

PRELIMINARY REPORT PREPARED FOR:



Your Strategic Partner for Defined Benefit Plans

Month Ending 12/31/2023

**John-Oliver Beirne, CRPC®, MBA**  
Partner & President  
JOBeirne@beirnegroup.com  
(203) 701-8976

**Richard DeFrancesco, Jr.**  
Partner, Chief Operating Officer  
RDeFrancesco@beirnegroup.com  
(203) 951-3577

**John Beirne, CIMA®**  
Founding Partner  
JBeirne@beirnegroup.com  
(203) 701-8974

**Lindsey Allard, AWMA®, MBA**  
Partner, Managing Director  
LAllard@beirnegroup.com  
(203) 951-0305

### Periods Ending 12/31/23

| Name                                | 1<br>Month | Last 3 Months | 1<br>Year | 3<br>Years | 5<br>Years | 10<br>Years | 15<br>Years | 20<br>Years |
|-------------------------------------|------------|---------------|-----------|------------|------------|-------------|-------------|-------------|
| <b>US Equity</b>                    |            |               |           |            |            |             |             |             |
| Russell 3000 Index                  | 5.3        | 12.1          | 26.0      | 8.5        | 15.2       | 11.5        | 13.8        | 12.5        |
| S&P 500 Index                       | 4.5        | 11.7          | 26.3      | 10.0       | 15.7       | 12.0        | 14.0        | 13.0        |
| Russell 1000 Index                  | 4.9        | 12.0          | 26.5      | 9.0        | 15.5       | 11.8        | 14.0        | 12.8        |
| Russell 1000 Growth Index           | 4.4        | 14.2          | 42.7      | 8.9        | 19.5       | 14.9        | 16.7        | 11.5        |
| Russell 1000 Value Index            | 5.5        | 9.5           | 11.5      | 8.9        | 10.9       | 8.4         | 11.1        | 13.6        |
| Russell Midcap Index                | 7.7        | 12.8          | 17.2      | 5.9        | 12.7       | 9.4         | 13.6        | 13.5        |
| Russell 2000 Index                  | 12.2       | 14.0          | 16.9      | 2.2        | 10.0       | 7.2         | 11.3        | 10.2        |
| Russell 2000 Growth Index           | 12.0       | 12.7          | 18.7      | -3.5       | 9.2        | 7.2         | 12.1        | 6.9         |
| Russell 2000 Value Index            | 12.4       | 15.3          | 14.6      | 7.9        | 10.0       | 6.8         | 10.3        | 12.9        |
| <b>International Equity</b>         |            |               |           |            |            |             |             |             |
| MSCI AC World Index                 | 4.8        | 11.1          | 22.8      | 6.2        | 12.3       | 8.5         | 10.8        | -           |
| MSCI AC World ex USA                | 5.1        | 9.8           | 16.2      | 2.0        | 7.6        | 4.3         | 7.2         | -           |
| MSCI EAFE Index                     | 5.3        | 10.5          | 18.9      | 4.5        | 8.7        | 4.8         | 7.4         | 11.1        |
| MSCI Emerging Markets Index         | 3.9        | 7.9           | 10.3      | -4.7       | 4.1        | 3.0         | 6.9         | -           |
| <b>Fixed Income</b>                 |            |               |           |            |            |             |             |             |
| 90 Day U.S. Treasury Bill           | 0.5        | 1.4           | 5.0       | 2.2        | 1.9        | 1.2         | 0.9         | 5.6         |
| Blmbg. U.S. Aggregate               | 3.8        | 6.8           | 5.5       | -3.3       | 1.1        | 1.8         | 2.7         | 9.4         |
| Blmbg. U.S. Gov't/Credit            | 3.7        | 6.6           | 5.7       | -3.5       | 1.4        | 2.0         | 2.8         | 9.4         |
| Bloomberg U.S. Municipal Bond Index | 2.3        | 7.9           | 6.4       | -0.4       | 2.3        | 3.0         | 4.0         | 8.6         |
| Blmbg. U.S. Corp: High Yield Index  | 3.7        | 7.2           | 13.4      | 2.0        | 5.4        | 4.6         | 9.2         | 10.0        |
| <b>Real Estate</b>                  |            |               |           |            |            |             |             |             |
| FTSE NAREIT All REITs Index         | 8.9        | 17.6          | 11.5      | 5.3        | 7.1        | 7.7         | 10.6        | 9.8         |
| NCREIF Property Index               | -          | -             | -         | -          | -          | -           | -           | 7.5         |
| <b>Alternatives</b>                 |            |               |           |            |            |             |             |             |
| Barclay Hedge Fund Index            | -0.6       | 1.6           | 5.7       | 2.3        | 5.6        | 4.1         | 5.8         | -           |
| <b>Inflation</b>                    |            |               |           |            |            |             |             |             |
| CPI - All Urban Consumers (SA)      | -          | -             | -         | -          | -          | -           | -           | 3.1         |

**Total Portfolio**

Run Date: January 9, 2024

As of December 31, 2023

|                                                           | Market Value<br>(\$) | % of<br>Portfolio | Month       | Quarter      | 1 Yr<br>(%)  | 3 Yrs<br>(%) | 5 Yrs<br>(%) | 10 Yrs<br>(%) | 15<br>Years | Inception<br>(%) | Inception<br>Date |
|-----------------------------------------------------------|----------------------|-------------------|-------------|--------------|--------------|--------------|--------------|---------------|-------------|------------------|-------------------|
| <b>Total Portfolio</b>                                    | <b>749,555,576</b>   | <b>100.00</b>     | <b>2.24</b> | <b>4.72</b>  | <b>12.40</b> | <b>4.37</b>  | <b>8.98</b>  | <b>6.29</b>   | <b>7.72</b> | <b>8.51</b>      | <b>Jan-92</b>     |
| Policy Index Blended New                                  |                      |                   | 3.50        | 8.15         | 14.57        | 3.05         | 8.09         | 6.02          | 7.68        | 7.19             |                   |
| 60% MSCI ACWI/40% BC Agg                                  |                      |                   | 4.41        | 9.36         | 15.37        | 2.21         | 7.67         | 5.68          | 7.43        | 6.65             |                   |
| <b>Credit</b>                                             | <b>173,597,666</b>   | <b>23.16</b>      | <b>1.29</b> | <b>1.80</b>  | <b>9.59</b>  | <b>5.06</b>  | <b>5.64</b>  | <b>-</b>      | <b>-</b>    | <b>5.64</b>      | <b>Jan-19</b>     |
| Blmbg. U.S. Aggregate                                     |                      |                   | 3.83        | 6.82         | 5.53         | -3.31        | 1.10         | 1.81          | 2.68        | 1.10             |                   |
| <b>High Quality Credit</b>                                | <b>105,602,637</b>   | <b>14.09</b>      | <b>1.92</b> | <b>3.10</b>  | <b>7.98</b>  | <b>1.12</b>  | <b>3.78</b>  | <b>-</b>      | <b>-</b>    | <b>3.78</b>      | <b>Jan-19</b>     |
| Blmbg. U.S. Aggregate                                     |                      |                   | 3.83        | 6.82         | 5.53         | -3.31        | 1.10         | 1.81          | 2.68        | 1.10             |                   |
| Boyd Watterson Fixed Income                               | 29,591,335           | 3.95              | 3.68        | 6.53         | 5.71         | -3.29        | 1.56         | 2.05          | 3.16        | 5.49             | Apr-90            |
| Blmbg. U.S. Aggregate                                     |                      |                   | 3.83        | 6.82         | 5.53         | -3.31        | 1.10         | 1.81          | 2.68        | 5.17             |                   |
| iShares Core US Aggregate Bond ETF(AGG)                   | 15,288,106           | 2.04              | 3.69        | 6.75         | -            | -            | -            | -             | -           | 3.33             | Aug-23            |
| Blmbg. U.S. Aggregate                                     |                      |                   | 3.83        | 6.82         | 5.53         | -3.31        | 1.10         | 1.81          | 2.68        | 3.44             |                   |
| GoldenTree High Grade Floating Rate Fund, Ltd.[CE]        | 36,385,759           | 4.85              | 0.79        | 2.55         | 10.81        | 4.05         | 3.90         | -             | -           | 3.32             | Feb-18            |
| Blmbg. U.S. Aggregate Float Adjusted                      |                      |                   | 3.75        | 6.72         | 5.60         | -3.33        | 1.17         | 1.83          | -           | 1.17             |                   |
| Golub Capital BDC 4, Inc.(\$22 million)[CE]               | 6,600,000            | 0.88              | 1.73        | 1.73         | 13.56        | -            | -            | -             | -           | 14.21            | Dec-22            |
| Blmbg. U.S. Aggregate                                     |                      |                   | 3.83        | 6.82         | 5.53         | -3.31        | 1.10         | 1.81          | 2.68        | 4.67             |                   |
| EnTrust Structured Income II-A                            | 17,737,437           | 2.37              | 0.00        | -3.27        | 3.38         | 1.17         | 5.38         | -             | -           | 4.23             | Jul-17            |
| Blmbg. U.S. Aggregate                                     |                      |                   | 3.83        | 6.82         | 5.53         | -3.31        | 1.10         | 1.81          | 2.68        | 1.04             |                   |
| <b>Multi-Credit</b>                                       | <b>67,995,029</b>    | <b>9.07</b>       | <b>0.32</b> | <b>-0.14</b> | <b>11.93</b> | <b>12.52</b> | <b>8.70</b>  | <b>-</b>      | <b>-</b>    | <b>8.70</b>      | <b>Jan-19</b>     |
| Blmbg. U.S. Corp: High Yield Index                        |                      |                   | 3.73        | 7.16         | 13.45        | 1.98         | 5.37         | 4.60          | 9.17        | 5.37             |                   |
| Prytania Athena Fund                                      | 13,458,704           | 1.80              | 0.00        | 1.50         | 18.77        | 6.84         | 0.30         | -             | -           | 3.24             | Mar-14            |
| Blmbg. Global High Yield Index                            |                      |                   | 4.03        | 8.56         | 14.04        | 0.18         | 3.91         | 3.62          | 8.62        | 3.43             |                   |
| EnTrust Structured Income Fund                            | 6,562,268            | 0.88              | 0.00        | -9.21        | 3.92         | 4.71         | 5.14         | 5.93          | -           | 5.27             | Mar-13            |
| Blmbg. U.S. Aggregate                                     |                      |                   | 3.83        | 6.82         | 5.53         | -3.31        | 1.10         | 1.81          | 2.68        | 1.50             |                   |
| Beach Point TR Offshore Fund II[CE]                       | 9,672,850            | 1.29              | 2.26        | 4.09         | 13.89        | 5.14         | 6.19         | 4.32          | -           | 5.78             | Jan-12            |
| Blmbg. U.S. Corp: High Yield Index                        |                      |                   | 3.73        | 7.16         | 13.45        | 1.98         | 5.37         | 4.60          | 9.17        | 5.72             |                   |
| Silver Point Specialty Credit Fund III, LP                | 6,632,951            | 0.88              | 0.00        | 0.00         | -            | -            | -            | -             | -           | 5.34             | Apr-23            |
| Blmbg. U.S. Corporate Investment Grade Index              |                      |                   | 4.34        | 8.50         | 8.52         | -3.29        | 2.63         | 2.95          | 4.81        | 4.85             |                   |
| GWC Select Opportunities SPC1(\$2.6 million)              | 2,643,970            | 0.35              | 0.00        | 0.00         | -            | -            | -            | -             | -           | 1.69             | Sep-23            |
| Blmbg. U.S. Corp: High Yield Index                        |                      |                   | 3.73        | 7.16         | 13.45        | 1.98         | 5.37         | 4.60          | 9.17        | 5.90             |                   |
| Greywolf Opportunities Offshore Fund II, LP(\$24 million) | 11,815,931           | 1.58              | 0.00        | 0.00         | 15.15        | -            | -            | -             | -           | 11.53            | Oct-22            |
| Blmbg. U.S. Corp: High Yield Index                        |                      |                   | 3.73        | 7.16         | 13.45        | 1.98         | 5.37         | 4.60          | 9.17        | 14.34            |                   |
| Greywolf Distressed Opp Fund, LP(\$17 million)            | 17,208,355           | 2.30              | 0.00        | 0.00         | 7.59         | 9.30         | -            | -             | -           | 9.31             | Aug-20            |
| Blmbg. U.S. Universal Index                               |                      |                   | 3.79        | 6.83         | 6.17         | -2.97        | 1.44         | 2.08          | 3.18        | -2.46            |                   |

| Total Portfolio                         |                   |                |       |         |          |           |           |            |          |               |                |
|-----------------------------------------|-------------------|----------------|-------|---------|----------|-----------|-----------|------------|----------|---------------|----------------|
|                                         | Market Value (\$) | % of Portfolio | Month | Quarter | 1 Yr (%) | 3 Yrs (%) | 5 Yrs (%) | 10 Yrs (%) | 15 Years | Inception (%) | Inception Date |
| Equity                                  | 344,375,042       | 45.94          | 4.18  | 9.45    | 20.24    | 4.86      | 12.83     | -          | -        | 12.83         | Jan-19         |
| MSCI AC World Index                     |                   |                | 4.84  | 11.15   | 22.81    | 6.24      | 12.27     | 8.48       | 10.78    | 12.28         |                |
| Public Equity                           | 278,542,602       | 37.16          | 5.22  | 11.96   | 23.34    | 4.38      | 12.40     | -          | -        | 12.40         | Jan-19         |
| MSCI AC World Index                     |                   |                | 4.84  | 11.15   | 22.81    | 6.24      | 12.27     | 8.48       | 10.78    | 12.28         |                |
| Neuberger Berman Large Cap Growth       | 73,974,378        | 9.87           | 5.29  | 15.32   | 43.28    | 8.17      | 19.82     | 14.75      | 15.35    | 14.36         | Feb-79         |
| Russell 1000 Growth Index               |                   |                | 4.43  | 14.16   | 42.68    | 8.86      | 19.50     | 14.86      | 16.68    | 11.89         |                |
| iShares Russell 1000 Value ETF(IWD)     | 6,210,950         | 0.83           | 5.54  | 9.48    | 11.34    | 8.66      | -         | -          | -        | 9.23          | Feb-19         |
| Russell 1000 Value Index                |                   |                | 5.54  | 9.50    | 11.46    | 8.86      | 10.91     | 8.40       | 11.09    | 9.43          |                |
| Columbia Dividend Income                | 16,173,024        | 2.16           | 4.39  | 8.53    | 10.51    | 10.02     | -         | -          | -        | 10.52         | May-19         |
| Russell 1000 Value Index                |                   |                | 5.54  | 9.50    | 11.46    | 8.86      | 10.91     | 8.40       | 11.09    | 8.25          |                |
| Eagle Equity                            | 26,274,466        | 3.51           | 3.17  | 10.21   | 37.75    | 9.39      | -         | -          | -        | 12.40         | Apr-19         |
| Russell 1000 Value Index                |                   |                | 5.54  | 9.50    | 11.46    | 8.86      | 10.91     | 8.40       | 11.09    | 8.88          |                |
| Robeco LCV                              | 44,109,700        | 5.88           | 5.84  | 8.78    | 13.75    | 12.26     | 12.25     | 8.95       | -        | 9.80          | Oct-13         |
| Russell 1000 Value Index                |                   |                | 5.54  | 9.50    | 11.46    | 8.86      | 10.91     | 8.40       | 11.09    | 9.20          |                |
| Miller Opportunity Trust Class I(LMNOX) | 7,055,972         | 0.94           | 13.24 | 18.11   | 39.59    | -4.62     | -         | -          | -        | 7.71          | Apr-19         |
| Russell 1000 Value Index                |                   |                | 5.54  | 9.50    | 11.46    | 8.86      | 10.91     | 8.40       | 11.09    | 8.88          |                |
| Fiera SMID Growth                       | 31,984,806        | 4.27           | 9.91  | 14.18   | 25.29    | 4.79      | 17.02     | -          | -        | 11.01         | Nov-14         |
| Russell 2500 Growth Index               |                   |                | 11.14 | 12.59   | 18.93    | -2.68     | 11.43     | 8.78       | 13.64    | 9.15          |                |
| Neuberger Berman International          | 21,245,098        | 2.83           | 4.77  | 10.15   | 14.73    | 0.17      | 8.04      | 4.63       | 8.40     | 6.20          | Feb-05         |
| MSCI EAFE Index                         |                   |                | 5.33  | 10.47   | 18.85    | 4.53      | 8.69      | 4.78       | 7.44     | 5.49          |                |
| Vanguard Developed Mkts Ind(VTMNX)      | 2,698,900         | 0.36           | 5.76  | 11.18   | 17.86    | 3.60      | -         | -          | -        | 8.46          | Mar-20         |
| FTSE Developed x North America Index    |                   |                | 5.43  | 10.70   | 18.95    | 3.78      | 8.57      | 4.84       | 7.56     | 8.96          |                |
| GAMCO Gold                              | 12,596,077        | 1.68           | 0.02  | 16.70   | 8.99     | -3.09     | 9.68      | 6.08       | -        | -2.68         | Feb-12         |
| Philadelphia Gold and Silver Index      |                   |                | 1.90  | 17.37   | 5.94     | -1.87     | 14.46     | 5.58       | -0.70    | -2.80         |                |
| Sprott Asset Management                 | 9,310,433         | 1.24           | 1.03  | 14.19   | 5.16     | -7.40     | 8.26      | 3.59       | -        | -4.48         | Feb-12         |
| Philadelphia Gold and Silver Index      |                   |                | 1.90  | 17.37   | 5.94     | -1.87     | 14.46     | 5.58       | -0.70    | -2.80         |                |
| iShares MSCI Emerging Markets ETF(EEM)  | 14,149,214        | 1.89           | 3.57  | 7.97    | 9.02     | -5.83     | 2.91      | -          | -        | 3.38          | Feb-17         |
| MSCI Emerging Markets Index             |                   |                | 3.95  | 7.93    | 10.26    | -4.71     | 4.08      | 3.05       | 6.93     | 4.63          |                |
| Glovista Emerging Markets               | 12,759,584        | 1.70           | 3.59  | 6.93    | 7.23     | -5.48     | 3.34      | -          | -        | 1.20          | May-14         |
| MSCI Emerging Markets Index             |                   |                | 3.95  | 7.93    | 10.26    | -4.71     | 4.08      | 3.05       | 6.93     | 3.15          |                |

| Total Portfolio                                      |                   |                |       |         |          |           |           |            |          |               |                |
|------------------------------------------------------|-------------------|----------------|-------|---------|----------|-----------|-----------|------------|----------|---------------|----------------|
|                                                      | Market Value (\$) | % of Portfolio | Month | Quarter | 1 Yr (%) | 3 Yrs (%) | 5 Yrs (%) | 10 Yrs (%) | 15 Years | Inception (%) | Inception Date |
| Private Equity                                       | 65,832,440        | 8.78           | 0.00  | 0.00    | 6.77     | 18.20     | 23.79     | 11.67      | -        | 8.52          | Jan-12         |
| 7.5% Annual Return                                   |                   |                | 0.60  | 1.82    | 7.50     | 7.50      | 7.50      | 7.50       | 7.50     | 7.50          |                |
| Arsenal III, LP(\$15 mill)                           | 34,072,964        | 4.55           | 0.00  | 0.00    | 8.18     | 18.83     | -         | -          | -        | 35.87         | Feb-19         |
| Arsenal Growth Equity IV, LP(\$35 mill)              | 10,883,298        | 1.45           | 0.00  | 0.00    | -        | -         | -         | -          | -        | -4.14         | Feb-23         |
| Arsenal-Cart Investors II, LLC(\$2 million)          | 3,769,712         | 0.50           | 0.00  | 0.00    | 7.04     | -         | -         | -          | -        | 33.98         | Nov-21         |
| Arsenal-Elevate Investors I, LLC(\$4.6 million)      | 4,790,421         | 0.64           | 0.00  | 0.00    | 5.03     | -         | -         | -          | -        | 3.09          | Sep-22         |
| Arsenal-Sayari Investors, LLC(\$2 million)           | 3,246,159         | 0.43           | 0.00  | 0.00    | 35.92    | -         | -         | -          | -        | 25.05         | Nov-21         |
| GWC Select Opportunities SPC(\$2.5 million)          | 3,204,806         | 0.43           | 0.00  | 0.00    | 24.76    | -         | -         | -          | -        | 23.72         | Nov-22         |
| Zephyr Peacock India Fund III Limited (\$5 million)  | 2,957,837         | 0.39           | 0.00  | 0.00    | -14.40   | 5.46      | 2.45      | 4.92       | -        | 1.40          | Jun-12         |
| Zephyr Peacock India Growth Fund US, LP(\$6 million) | 2,907,243         | 0.39           | 0.00  | 0.00    | 13.84    | 7.17      | 0.85      | -          | -        | -1.81         | Jul-18         |
| Alternatives                                         | 214,544,950       | 28.62          | 0.17  | 0.35    | 4.45     | 4.75      | 4.18      | -          | -        | 4.18          | Jan-19         |
| Barclay Hedge Fund Index                             |                   |                | -0.61 | 1.62    | 5.75     | 2.28      | 5.64      | 4.15       | 5.84     | 5.64          |                |
| Real Estate                                          | 74,258,390        | 9.91           | 0.01  | 0.01    | -1.14    | 3.54      | 4.38      | -          | -        | 4.38          | Jan-19         |
| NCREIF Property Index                                |                   |                | -     | -       | -        | -         | -         | -          | -        | -             |                |
| Boyd Titanium GSA Fund (\$34.5 million)              | 36,959,519        | 4.93           | 0.00  | 0.00    | -0.93    | 3.85      | 5.13      | 6.56       | -        | 6.40          | Oct-13         |
| Boyd Watterson State Govt Fund, LP(\$10 million)     | 11,090,756        | 1.48           | 0.00  | 0.00    | -0.50    | 5.00      | 6.90      | -          | -        | 6.73          | Feb-18         |
| Boyd Diversified Gov't REIT(\$10 million)            | 24,160,251        | 3.22           | 0.00  | 0.00    | 4.24     | -         | -         | -          | -        | 4.24          | Jan-23         |
| Invesco Realty (\$10 million)                        | 37,944            | 0.01           | 0.00  | 0.00    | -0.89    | -0.99     | -1.52     | 4.86       | -        | 6.99          | Dec-09         |
| Invesco Mortgage Recovery Fund II, LP(\$10 million)  | 1,998,957         | 0.27           | 0.00  | 0.00    | -32.70   | -17.00    | -21.31    | -          | -        | -8.48         | Apr-15         |
| Heitman Value Partners III, LP(\$7 million)          | -                 | 0.00           | 24.06 | 24.06   | 19.06    | 27.12     | 20.22     | -          | -        | 18.99         | May-15         |
| Lone Star (\$10 million)                             | 10,963            | 0.00           | 0.00  | 0.00    | 80.10    | 74.78     | 40.48     | 29.38      | -        | 21.27         | Jun-11         |
| Commodities                                          | 5,869,240         | 0.78           | 0.00  | 0.00    | -7.79    | -0.09     | -5.73     | -          | -        | -5.73         | Jan-19         |
| Bloomberg Commodity Index Total Return               |                   |                | -2.69 | -4.63   | -7.91    | 10.76     | 7.23      | -1.11      | -0.24    | 7.23          |                |
| Corrum Capital Real Assets, LP (\$10 million)        | 5,869,240         | 0.78           | 0.00  | 0.00    | -7.79    | -0.09     | -5.73     | -          | -        | -0.10         | Jun-15         |

|                                                      | Total Portfolio   |                |       |         |          |           |           |            |          |               |                |
|------------------------------------------------------|-------------------|----------------|-------|---------|----------|-----------|-----------|------------|----------|---------------|----------------|
|                                                      | Market Value (\$) | % of Portfolio | Month | Quarter | 1 Yr (%) | 3 Yrs (%) | 5 Yrs (%) | 10 Yrs (%) | 15 Years | Inception (%) | Inception Date |
| Differentiated Return Stream                         | 134,417,320       | 17.93          | 0.26  | 0.55    | 8.10     | 5.61      | 4.09      | -          | -        | 4.09          | Jan-19         |
| CPI+2%                                               |                   |                | -     | -       | -        | -         | -         | -          | -        | -             |                |
| Kelly Park Capital                                   | 17,098,753        | 2.28           | 0.00  | 0.00    | 0.58     | -3.18     | -         | -          | -        | 0.14          | Jan-20         |
| Verition International Multi-Strategy Fund, Ltd.[CE] | 41,737,440        | 5.57           | 0.86  | 1.19    | 8.06     | 7.37      | -         | -          | -        | 12.79         | Jan-20         |
| OCO Opportunities Offshore Fund, Ltd.                | 18,202,251        | 2.43           | 0.00  | 1.39    | 10.97    | 14.95     | 15.39     | -          | -        | 7.64          | Feb-14         |
| Greywolf Containership Opps II, LP(\$6 million)      | 5,111,372         | 0.68           | 0.00  | 0.00    | 9.26     | -         | -         | -          | -        | 12.13         | Nov-22         |
| Entrust Blue Ocean Fund, LP(\$17 million)            | 21,979,770        | 2.93           | 0.00  | 0.00    | 8.48     | 21.13     | -         | -          | -        | 18.96         | Apr-20         |
| Entrust Blue Ocean Fund II, LP (\$30 mill)           | 2,289,063         | 0.31           | 0.00  | -       | -        | -         | -         | -          | -        | 0.00          | Dec-23         |
| Longford Capital (\$15 million)                      | 2,854,085         | 0.38           | 0.00  | 0.00    | 4.94     | 18.60     | 18.50     | 7.26       | -        | 3.78          | Jul-13         |
| Longford Capital Fund II, LP (\$30 million)          | 15,392,719        | 2.05           | 0.00  | 0.00    | 14.11    | 2.03      | 5.93      | -          | -        | 1.32          | Dec-16         |
| Longford Capital Fund III, LP(\$30 million)          | 9,751,867         | 1.30           | 0.00  | 0.00    | 9.76     | 14.71     | -         | -          | -        | 4.38          | Apr-20         |
| Cash                                                 | 17,037,918        | 2.27           | 0.43  | 1.27    | 4.81     | 2.02      | 1.64      | -          | -        | 1.64          | Jan-19         |
| Cash Account                                         | 17,037,918        | 2.27           | 0.43  | 1.27    | 4.81     | 2.02      | 1.64      | 1.04       | -        | 0.92          | Jan-12         |
| 90 Day U.S. Treasury Bill                            |                   |                | 0.47  | 1.37    | 5.02     | 2.15      | 1.88      | 1.24       | 0.86     | 1.06          |                |

Approx. 42% of portfolio is unvalued as of 12/31. This includes approx. 32% which is only valued quarterly.

*Policy Index-Blended New = MSCI ACWI 55% / BBgBarc US Aggregate TR 25% / Barclay Hedge Fund Index 20%.*

*From 4/30/2022-1/1/2019 the Policy Index Blended New consists of MSCI ACWI 55% / BBgBarc US Aggregate TR 25% / HFRI Fund of Funds Composite Index 20%. Prior to 1/1/2019 the Policy Index Blended New consists of 15% Russell 1000 Growth, 15% Russell 1000 Value, 5% Russell MidCap, 13.6% MSCI EAFE, 7.5% MSCI Emerging Markets, 21.3% BC US Aggregate, 7.6% BofA HY BB-B Rated Constrained Index, 10% HFRX Global Hedge Fund Index, 5% Private Equity Actual.*

Beirne Wealth Consulting Services, LLC (BWC) D/B/A beirne. All rights reserved.

For more information, please visit [www.beirnewealth.com](http://www.beirnewealth.com) or call BWC at 888-231-6372. This contains confidential and proprietary information of BWC and is intended for the exclusive use of the parties to whom it was provided by BWC. Its content may not be modified, sold or otherwise provided, in whole or in part, to any other person or entity, without BWC's prior written permission.

The findings, ratings and/or opinions expressed herein are the intellectual property of BWC and are subject to change without notice. They are not intended to convey any guarantees as to the future performance of the investment products, asset classes or capital markets discussed. Past performance does not guarantee future results. BWC's ratings do not constitute individualized investment advice.

Information contained herein has been obtained from a range of third party sources. While the information is believed to be reliable, BWC has not sought to verify it independently. As such, BWC makes no representations or warranties as to the accuracy of the information presented and takes no responsibility or liability (including for indirect, consequential or incidental damages) for any error, omission or inaccuracy in the data supplied by any third party.

This does not constitute an offer or a solicitation of an offer to buy or sell securities, commodities and/or any other financial instruments or products or constitute a solicitation on behalf of any of the investment managers, their affiliates, products or strategies that BWC may evaluate or recommend.

For the most recent approved ratings of an investment strategy, and a fuller explanation of their meanings, contact your BWCS representative.

Returns for pooled funds, e.g., mutual funds and collective investment trusts, are collected from third parties; they are not generally calculated by BWCS. Returns for separate accounts, with some exceptions, are calculated by BWC. 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.

BWC'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 BWC 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.

This report may contain confidential or proprietary information and may not be copied or redistributed to any party not legally entitled to receive it.

This report is intended for the exclusive use of the client listed within the report. Content is privileged and confidential. Any dissemination or distribution is strictly prohibited. Information has been obtained from a variety of sources believed to be reliable though not independently verified. Any forecast represents median expectations and actual returns, volatilities and correlations will differ from forecasts. Please note each client has customized investment objectives and constraints and the investment strategy for each portfolio is based on a client-specific asset allocation model. Past performance does not indicate future performance and there is a possibility of a loss.

This report does not represent a specific investment recommendation. Please consult with your advisor, attorney, and accountant, as appropriate, regarding specific advice.

Please remember to review the periodic statements you receive from you custodian. If you do not receive periodic statements from your custodian or notice issues with the activity reported in those statements, please contact BWCS or your custodian immediately.

## INDEX DEFINITIONS

- Citigroup 3 Month T-Bill measures monthly return equivalents of yield averages that are not marked to market. The Three-Month Treasury Bill Indexes consist of the last three three-month Treasury bill issues.
- Bloomberg Barclays Treasury U.S. T-Bills-1-3 Month Index includes aged U.S. Treasury bills, notes and bonds with a remaining maturity from 1 up to (but not including) 3 months. It excludes zero coupon strips.
- Bloomberg Barclays Capital US Treasury Inflation Protected Securities Index consists of Inflation-Protection securities issued by the U.S. Treasury.
- Bloomberg Barclays Muni Index is a rules-based, market-value-weighted index engineered for the long-term tax-exempt bond market. Bonds must be rated investment-grade by at least two ratings agencies.
- Bloomberg Barclays Muni 1 Year Index is the 1-year (1-2) component of the Municipal Bond index.
- Bloomberg Barclays Muni 3 Year Index is the 3-year (2-4) component of the Municipal Bond index.
- Bloomberg Barclays Muni 5 Year Index is the 5-year (4-6) component of the Municipal Bond index.
- Bloomberg Barclays Muni 7 Year Index is the 7-year (6-8) component of the Municipal Bond index.
- Bloomberg Barclays Intermediate U.S. Gov't/Credit is the Intermediate component of the U.S. Government/Credit index, which includes securities in the Government and Credit Indices. The Government Index includes treasuries and agencies, while the credit index includes publicly issued U.S. corporate and foreign debentures and secured notes that meet specified maturity, liquidity, and quality requirements.
- Bloomberg Barclays U.S. Aggregate Index covers the U.S. investment grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities, and asset backed securities.
- Bloomberg Barclays Global Aggregate ex. USD Indices represent a broad-based measure of the global investment-grade fixed income markets. The two major components of this index are the Pan-European Aggregate and the Asian-Pacific Aggregate Indices. The index also includes Eurodollar and Euro-Yen corporate bonds and Canadian government, agency and corporate securities.
- Bloomberg Barclays U.S. Corporate High Yield Index covers the universe of fixed rate, non-investment grade debt. Eurobonds and debt issues from countries designated as emerging markets (sovereign rating of Baa1/BBB+/BBB+ and below using the middle of Moody's, S&P, and Fitch) are excluded, but Canadian and global bonds (SEC registered) of issuers in non-EMG countries are included.
- JP Morgan Government Bond Index-Emerging Market (GBI-EM) Index is a comprehensive, global local emerging markets index, and consists of regularly traded, liquid fixed-rate, domestic currency government bonds to which international investors can gain exposure.
- The S&P 500 is a capitalization-weighted index of 500 stocks designed to measure performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industries.
- The Dow Jones Industrial Index is a price-weighted average of 30 blue-chip stocks that are generally the leaders in their industry.
- The NASDAQ is a broad-based capitalization-weighted index of stocks in all three NASDAQ tiers: Global Select, Global Market and Capital Market.
- Russell 3000 is a market-cap-weighted index which consists of roughly 3,000 of the largest companies in the U.S. as determined by market capitalization. It represents nearly 98% of the investable U.S. equity market.
- Russell 1000 consists of the largest 1000 companies in the Russell 3000 Index.
- Russell 1000 Growth measures the performance of those Russell 1000 companies with higher P/B ratios and higher forecasted growth values.
- Russell 1000 Value measures the performance of those Russell 1000 companies with lower P/B ratios and lower forecasted growth values.
- Russell Mid Cap measures the performance of the 800 smallest companies in the Russell 1000 Index.
- Russell Mid Cap Growth measures the performance of those Russell Mid Cap companies with higher P/B ratios and higher forecasted growth values.
- Russell Mid Cap Value measures the performance of those Russell Mid Cap companies with lower P/B ratios and lower forecasted growth values.

- Russell 2000 consists of the 2,000 smallest U.S. companies in the Russell 3000 index.
- Russell 2000 Growth measures the performance of the Russell 2000 companies with higher P/B ratios and higher forecasted growth values.
- Russell 2000 Value measures the performance of those Russell 2000 companies with lower P/B ratios and lower forecasted growth values.
- Russell 2500 consists of the 2,500 smallest U.S. companies in the Russell 3000 index.
- Russell 2500 Growth measures the performance of the Russell 2500 companies with higher P/B ratios and higher forecasted growth values.
- Russell 2500 Value measures the performance of those Russell 2500 companies with lower P/B ratios and lower forecasted growth values.
- MSCI World captures large and mid-cap representation across 23 Developed Markets countries. With 1,645 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.
- MSCI ACWI (All Country World Index) ex. U.S. Index captures large and mid-cap representation across 22 of 23 Developed Markets countries (excluding the United States) and 23 Emerging Markets countries. With 1,859 constituents, the index covers approximately 85% of the global equity opportunity set outside the US.
- MSCI ACWI (All Country World Index) ex. U.S. Small Cap Index captures small cap representation across 22 of 23 Developed Markets countries (excluding the US) and 23 Emerging Markets countries. With 4,368 constituents, the index covers approximately 14% of the global equity opportunity set outside the US.
- MSCI EAFE is an equity index which captures large and mid-cap representation across Developed Markets countries around the world, excluding the US and Canada. With 930 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.
- MSCI EAFE Value captures large and mid-cap securities exhibiting overall value style characteristics across Developed Markets countries around the world, excluding the US and Canada. The value investment style characteristics for index construction are defined using three variables: book value to price, 12-month forward earnings to price and dividend yield. With 507 constituents, the index targets 50% coverage of the free float-adjusted market capitalization of the MSCI EAFE Index.
- MSCI EAFE Growth captures large and mid-cap securities exhibiting overall growth style characteristics across Developed Markets countries around the world, excluding the US and Canada. The growth investment style characteristics for index construction are defined using five variables: long-term forward EPS growth rate, short-term forward EPS growth rate, current internal growth rate and long-term historical EPS growth trend and long term historical sales per share growth trend. With 542 constituents, the index targets 50% coverage of the free float-adjusted market capitalization of the MSCI EAFE Index.
- MSCI Emerging Markets captures large and mid-cap representation across 23 Emerging Markets countries. With 836 constituents, the index covers approximately 85% of the free-float adjusted market capitalization in each country.
- Consumer Price Index is a measure of prices paid by consumers for a market basket of consumer goods and services. The yearly (or monthly) growth rates represent the inflation rate.
- FTSE NAREIT Equity REITs Index contains all Equity REITs not designed as Timber REITs or Infrastructure REITs.
- S&P Developed World Property defines and measures the investable universe of publicly traded property companies domiciled in developed markets. The companies in the index are engaged in real estate related activities, such as property ownership, management, development, rental and investment.
- S&P Developed World Property x U.S. defines and measures the investable universe of publicly traded property companies domiciled in developed countries outside of the U.S. The companies included are engaged in real estate related activities, such as property ownership, management, development, rental and investment.
- Bloomberg Commodity Index is calculated on an excess return basis and reflects commodity futures price movements. The index rebalances annually weighted 2/3 by trading volume and 1/3 by world production and weight-caps are applied at the commodity, sector and group level for diversification.
- HFRI Fund Weighted Composite Index is a global, equal-weighted index of over 2,000 single-manager funds that report to HFR Database. Constituent funds report monthly net of all fees performance in US Dollar and have a minimum of \$50 Million under management or a twelve (12) month track record of active performance. The HFRI Fund Weighted Composite Index does not include Funds of Hedge Funds.
- The Alerian MLP Index is the leading gauge of energy Master Limited Partnerships (MLPs). The float adjusted, capitalization-weighted index, whose constituents represent approximately 85% of total float-adjusted market capitalization, is disseminated real-time on a price-return basis (AMZ) and on a total-return basis.
- The Adjusted Alerian MLP Index is commensurate with 65% of the monthly returns of the Alerian MLP Index to incorporate the effect of deferred tax liabilities incurred by MLP entities.

## DEFINITION OF KEY STATISTICS AND TERMS

- Returns: A percentage figure used when reporting historical average compounded rate of investment return. All returns are annualized if the period for which they are calculated exceeds one year.
- Universe Comparison: The universe compares the fund's returns to a group of other investment portfolios with similar investment strategies. The returns for the fund, the index and the universe percentiles are displayed. A percentile ranking of 1 is the best, while a percentile ranking of 100 is the worst. For example, a ranking of 50 indicates the fund outperformed half of the universe. A ranking of 25 indicates the fund was in the top 25% of the universe, outperforming 75%.
- Returns In Up/Down Markets: This measures how the fund performed in both up and down markets. The methodology is to segregate the performance for each time period into the quarters in which the market, as defined by the index, was positive and negative. Quarters with negative index returns are treated as down markets, and quarters with positive index returns are treated as up markets. Thus, in a 3 year or 12 quarter period, there might be 4 down quarters and 8 up quarters. A simple arithmetic average of returns is calculated for the fund and the index based on the up quarters. A simple arithmetic average of returns is calculated for the fund and the index based on the down quarters. The up-market capture ratio is the ratio of the fund's return in up markets to the index. The down-market capture ratio is the ratio of the fund's return in down markets to the index. Ideally, the fund would have a greater up market capture ratio than down market capture ratio.
- Standard Deviation: Standard deviation is a statistical measure of the range of performance within which the total returns of a fund fall. When a fund has a high standard deviation, the range of performance is very wide, meaning there is a greater volatility. Approximately 68% of the time, the total return of any given fund will differ from the average total return by no more than plus or minus the standard deviation figure. Ninety-five percent of the time, a fund's total return will be within a range of plus or minus two times the standard deviation from the average total return. If the quarterly or monthly returns are all the same the standard deviation will be zero. The more they vary from one another, the higher the standard deviation. Standard deviation can be misleading as a risk indicator for funds with high total returns because large positive deviations will increase the standard deviation without a corresponding increase in the risk of the fund. While positive volatility is welcome, negative is not.
- R-Squared: This reflects the percentage of a fund's movements that are explained by movements in its benchmark index. An R-squared of 100 means that all movements of a fund are completely explained by movements in the index. Conversely, a low R-squared indicates very few of the fund's movements are explained by movements in the benchmark index. R-squared can also be used to ascertain the significance of a particular beta. Generally, a higher R-squared will indicate a more reliable beta figure. If the R-squared is lower, then the beta is less relevant to the fund's performance. A measure of diversification, R-squared indicates the extent to which fluctuations in portfolio returns are explained by market. An R-squared = 0.70 implies that 70% of the fluctuation in a portfolio's return is explained by the fluctuation in the market. In this instance, overweighting or underweighting of industry groups or individual securities is responsible for 30% of the fund's movement.
- Beta: This is a measure of a fund's market risk. The beta of the market is 1.00. Accordingly, a fund with a 1.10 beta is expected to perform 10% better than the market in up markets and 10% worse than the market in down markets. It is important to note, however, a low fund beta does not imply the fund has a low level of volatility; rather, a low beta means only that the fund's market-related risk is low. Because beta analyzes the market risk of a fund by showing how responsive the fund is to the market, its usefulness depends on the degree to which the markets determine the fund's total risk (indicated by R-squared).
- Alpha: The Alpha is the nonsystematic return, or the return that cannot be attributed to the market. It can be thought of as how the manager performed if the market's return was zero. A positive alpha implies the manager added value to the return of the portfolio over that of the market. A negative alpha implies the manager did not contribute any value over the performance of the market.
- Sharpe Ratio: The Sharpe ratio is the excess return per unit of total risk as measured by standard deviation. Higher numbers are better, indicating more return for the level of risk experienced. The ratio is a fund's return minus the risk-free rate of return (30-day T-Bill rate) divided by the fund's standard deviation. The higher the Sharpe ratio, the more reward you are receiving per unit of total risk. This measure can be used to rank the performance of mutual funds or other portfolios.
- Treynor Ratio: The Treynor ratio measures returns earned in excess of that which could have been earned on a riskless investment per each unit of market risk. The ratio relates excess return over the risk-free rate to the additional risk taken; however, systematic risk is used instead of total risk. The Treynor ratio is similar to the Sharpe ratio, except in the fact that it uses the beta to evaluate the returns.
- Tracking Error: Tracking error measures the volatility of the difference in annual returns between the manager and the index. This value is calculated by measuring the standard deviation of the difference between the manager and index returns. For example, a tracking error of +/- 5 would mean there is about a 68% chance (1 standard deviation event) that the manager's returns will fall within +/- 5% of the benchmark's annual return.
- Information Ratio: The information ratio is a measure of the consistency of excess return. This value is determined by taking the annualized excess return over a benchmark (style benchmark by default) and dividing it by the standard deviation of excess return.
- Downside Risk: Downside risk is a measure similar to standard deviation but focuses only on the negative movements of the return series. It is calculated by taking the standard deviation of the negative quarterly set of returns. The higher the factor, the riskier the product.