

# INVESTMENT MARKET UPDATE

(AS OF AUGUST 31, 2019)

## LOUISIANA MUNICIPAL POLICE EMPLOYEES' RETIREMENT SYSTEM

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# MARKET COMMENTARY – AUGUST 2019

## Market Environment

Equity markets lagged in August as trade tensions between the US and China resurfaced and investors fretted over slowing global economic growth. The S&P 500 Index declined 1.6% last month as the US manufacturing sector grew at its slowest pace since 2009, according to Market's Manufacturing Purchasing Managers' Index. The MSCI EAFE Index lost 2.6%, while the MSCI Emerging Market Index fell 4.9% as currency weakness in China put a damper on the rest of the EM Index.

Global bond yields continued to decline as demand for safe-haven assets rose. In the US, 30- and 10-year Treasury yields dropped 57 and 52 basis points, respectively, causing the yield curve to fully invert. As a result, the Barclays US Long Treasury Index shot up 10.5%, its fourth-highest monthly return since inception in 1973. In emerging markets, a stronger US dollar caused hard-currency bonds to outperform local-currency debt, resulting in a 0.7% gain in the JPM EMBI Global Diversified Index and a loss of 2.6% in the JPM GBI-EM Global Diversified Index.

Meanwhile, in real assets, gold prices got a shot in the arm, rising 7.5% in August, amid concerns around global growth and a lower-yield environment. Additionally, spot WTI crude oil fell 5.9% to \$55.06 per barrel but remains up 21.9% for the year.

With slowing global growth and the United States in the late stage of its economic cycle, we maintain our recommendations to rebalance equity exposure, reduce return-seeking credit, and consider shorter-duration maturities within safe-haven fixed income.



# Louisiana Municipal Police Employees' Retirement System

## TOTAL FUND PERFORMANCE DETAIL

| Investment Performance Summary          |                      |                |              |             |             |             |                |             |             |             |               |                |
|---|----------------------|----------------|--------------|-------------|-------------|-------------|----------------|-------------|-------------|-------------|---------------|----------------|
|   | Market Value (\$)    | % of Portfolio | Policy %     | 1 Mo (%)    | 3 Mo (%)    | YTD (%)     | Fiscal YTD (%) | 3 Yrs (%)   | 5 Yrs (%)   | 10 Yrs (%)  | Inception (%) | Inception Date |
| <b>Total Fund Composite</b>             | <b>2,135,503,458</b> | <b>100.0</b>   | <b>100.0</b> | <b>-1.1</b> | <b>3.0</b>  | <b>10.3</b> | <b>-1.0</b>    | <b>6.6</b>  | <b>4.2</b>  | <b>7.8</b>  | <b>5.0</b>    | <b>Mar-98</b>  |
| <i>Total Fund Policy Index</i>          |                      |                |              | <i>-0.9</i> | <i>3.2</i>  | <i>10.1</i> | <i>-0.8</i>    | <i>7.5</i>  | <i>5.3</i>  | <i>7.9</i>  | --            | <i>Mar-98</i>  |
| Over/Under                              |                      |                |              | <b>-0.2</b> | <b>-0.2</b> | <b>0.2</b>  | <b>-0.2</b>    | <b>-0.9</b> | <b>-1.1</b> | <b>-0.1</b> |               |                |
| <i>Total Fund Allocation Index</i>      |                      |                |              | <i>-1.0</i> | <i>3.2</i>  | <i>10.4</i> | <i>-0.8</i>    | <i>7.1</i>  | <i>4.8</i>  | --          | --            | <i>Mar-98</i>  |
| <b>Total Equity Composite</b>           | <b>1,059,812,892</b> | <b>49.6</b>    | <b>48.5</b>  | <b>-3.0</b> | <b>3.1</b>  | <b>12.2</b> | <b>-3.1</b>    | <b>8.0</b>  | <b>4.6</b>  | <b>9.1</b>  | <b>4.9</b>    | <b>Mar-98</b>  |
| <i>MSCI ACWI</i>                        |                      |                |              | <i>-2.4</i> | <i>4.3</i>  | <i>13.8</i> | <i>-2.1</i>    | <i>9.2</i>  | <i>5.5</i>  | <i>8.6</i>  | <i>5.4</i>    | <i>Mar-98</i>  |
| Over/Under                              |                      |                |              | <b>-0.6</b> | <b>-1.2</b> | <b>-1.6</b> | <b>-1.0</b>    | <b>-1.2</b> | <b>-0.9</b> | <b>0.5</b>  | <b>-0.5</b>   |                |
| <b>Total Domestic Equity Composite</b>  | <b>537,728,081</b>   | <b>25.2</b>    | <b>24.0</b>  | <b>-2.8</b> | <b>5.4</b>  | <b>17.0</b> | <b>-1.5</b>    | <b>11.1</b> | <b>8.5</b>  | <b>12.6</b> | <b>6.4</b>    | <b>Mar-98</b>  |
| <i>Russell 3000</i>                     |                      |                |              | <i>-2.0</i> | <i>6.4</i>  | <i>18.0</i> | <i>-0.6</i>    | <i>12.2</i> | <i>9.6</i>  | <i>13.3</i> | <i>7.1</i>    | <i>Mar-98</i>  |
| Over/Under                              |                      |                |              | <b>-0.8</b> | <b>-1.0</b> | <b>-1.0</b> | <b>-0.9</b>    | <b>-1.1</b> | <b>-1.1</b> | <b>-0.7</b> | <b>-0.7</b>   |                |
| <b>Total Large Cap Equity Composite</b> | <b>384,689,928</b>   | <b>18.0</b>    | <b>17.0</b>  | <b>-1.8</b> | <b>6.1</b>  | <b>19.1</b> | <b>-0.4</b>    | <b>12.9</b> | <b>10.1</b> | <b>13.2</b> | <b>6.6</b>    | <b>Apr-98</b>  |
| <i>Russell 1000</i>                     |                      |                |              | <i>-1.8</i> | <i>6.7</i>  | <i>18.5</i> | <i>-0.3</i>    | <i>12.6</i> | <i>9.8</i>  | <i>13.5</i> | <i>6.9</i>    | <i>Apr-98</i>  |
| Over/Under                              |                      |                |              | <b>0.0</b>  | <b>-0.6</b> | <b>0.6</b>  | <b>-0.1</b>    | <b>0.3</b>  | <b>0.3</b>  | <b>-0.3</b> | <b>-0.3</b>   |                |
| AllianceBernstein S&P 500 Index Fund    | 110,832,745          | 5.2            |              | -1.6        | 6.8         | 18.3        | -0.2           | 12.6        | 10.1        | 13.3        | 6.8           | Mar-98         |
| <i>S&amp;P 500</i>                      |                      |                |              | <i>-1.6</i> | <i>6.9</i>  | <i>18.3</i> | <i>-0.2</i>    | <i>12.7</i> | <i>10.1</i> | <i>13.4</i> | <i>6.9</i>    | <i>Mar-98</i>  |
| Over/Under                              |                      |                |              | <b>0.0</b>  | <b>-0.1</b> | <b>0.0</b>  | <b>0.0</b>     | <b>-0.1</b> | <b>0.0</b>  | <b>-0.1</b> | <b>-0.1</b>   |                |
| BMO Asset Management                    | 122,920,053          | 5.8            |              | -3.8        | 2.0         | 8.9         | -3.8           | 7.7         | 5.8         | 11.3        | 7.8           | Sep-08         |
| <i>Russell 1000 Value</i>               |                      |                |              | <i>-2.9</i> | <i>4.9</i>  | <i>13.8</i> | <i>-2.1</i>    | <i>8.1</i>  | <i>6.6</i>  | <i>11.5</i> | <i>8.1</i>    | <i>Sep-08</i>  |
| Over/Under                              |                      |                |              | <b>-0.9</b> | <b>-2.9</b> | <b>-4.9</b> | <b>-1.7</b>    | <b>-0.4</b> | <b>-0.8</b> | <b>-0.2</b> | <b>-0.3</b>   |                |
| INTECH                                  | 150,937,131          | 7.1            |              | -0.1        | 9.1         | 29.5        | 2.4            | 18.1        | 14.3        | 16.0        | 6.8           | Nov-00         |
| <i>Russell 1000 Growth</i>              |                      |                |              | <i>-0.8</i> | <i>8.4</i>  | <i>23.3</i> | <i>1.5</i>     | <i>17.0</i> | <i>13.1</i> | <i>15.4</i> | <i>5.3</i>    | <i>Nov-00</i>  |
| Over/Under                              |                      |                |              | <b>0.7</b>  | <b>0.7</b>  | <b>6.2</b>  | <b>0.9</b>     | <b>1.1</b>  | <b>1.2</b>  | <b>0.6</b>  | <b>1.5</b>    |                |



## Louisiana Municipal Police Employees' Retirement System

# TOTAL FUND PERFORMANCE DETAIL

|   | Market Value (\$)  | % of Portfolio | Policy %    | 1 Mo (%)    | 3 Mo (%)    | YTD (%)     | Fiscal YTD (%) | 3 Yrs (%)   | 5 Yrs (%)   | 10 Yrs (%)  | Inception (%) | Inception Date |
|---|--------------------|----------------|-------------|-------------|-------------|-------------|----------------|-------------|-------------|-------------|---------------|----------------|
| <b>Total Small-Mid Cap Equity Composite</b> | <b>153,038,153</b> | <b>7.2</b>     | <b>7.0</b>  | <b>-5.3</b> | <b>3.7</b>  | <b>12.0</b> | <b>-4.4</b>    | <b>6.9</b>  | <b>5.2</b>  | <b>11.5</b> | <b>2.0</b>    | <b>Apr-98</b>  |
| <i>Russell 2500</i>                         |                    |                |             | <u>-4.0</u> | <u>3.9</u>  | <u>15.7</u> | <u>-3.0</u>    | <u>9.0</u>  | <u>7.1</u>  | <u>12.7</u> | <u>8.2</u>    | <i>Apr-98</i>  |
| Over/Under                                  |                    |                |             | -1.3        | -0.2        | -3.7        | -1.4           | -2.1        | -1.9        | -1.2        | -6.2          |                |
| LSV   | 73,527,152         | 3.4            |             | -7.3        | 0.9         | 5.6         | -6.4           | 2.1         | 3.9         | 11.1        | 9.1           | Sep-01         |
| <i>Russell 2000 Value</i>                   |                    |                |             | <u>-5.6</u> | <u>0.6</u>  | <u>7.3</u>  | <u>-5.4</u>    | <u>5.0</u>  | <u>4.6</u>  | <u>10.0</u> | <u>7.9</u>    | <i>Sep-01</i>  |
| Over/Under                                  |                    |                |             | -1.7        | 0.3         | -1.7        | -1.0           | -2.9        | -0.7        | 1.1         | 1.2           |                |
| Pinnacle Associates                         | 79,511,000         | 3.7            |             | -3.4        | 6.5         | 18.0        | -2.4           | 11.7        | 6.5         | 13.2        | 8.9           | Mar-06         |
| <i>Russell 2500 Growth</i>                  |                    |                |             | <u>-2.8</u> | <u>6.4</u>  | <u>22.3</u> | <u>-1.3</u>    | <u>13.2</u> | <u>9.6</u>  | <u>14.4</u> | <u>9.1</u>    | <i>Mar-06</i>  |
| Over/Under                                  |                    |                |             | -0.6        | 0.1         | -4.3        | -1.1           | -1.5        | -3.1        | -1.2        | -0.2          |                |
| <b>Total International Equity Composite</b> | <b>369,311,738</b> | <b>17.3</b>    | <b>17.0</b> | <b>-2.3</b> | <b>2.5</b>  | <b>12.0</b> | <b>-3.2</b>    | <b>6.0</b>  | <b>2.0</b>  | <b>5.8</b>  | <b>3.8</b>    | <b>Mar-98</b>  |
| <i>MSCI EAFE</i>                            |                    |                |             | <u>-2.6</u> | <u>1.9</u>  | <u>9.7</u>  | <u>-3.8</u>    | <u>5.9</u>  | <u>1.9</u>  | <u>5.0</u>  | <u>4.1</u>    | <i>Mar-98</i>  |
| Over/Under                                  |                    |                |             | 0.3         | 0.6         | 2.3         | 0.6            | 0.1         | 0.1         | 0.8         | -0.3          |                |
| KBI   | 87,355,596         | 4.1            |             | -3.2        | -0.7        | 3.6         | -4.6           | 2.2         | -1.0        | 3.8         | 0.3           | Sep-07         |
| <i>MSCI EAFE Value</i>                      |                    |                |             | <u>-4.1</u> | <u>-1.3</u> | <u>2.7</u>  | <u>-6.3</u>    | <u>3.8</u>  | <u>-0.8</u> | <u>3.1</u>  | <u>-0.1</u>   | <i>Sep-07</i>  |
| Over/Under                                  |                    |                |             | 0.9         | 0.6         | 0.9         | 1.7            | -1.6        | -0.2        | 0.7         | 0.4           |                |
| William Blair                               | 178,734,814        | 8.4            |             | -1.6        | 4.4         | 17.5        | -2.2           | 7.8         | 3.5         | 8.0         | 8.6           | Aug-03         |
| <i>MSCI ACWI ex USA Growth</i>              |                    |                |             | <u>-1.8</u> | <u>4.5</u>  | <u>14.8</u> | <u>-2.0</u>    | <u>7.5</u>  | <u>3.7</u>  | <u>6.3</u>  | <u>7.3</u>    | <i>Aug-03</i>  |
| Over/Under                                  |                    |                |             | 0.2         | -0.1        | 2.7         | -0.2           | 0.3         | -0.2        | 1.7         | 1.3           |                |
| Mellon MSCI EAFE Index Fund                 | 103,105,710        | 4.8            |             | -2.6        | 1.9         | 9.9         | -3.8           | 6.3         | 2.2         | --          | 3.2           | Feb-14         |
| <i>MSCI EAFE</i>                            |                    |                |             | <u>-2.6</u> | <u>1.9</u>  | <u>9.7</u>  | <u>-3.8</u>    | <u>5.9</u>  | <u>1.9</u>  | <u>5.0</u>  | <u>2.9</u>    | <i>Feb-14</i>  |
| Over/Under                                  |                    |                |             | 0.0         | 0.0         | 0.2         | 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 (%)    | 3 Mo (%)    | YTD (%)     | Fiscal YTD (%) | 3 Yrs (%)   | 5 Yrs (%)   | 10 Yrs (%)  | Inception (%) | Inception Date |
|--|--------------------|----------------|-------------|-------------|-------------|-------------|----------------|-------------|-------------|-------------|---------------|----------------|
| <b>Total Emerging Markets Equities</b>                     | <b>152,773,074</b> | <b>7.2</b>     | <b>7.5</b>  | <b>-5.2</b> | <b>-2.7</b> | <b>-0.2</b> | <b>-8.1</b>    | <b>4.1</b>  | <b>-1.0</b> | <b>--</b>   | <b>1.1</b>    | <b>Apr-14</b>  |
| <i>MSCI Emerging Markets</i>                               |                    |                |             | <u>-4.9</u> | <u>-0.2</u> | <u>3.9</u>  | <u>-6.0</u>    | <u>5.8</u>  | <u>0.4</u>  | <u>4.1</u>  | <u>2.3</u>    | <i>Apr-14</i>  |
| Over/Under   |                    |                |             | <b>-0.3</b> | <b>-2.5</b> | <b>-4.1</b> | <b>-2.1</b>    | <b>-1.7</b> | <b>-1.4</b> |             | <b>-1.2</b>   |                |
| Dimensional Fund Advisors                                  | 59,094,862         | 2.8            |             | -5.1        | -4.7        | -2.5        | -9.3           | 4.8         | -0.8        | --          | 1.4           | Apr-14         |
| <i>MSCI Emerging Markets</i>                               |                    |                |             | <u>-4.9</u> | <u>-0.2</u> | <u>3.9</u>  | <u>-6.0</u>    | <u>5.8</u>  | <u>0.4</u>  | <u>4.1</u>  | <u>2.3</u>    | <i>Apr-14</i>  |
| Over/Under   |                    |                |             | <b>-0.2</b> | <b>-4.5</b> | <b>-6.4</b> | <b>-3.3</b>    | <b>-1.0</b> | <b>-1.2</b> |             | <b>-0.9</b>   |                |
| Acadian Emerging Markets                                   | 93,678,212         | 4.4            |             | -5.3        | -1.3        | 1.4         | -7.4           | 3.6         | -1.2        | --          | 1.0           | May-14         |
| <i>MSCI Emerging Markets</i>                               |                    |                |             | <u>-4.9</u> | <u>-0.2</u> | <u>3.9</u>  | <u>-6.0</u>    | <u>5.8</u>  | <u>0.4</u>  | <u>4.1</u>  | <u>2.3</u>    | <i>May-14</i>  |
| Over/Under   |                    |                |             | <b>-0.4</b> | <b>-1.1</b> | <b>-2.5</b> | <b>-1.4</b>    | <b>-2.2</b> | <b>-1.6</b> |             | <b>-1.3</b>   |                |
| <b>Total Fixed Income Composite</b>                        | <b>723,568,611</b> | <b>33.9</b>    | <b>33.5</b> | <b>1.0</b>  | <b>3.4</b>  | <b>8.6</b>  | <b>1.4</b>     | <b>4.2</b>  | <b>3.2</b>  | <b>5.7</b>  | <b>5.7</b>    | <b>Mar-98</b>  |
| <i>Total Fixed Income Policy Index</i>                     |                    |                |             | <u>1.5</u>  | <u>3.9</u>  | <u>9.1</u>  | <u>1.9</u>     | <u>4.0</u>  | <u>3.3</u>  | <u>4.5</u>  | <u>5.2</u>    | <i>Mar-98</i>  |
| Over/Under   |                    |                |             | <b>-0.5</b> | <b>-0.5</b> | <b>-0.5</b> | <b>-0.5</b>    | <b>0.2</b>  | <b>-0.1</b> | <b>1.2</b>  | <b>0.5</b>    |                |
| Loomis Sayles  | 132,653,817        | 6.2            |             | 1.5         | 3.3         | 8.9         | 1.8            | 4.6         | 3.9         | 6.8         | 7.3           | Oct-07         |
| <i>BBgBarc US Aggregate TR</i>                             |                    |                |             | <u>2.6</u>  | <u>4.1</u>  | <u>9.1</u>  | <u>2.8</u>     | <u>3.1</u>  | <u>3.3</u>  | <u>3.9</u>  | <u>4.4</u>    | <i>Oct-07</i>  |
| Over/Under   |                    |                |             | <b>-1.1</b> | <b>-0.8</b> | <b>-0.2</b> | <b>-1.0</b>    | <b>1.5</b>  | <b>0.6</b>  | <b>2.9</b>  | <b>2.9</b>    |                |
| SSgA Bond Index Fund                                       | 352,688,794        | 16.5           |             | 2.6         | 4.1         | 9.0         | 2.8            | 3.0         | 3.3         | 3.8         | 4.9           | Mar-98         |
| <i>BBgBarc US Aggregate TR</i>                             |                    |                |             | <u>2.6</u>  | <u>4.1</u>  | <u>9.1</u>  | <u>2.8</u>     | <u>3.1</u>  | <u>3.3</u>  | <u>3.9</u>  | <u>5.0</u>    | <i>Mar-98</i>  |
| Over/Under   |                    |                |             | <b>0.0</b>  | <b>0.0</b>  | <b>-0.1</b> | <b>0.0</b>     | <b>-0.1</b> | <b>0.0</b>  | <b>-0.1</b> | <b>-0.1</b>   |                |
| Investec EMD LC Dynamic                                    | 105,432,991        | 4.9            |             | -3.4        | 3.1         | 6.4         | -2.4           | 2.9         | --          | --          | -0.5          | Oct-14         |
| <i>JP Morgan GBI EM Global Diversified TR USD</i>          |                    |                |             | <u>-2.6</u> | <u>3.7</u>  | <u>6.8</u>  | <u>-1.7</u>    | <u>3.4</u>  | <u>-0.7</u> | <u>2.7</u>  | <u>0.4</u>    | <i>Oct-14</i>  |
| Over/Under   |                    |                |             | <b>-0.8</b> | <b>-0.6</b> | <b>-0.4</b> | <b>-0.7</b>    | <b>-0.5</b> |             |             | <b>-0.9</b>   |                |
| Pacific  | 40,305,966         | 1.9            |             | 0.0         | 1.2         | 6.6         | 0.8            | 5.1         | --          | --          | 4.7           | Mar-15         |
| <i>Credit Suisse Leveraged Loans</i>                       |                    |                |             | <u>-0.3</u> | <u>0.7</u>  | <u>5.9</u>  | <u>0.5</u>     | <u>4.8</u>  | <u>3.9</u>  | <u>5.7</u>  | <u>4.2</u>    | <i>Mar-15</i>  |
| Over/Under   |                    |                |             | <b>0.3</b>  | <b>0.5</b>  | <b>0.7</b>  | <b>0.3</b>     | <b>0.3</b>  |             |             | <b>0.5</b>    |                |
| Hotchkis & Wiley High Yield SMA                            | 42,486,140         | 2.0            |             | -0.3        | 1.8         | 9.1         | -0.1           | --          | --          | --          | 6.9           | Dec-18         |
| <i>BBgBarc US High Yield TR</i>                            |                    |                |             | <u>0.4</u>  | <u>3.3</u>  | <u>11.0</u> | <u>1.0</u>     | <u>6.2</u>  | <u>4.9</u>  | <u>8.5</u>  | <u>8.6</u>    | <i>Dec-18</i>  |
| Over/Under   |                    |                |             | <b>-0.7</b> | <b>-1.5</b> | <b>-1.9</b> | <b>-1.1</b>    |             |             |             | <b>-1.7</b>   |                |
| Orleans Capital Intermediate Investment Grade Fixed Income | 50,000,903         | 2.3            |             | --          | --          | --          | --             | --          | --          | --          | --            | Sep-19         |
| <i>BBgBarc US Govt/Credit Int TR</i>                       |                    |                |             | <u>1.8</u>  | <u>2.8</u>  | <u>6.8</u>  | <u>1.7</u>     | <u>2.6</u>  | <u>2.6</u>  | <u>3.2</u>  |               | <i>Sep-19</i>  |
| Over/Under   |                    |                |             |             |             |             |                |             |             |             |               |                |



## Louisiana Municipal Police Employees' Retirement System

# TOTAL FUND PERFORMANCE DETAIL

|   | Market Value (\$)  | % of Portfolio | Policy %   | 1 Mo (%)    | 3 Mo (%)   | YTD (%)    | Fiscal YTD (%) | 3 Yrs (%)  | 5 Yrs (%)   | 10 Yrs (%) | Inception (%) | Inception Date |
|---|--------------------|----------------|------------|-------------|------------|------------|----------------|------------|-------------|------------|---------------|----------------|
| <b>Total Hedge Funds Composite</b>        | <b>86,910,389</b>  | <b>4.1</b>     | <b>5.0</b> | <b>0.0</b>  | <b>1.5</b> | <b>7.7</b> | <b>0.0</b>     | <b>1.9</b> | <b>-0.2</b> | <b>3.1</b> | <b>2.1</b>    | <b>Jun-07</b>  |
| <i>HFRI Fund of Funds Composite Index</i> |                    |                |            | <u>-0.7</u> | <u>1.1</u> | <u>5.7</u> | <u>-0.5</u>    | <u>3.4</u> | <u>2.0</u>  | <u>2.9</u> | <u>1.2</u>    | <i>Jun-07</i>  |
| Over/Under                                |                    |                |            | 0.7         | 0.4        | 2.0        | 0.5            | -1.5       | -2.2        | 0.2        | 0.9           |                |
| EnTrustPermal                             | 86,897,587         | 4.1            |            | 0.0         | 1.6        | 7.7        | 0.0            | --         | --          | --         | 2.2           | Apr-18         |
| <i>HFRI FOF COMP</i>                      |                    |                |            | <u>-0.7</u> | <u>1.1</u> | <u>5.7</u> | <u>-0.5</u>    | <u>3.4</u> | <u>2.0</u>  | <u>2.9</u> | <u>0.8</u>    | <i>Apr-18</i>  |
| Over/Under                                |                    |                |            | 0.7         | 0.5        | 2.0        | 0.5            |            |             |            | 1.4           |                |
| Och-Ziff                                  | 6,674              | 0.0            |            | 0.0         | -39.9      | -54.2      | -34.8          | -37.9      | -29.8       | -21.0      | -17.3         | Apr-07         |
| Stark                                     | 6,128              | 0.0            |            | 0.0         | -2.1       | -7.2       | -2.1           | -25.4      | -32.3       | -22.4      | -21.7         | Apr-07         |
| <b>Total Real Estate Composite</b>        | <b>178,440,333</b> | <b>8.4</b>     | <b>8.0</b> | <b>0.7</b>  | <b>2.2</b> | <b>5.0</b> | <b>1.2</b>     | <b>8.5</b> | <b>10.1</b> | <b>9.8</b> | <b>8.3</b>    | <b>Aug-00</b>  |
| <i>NCREIF ODCE Net</i>                    |                    |                |            | <u>0.0</u>  | <u>0.8</u> | <u>2.0</u> | <u>0.0</u>     | <u>6.6</u> | <u>8.8</u>  | <u>8.9</u> | <u>7.1</u>    | <i>Aug-00</i>  |
| Over/Under                                |                    |                |            | 0.7         | 1.4        | 3.0        | 1.2            | 1.9        | 1.3         | 0.9        | 1.2           |                |
| Principal Global Advisors                 | 157,724,444        | 7.4            |            | 0.8         | 2.0        | 4.4        | 1.3            | 8.1        | 9.9         | 10.3       | 7.4           | Jan-04         |
| <i>NCREIF ODCE Net</i>                    |                    |                |            | <u>0.0</u>  | <u>0.8</u> | <u>2.0</u> | <u>0.0</u>     | <u>6.6</u> | <u>8.8</u>  | <u>8.9</u> | <u>7.1</u>    | <i>Jan-04</i>  |
| Over/Under                                |                    |                |            | 0.8         | 1.2        | 2.4        | 1.3            | 1.5        | 1.1         | 1.4        | 0.3           |                |
| Siguler Guff DREOF II (\$25.0 MM)         | 20,715,889         | 1.0            |            | 0.0         | 3.2        | 8.2        | 0.0            | 11.7       | --          | --         | 8.5           | May-16         |
| <i>NCREIF Property Index</i>              |                    |                |            | <u>0.0</u>  | <u>1.5</u> | <u>3.3</u> | <u>0.0</u>     | <u>6.9</u> | <u>8.8</u>  | <u>9.2</u> | <u>6.8</u>    | <i>May-16</i>  |
| Over/Under                                |                    |                |            | 0.0         | 1.7        | 4.9        | 0.0            | 4.8        |             |            | 1.7           |                |



## Louisiana Municipal Police Employees' Retirement System

# TOTAL FUND PERFORMANCE DETAIL

|  | Market Value<br>(\$) | % of<br>Portfolio | Policy %   | 1 Mo<br>(%) | 3 Mo<br>(%) | YTD<br>(%) | Fiscal<br>YTD<br>(%) | 3 Yrs<br>(%) | 5 Yrs<br>(%) | 10 Yrs<br>(%) | Inception<br>(%) | Inception<br>Date |
|--|----------------------|-------------------|------------|-------------|-------------|------------|----------------------|--------------|--------------|---------------|------------------|-------------------|
| <b>Total Private Equity Composite</b>                  | <b>64,733,751</b>    | <b>3.0</b>        | <b>5.0</b> | <b>0.0</b>  | <b>1.0</b>  | <b>3.5</b> | <b>0.0</b>           | <b>11.5</b>  | <b>9.8</b>   | <b>--</b>     | <b>10.0</b>      | <b>Oct-12</b>     |
| <i>Cambridge Associates US All PE</i>                  |                      |                   |            | <u>0.0</u>  | <u>0.0</u>  | <u>4.8</u> | <u>0.0</u>           | <u>13.9</u>  | <u>10.7</u>  | <u>14.1</u>   | <u>12.6</u>      | <i>Oct-12</i>     |
| Over/Under   |                      |                   |            | 0.0         | 1.0         | -1.3       | 0.0                  | -2.4         | -0.9         |               | -2.6             |                   |
| Summit Partners Credit Fund (\$41.4 MM)                | 5,427,209            | 0.3               |            | 0.0         | 0.5         | -11.2      | 0.0                  | 5.0          | 6.1          | --            | 7.3              | Oct-12            |
| Collier International Partners VII (\$15.0 MM)         | 11,761,271           | 0.6               |            | 0.0         | -3.2        | -2.0       | 0.0                  | 25.1         | --           | --            | 23.7             | Feb-16            |
| Warburg Pincus (\$12.9 MM)                             | 13,440,268           | 0.6               |            | 0.0         | -0.3        | 1.6        | 0.0                  | 5.4          | --           | --            | -2.4             | Jan-16            |
| HarbourVest Partners Co-Investment IV (\$12.5 MM)      | 12,197,280           | 0.6               |            | 0.0         | 2.5         | 4.2        | 0.0                  | --           | --           | --            | 10.0             | Jan-17            |
| J.F. Lehman Equity Investors IV, L.P. (\$12.5 MM)      | 11,214,058           | 0.5               |            | 0.0         | 5.8         | 24.8       | 0.0                  | --           | --           | --            | 27.4             | Jan-17            |
| GoldPoint Partners Co-Investment VI, L.P. (\$15.0 MM)  | 5,127,341            | 0.2               |            | 0.0         | 0.2         | -0.9       | 0.0                  | --           | --           | --            | -3.7             | Jan-18            |
| Levine Leichtman Capital Partners VI, L.P. (\$12.5 MM) | 5,390,659            | 0.3               |            | 0.0         | 2.3         | -0.9       | 0.0                  | --           | --           | --            | -0.4             | Mar-18            |
| Warburg Pincus Global Growth Fund                      | 175,664              | 0.0               |            | 0.0         | 0.0         | --         | 0.0                  | --           | --           | --            | 0.0              | Apr-19            |
| <b>Cash Account</b>                                    | <b>22,037,482</b>    | <b>1.0</b>        | <b>0.0</b> | <b>0.2</b>  | <b>0.6</b>  | <b>2.0</b> | <b>0.4</b>           | <b>2.0</b>   | <b>2.0</b>   | <b>3.6</b>    | <b>3.9</b>       | <b>Mar-98</b>     |
| Cash Account   | 22,037,482           | 1.0               |            | 0.2         | 0.6         | 2.0        | 0.4                  | 2.0          | 2.0          | 3.6           | 3.9              | Mar-98            |
| 91 Day T-Bills   |                      |                   |            | <u>0.2</u>  | <u>0.5</u>  | <u>1.5</u> | <u>0.3</u>           | <u>1.5</u>   | <u>0.9</u>   | <u>0.5</u>    | <u>1.9</u>       | <i>Mar-98</i>     |
| Over/Under   |                      |                   |            | 0.0         | 0.1         | 0.5        | 0.1                  | 0.5          | 1.1          | 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.
- Total Fund Policy Index is 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 as of 6/1/2019.
- 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 3/31/2019 value +/- capital calls and distributions.
- Siguler Guff was funded on 4/13/2016. Market values are based on reported 3/31/2019 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 \$115,617.27 from liquidating Alliance Bernstein Int'l Value.



## Louisiana Municipal Police Employees' Retirement System

# MONTHLY BREAKDOWN OF CHANGE IN VALUE

| Cash Flow Summary                                     |                           |                              |                          |                        |
|---|---------------------------|------------------------------|--------------------------|------------------------|
|   | Beginning<br>Market Value | Month Ending August 31, 2019 |                          | Ending<br>Market Value |
|   |                           | Net Cash Flow                | Net Investment<br>Change |                        |
| Acadian Emerging Markets                              | \$98,940,621              | \$0                          | -\$5,262,409             | \$93,678,212           |
| AllianceBernstein Int'l Value                         | \$116,124                 | \$0                          | -\$507                   | \$115,617              |
| AllianceBernstein S&P 500 Index Fund                  | \$112,618,579             | \$0                          | -\$1,785,834             | \$110,832,745          |
| BMO Asset Management                                  | \$127,839,793             | \$0                          | -\$4,919,740             | \$122,920,053          |
| Cash Account  | \$67,336,010              | -\$45,424,246                | \$125,718                | \$22,037,482           |
| Coller International Partners VII (\$15.0 MM)         | \$11,761,271              | \$0                          | \$0                      | \$11,761,271           |
| Dimensional Fund Advisors                             | \$62,284,898              | \$0                          | -\$3,190,036             | \$59,094,862           |
| Energy Opportunities Capital                          | \$23                      | -\$23                        | \$0                      | --                     |
| EnTrustPermal   | \$86,897,587              | \$0                          | \$0                      | \$86,897,587           |
| GoldPoint Partners Co-Investment VI, L.P. (\$15.0 MM) | \$5,127,341               | \$0                          | \$0                      | \$5,127,341            |
| HarbourVest Partners Co-Investment IV (\$12.5 MM)     | \$13,159,780              | -\$962,500                   | \$0                      | \$12,197,280           |
| Hotchkis & Wiley High Yield SMA                       | \$42,626,403              | \$0                          | -\$140,263               | \$42,486,140           |
| INTECH  | \$151,091,236             | \$0                          | -\$154,106               | \$150,937,131          |
| Investec EMD LC Dynamic                               | \$109,094,141             | \$0                          | -\$3,661,149             | \$105,432,991          |
| J.F. Lehman Equity Investors IV, L.P. (\$12.5 MM)     | \$10,462,468              | \$751,590                    | \$0                      | \$11,214,058           |
| KBI   | \$90,287,042              | \$0                          | -\$2,931,446             | \$87,355,596           |



## Louisiana Municipal Police Employees' Retirement System

# MONTHLY BREAKDOWN OF CHANGE IN VALUE

|  | Beginning<br>Market Value | Month Ending August 31, 2019 |                          | Ending<br>Market Value |
|--|---------------------------|------------------------------|--------------------------|------------------------|
|  |                           | Net Cash Flow                | Net Investment<br>Change |                        |
| Levine Leichtman Capital Partners VI, L.P. (\$12.5 MM)     | \$5,390,659               | \$0                          | \$0                      | \$5,390,659            |
| Loomis Sayles  | \$130,734,572             | \$0                          | \$1,919,245              | \$132,653,817          |
| LSV  | \$79,355,842              | \$0                          | -\$5,828,690             | \$73,527,152           |
| Mellon MSCI EAFE Index Fund                                | \$105,875,986             | \$0                          | -\$2,770,276             | \$103,105,710          |
| Och-Ziff   | \$6,674                   | \$0                          | \$0                      | \$6,674                |
| Orleans Capital Intermediate Investment Grade Fixed Income | \$0                       | \$50,000,000                 | \$903                    | \$50,000,903           |
| Pacific  | \$40,317,255              | \$0                          | -\$11,289                | \$40,305,966           |
| Pinnacle Associates  | \$82,313,280              | \$0                          | -\$2,802,280             | \$79,511,000           |
| Principal Global Advisors                                  | \$156,474,519             | \$0                          | \$1,249,925              | \$157,724,444          |
| Siguler Guff DREOF II (\$25.0 MM)                          | \$25,732,703              | -\$5,016,814                 | \$0                      | \$20,715,889           |
| SSgA Bond Index Fund                                       | \$343,771,231             | \$0                          | \$8,917,564              | \$352,688,794          |
| Stark  | \$6,128                   | \$0                          | \$0                      | \$6,128                |
| Summit Partners Credit Fund (\$41.4 MM)                    | \$5,427,209               | \$0                          | \$0                      | \$5,427,209            |
| Warburg Pincus (\$12.9 MM)                                 | \$12,778,479              | \$661,789                    | \$0                      | \$13,440,268           |
| Warburg Pincus Global Growth Fund                          | \$175,664                 | \$0                          | \$0                      | \$175,664              |
| William Blair  | \$181,695,894             | \$0                          | -\$2,961,080             | \$178,734,814          |
| <b>Total</b>   | <b>\$2,159,699,411</b>    | <b>\$9,796</b>               | <b>-\$24,205,750</b>     | <b>\$2,135,503,458</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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## **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.

