
William Blair	\$187,052,482	\$0	\$4,467,891	\$191,520,373
<b>Total</b>	<b>\$2,187,582,227</b>	<b>-\$7,060,964</b>	<b>\$27,475,896</b>	<b>\$2,207,997,159</b>



### **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.
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- 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.

