



Monthly Investment Performance Analysis

Wyoming State Treasurer's Office

Period Ended: December 31, 2017



Annual Asset Class Performance

As of December 31, 2017

| Calendar Year Performance | | | | | | | | | | | | Annualized Statistics (01/2006 - 12/2017) | | | |
|---------------------------|-------|--------|--------|-------|--------|-------|-------|-------|--------|-------|--------------------------|--|--------|-----------------------|-----------------|
| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | CYTD (As of 12/17) | | Return | Standard Deviation | Sharpe Ratio |
| Best | 18.85 | 5.24 | 49.13 | 26.85 | 15.99 | 16.83 | 38.82 | 13.88 | 15.02 | 21.31 | 27.19 | US Equity Custom Index - US All Cap | 8.78 | 15.03 | 0.56 |
| | 18.11 | 3.06 | 45.12 | 21.74 | 14.26 | 16.76 | 32.39 | 13.69 | 13.33 | 13.00 | 23.97 | S&P 500 Index - US Large Cap | 8.83 | 15.01 | 0.57 |
| | 15.97 | -5.22 | 34.63 | 16.77 | 11.16 | 16.35 | 32.39 | 12.50 | 5.59 | 12.74 | 21.83 | Rusell 2000 Index - US Small Cap | 8.58 | 18.96 | 0.47 |
| | 15.85 | -6.46 | 32.46 | 16.36 | 7.84 | 16.13 | 24.96 | 11.82 | 1.38 | 11.96 | 21.13 | MSCI ACW Index - Global | 6.49 | 16.75 | 0.40 |
| | 11.66 | -10.01 | 27.17 | 15.68 | 3.49 | 16.00 | 22.80 | 11.18 | 0.55 | 10.69 | 15.21 | International Equity Custom Index - International | 4.18 | 18.58 | 0.26 |
| | 11.63 | -21.37 | 26.46 | 15.06 | 2.11 | 16.00 | 21.26 | 9.42 | 0.48 | 10.44 | 14.65 | Cambridge US PE Index - Private Equity | 11.50 | 8.60 | 1.20 |
| | 10.25 | -22.48 | 26.46 | 15.06 | 2.11 | 14.96 | 15.29 | 5.97 | 0.18 | 9.94 | 13.70 | NCREIF ODCE Index - Core Real Estate | 6.80 | 7.94 | 0.74 |
| | 6.97 | -23.62 | 21.98 | 13.11 | 0.66 | 13.43 | 13.94 | 4.89 | -0.27 | 8.77 | 11.74 | NCREIF Property Index - Value-Added Real Estate | 7.71 | 5.47 | 1.22 |
| | 5.49 | -33.79 | 13.22 | 12.67 | -1.75 | 10.94 | 10.98 | 4.16 | -1.47 | 7.97 | 7.73 | HFRI FOF Comp Index | 2.56 | 6.52 | 0.25 |
| | 5.49 | -35.73 | 11.47 | 10.82 | -4.18 | 10.77 | 8.96 | 3.37 | -2.36 | 7.86 | 7.62 | BofA ML All Cnvrts Index (All Qual) - Convertibles | 7.53 | 13.35 | 0.53 |
| | 5.36 | -37.00 | 5.93 | 9.28 | -5.18 | 10.54 | 4.22 | 2.95 | -3.24 | 4.50 | 6.96 | Bloomberg US Agg Bond Index - Fixed Income | 4.28 | 3.26 | 0.95 |
| | 4.53 | -37.00 | 1.17 | 6.54 | -5.72 | 4.79 | 0.12 | 0.18 | -4.41 | 2.65 | 5.20 | Credit Custom Index - Fixed Income | 5.53 | 8.95 | 0.51 |
| | 2.76 | -42.19 | -16.85 | 5.70 | -7.35 | 4.21 | -2.02 | -3.87 | -5.66 | 0.51 | 3.54 | JPM GBI-EM Gbl Dvfd Index (USD) - EMD | 5.64 | 10.98 | 0.46 |
| Worst | -1.57 | -43.06 | -29.76 | 0.73 | -13.71 | 0.26 | -8.98 | -5.72 | -14.92 | 0.38 | 0.84 | JP Morgan Cash Custom Index - Cash Equiv | 1.47 | 0.92 | 1.23 |

The Cambridge US Private Equity Index is shown for informational purposes only. Due to availability of data, current quarter performance assumes a 0.00% return. Calculations are based on a quarterly periodicity.



| Asset Allocation & Performance | | | |
|---|-----------------------|---------------|-----------------|
| | Allocation | | Performance (%) |
| | Market Value (\$) | % | FYTD |
| Total Fund | 20,714,768,927 | 100.00 | 3.73 |
| US Equity Composite | 2,110,962,665 | 10.19 | 10.61 |
| State Street All Cap | 1,604,624,047 | 7.75 | 11.00 |
| Epoch | 284,347,148 | 1.37 | 11.70 |
| Lazard | 586,447 | 0.00 | N/A |
| UW Portfolio Mgmt Program | 1,467,535 | 0.01 | 10.68 |
| RBC | 219,937,489 | 1.06 | 11.90 |
| Global Equity Composite | 443,993,273 | 2.14 | 11.46 |
| Arrowstreet | 443,993,273 | 2.14 | 11.46 |
| Int'l Equity Composite | 1,797,652,814 | 8.68 | 10.80 |
| Internal International Equity Portfolio | 174,767,998 | 0.84 | 10.91 |
| Northern Trust | 1,159,809,849 | 5.60 | 11.66 |
| Fisher Investments | 463,071,218 | 2.24 | 9.82 |
| Manning & Napier | 3,750 | 0.00 | N/A |
| Private Equity Composite | 593,521,039 | 2.87 | N/A |
| Access Venture Partners II | 12,252,112 | 0.06 | N/A |
| Cheyenne Equity Capital Fund, L.P. | 283,143,150 | 1.37 | N/A |
| Hamilton Lane Nowood Fund, L.P. | 130,402,358 | 0.63 | N/A |
| Neuberger Berman Sauger Fund, L.P. | 167,723,419 | 0.81 | N/A |
| Real Estate Composite | 894,978,015 | 4.32 | N/A |
| Clarion Lion | 331,478,696 | 1.60 | 3.88 |
| UBS Trumbull | 277,415,418 | 1.34 | 3.46 |
| Cornerstone | 7,197,121 | 0.03 | N/A |
| Heitman | 62,334 | 0.00 | N/A |
| M&G | 61,324,971 | 0.30 | N/A |
| Northwood | 137,746,950 | 0.66 | N/A |

| Asset Allocation & Performance | | | |
|-------------------------------------|-----------------------|--------------|-----------------|
| | Allocation | | Performance (%) |
| | Market Value (\$) | % | FYTD |
| SC Capital | 30,782,699 | 0.15 | N/A |
| TA Associates Realty | 4,149,486 | 0.02 | N/A |
| WestRiver | 44,820,340 | 0.22 | N/A |
| Absolute Return Composite | 520,399,554 | 2.51 | 2.62 |
| PAAMCO - Jackalope Fund | 520,399,554 | 2.51 | 2.62 |
| Convertible Bonds Composite | 506,469,548 | 2.44 | 6.18 |
| Allianz Global Investors | 506,469,548 | 2.44 | 6.18 |
| Total Fixed Income Composite | 11,568,631,236 | 55.85 | 1.51 |
| C.S. McKee | 1,265,942,557 | 6.11 | 1.43 |
| JP Morgan | 2,157,651,658 | 10.42 | 1.02 |
| Neuberger Berman Core | 8 | 0.00 | N/A |
| PIMCO | 2,219,693,500 | 10.72 | 1.71 |
| Neuberger Berman Credit | 937,737,844 | 4.53 | 1.85 |
| Seix | 967,971,473 | 4.67 | 2.47 |
| Grosvenor Silvery Lupine Fund | 308,922,535 | 1.49 | 4.59 |
| Investec | 218,863,062 | 1.06 | 5.23 |
| Stone Harbor | 208,526,420 | 1.01 | 4.11 |
| State Street TIPS | 728,042,892 | 3.51 | 2.39 |
| Internal Fixed Income Portfolio | 2,555,279,287 | 12.34 | 0.14 |
| Cash Equivalents | 1,878,555,540 | 9.07 | 0.43 |
| Public Purpose Investments | 399,605,243 | 1.93 | N/A |

| Schedule of Investable Assets - Total Fund Composite Ex Public Purpose Investments | | | | | | |
|--|-----------------------------|---------------------|--------------------|--------------------------|-------------|---------------|
| Periods Ending | Beginning Market Value (\$) | Net Cash Flow (\$) | Gain/Loss (\$) | Ending Market Value (\$) | % Return | Unit Value |
| FYTD | 19,944,050,925 | -361,685,071 | 732,797,830 | 20,315,163,684 | 3.73 | 103.73 |

Allocations may not sum up to 100% exactly due to rounding. Performance shown is net of fees and excludes Public Purpose Investments (PPIs). Market value shown for Public Purpose Investments (PPIs) is as of 12/31/2017. Market value shown for Neuberger Berman Core consists of cash equivalents. Investment manager fees are accounted for on a quarterly basis. Wyoming State Treasurer's Office fiscal year ends on June 30th.

| | Allocation | | Performance (%) | | | | | | | | | | |
|---------------------------------------|-----------------------|---------------|-----------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|--------------|-------------------|
| | Market Value (\$) | % | MTD | QTD | FYTD | CYTD | 1 Year | 3 Years | 5 Years | 7 Years | 10 Years | Since Incep. | Inception Date |
| Total Fund | 20,714,768,927 | 100.00 | 0.66 | 1.71 | 3.73 | 8.37 | 8.37 | 4.37 | 4.71 | 5.01 | 4.66 | 5.59 | 10/01/1996 |
| Wyoming State Actual Allocation Index | | | 0.67 | 1.61 | 3.54 | 7.96 | 7.96 | 4.24 | 4.73 | 4.95 | 4.39 | 5.53 | |
| Difference | | | -0.01 | 0.10 | 0.19 | 0.41 | 0.41 | 0.13 | -0.02 | 0.06 | 0.27 | 0.06 | |
| Total Equity Composite | 4,352,608,752 | 21.01 | 1.33 | 5.35 | 10.76 | 22.73 | 22.73 | 9.34 | 11.81 | 9.91 | 5.99 | 7.25 | 01/01/2006 |
| Total Equity Custom Index | | | 1.61 | 5.73 | 11.21 | 23.97 | 23.97 | 9.30 | 10.80 | 8.73 | 4.49 | 6.08 | |
| Difference | | | -0.28 | -0.38 | -0.45 | -1.24 | -1.24 | 0.04 | 1.01 | 1.18 | 1.50 | 1.17 | |
| US Equity Composite | 2,110,962,665 | 10.19 | 0.91 | 5.99 | 10.61 | 18.59 | 18.59 | 10.18 | 15.15 | 13.34 | 8.67 | 7.21 | 06/01/1997 |
| US Equity Custom Index | | | 1.00 | 6.34 | 11.20 | 21.13 | 21.13 | 11.12 | 15.65 | 13.66 | 8.43 | 7.71 | |
| Difference | | | -0.09 | -0.35 | -0.59 | -2.54 | -2.54 | -0.94 | -0.50 | -0.32 | 0.24 | -0.50 | |
| State Street All Cap | 1,604,624,047 | 7.75 | 1.12 | 6.34 | 11.00 | 19.76 | 19.76 | 10.84 | N/A | N/A | N/A | 10.84 | 01/01/2015 |
| State Street All Cap Custom Index | | | 1.10 | 6.32 | 11.03 | 19.85 | 19.85 | 10.94 | 15.51 | 13.52 | 8.91 | 10.94 | |
| Difference | | | 0.02 | 0.02 | -0.03 | -0.09 | -0.09 | -0.10 | N/A | N/A | N/A | -0.10 | |
| Russell 3000 Index | | | 1.00 | 6.34 | 11.20 | 21.13 | 21.13 | 11.12 | 15.58 | 13.50 | 8.60 | 11.12 | |
| Difference | | | 0.12 | 0.00 | -0.20 | -1.37 | -1.37 | -0.28 | N/A | N/A | N/A | -0.28 | |
| Epoch | 284,347,148 | 1.37 | 0.52 | 6.60 | 11.70 | 23.36 | 23.36 | 9.82 | N/A | N/A | N/A | 10.74 | 11/01/2014 |
| Russell 3000 Index | | | 1.00 | 6.34 | 11.20 | 21.13 | 21.13 | 11.12 | 15.58 | 13.50 | 8.60 | 11.34 | |
| Difference | | | -0.48 | 0.26 | 0.50 | 2.23 | 2.23 | -1.30 | N/A | N/A | N/A | -0.60 | |
| UW Portfolio Mgmt Program | 1,467,535 | 0.01 | 1.66 | 6.26 | 10.68 | 21.83 | 21.83 | 10.92 | 13.82 | 10.63 | 2.23 | 3.43 | 04/01/2006 |
| S&P 500 Index (Cap Wtd) | | | 1.11 | 6.64 | 11.42 | 21.83 | 21.83 | 11.41 | 15.79 | 13.76 | 8.50 | 8.65 | |
| Difference | | | 0.55 | -0.38 | -0.74 | 0.00 | 0.00 | -0.49 | -1.97 | -3.13 | -6.27 | -5.22 | |
| RBC | 219,937,489 | 1.06 | -0.09 | 4.80 | 11.90 | 11.12 | 11.12 | 9.51 | N/A | N/A | N/A | 9.51 | 01/01/2015 |
| Russell 2000 Index | | | -0.40 | 3.34 | 9.20 | 14.65 | 14.65 | 9.96 | 14.12 | 11.62 | 8.71 | 9.96 | |
| Difference | | | 0.31 | 1.46 | 2.70 | -3.53 | -3.53 | -0.45 | N/A | N/A | N/A | -0.45 | |
| Arrowstreet | 443,993,273 | 2.14 | 1.50 | 6.13 | 11.46 | 27.32 | 27.32 | N/A | N/A | N/A | N/A | 9.87 | 03/01/2015 |
| MSCI ACW Index (USD) (Net) | | | 1.61 | 5.73 | 11.21 | 23.97 | 23.97 | 9.30 | 10.80 | 8.73 | 4.65 | 8.39 | |
| Difference | | | -0.11 | 0.40 | 0.25 | 3.35 | 3.35 | N/A | N/A | N/A | N/A | 1.48 | |

Performance shown is net of fees and excludes Public Purpose Investments (PPIs). Investment manager fees are accounted for on a quarterly basis. Performance and market values shown are preliminary and subject to change. Performance is annualized for periods greater than one year.

| | Allocation | | Performance (%) | | | | | | | | | | |
|---|----------------------|-------------|-----------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|--------------|-------------------|
| | Market Value (\$) | % | MTD | QTD | FYTD | CYTD | 1 Year | 3 Years | 5 Years | 7 Years | 10 Years | Since Incep. | Inception Date |
| Int'l Equity Composite | 1,797,652,814 | 8.68 | 1.78 | 4.34 | 10.80 | 27.73 | 27.73 | 7.92 | 7.03 | 5.17 | 2.19 | 6.35 | 01/01/2004 |
| International Equity Custom Index | | | 2.24 | 5.00 | 11.48 | 27.19 | 27.19 | 7.83 | 6.80 | 4.93 | 1.45 | 5.96 | |
| Difference | | | -0.46 | -0.66 | -0.68 | 0.54 | 0.54 | 0.09 | 0.23 | 0.24 | 0.74 | 0.39 | |
| Internal International Equity Portfolio | 174,767,998 | 0.84 | 1.95 | 4.72 | 10.91 | 27.20 | 27.20 | N/A | N/A | N/A | N/A | 19.65 | 02/01/2016 |
| FTSE All Wrld Ex US Index (US Invstr) (USD) (Net) | | | 2.33 | 5.28 | 11.55 | 27.11 | 27.11 | 8.27 | 7.19 | 5.28 | 2.26 | 20.52 | |
| Difference | | | -0.38 | -0.56 | -0.64 | 0.09 | 0.09 | N/A | N/A | N/A | N/A | -0.87 | |
| Northern Trust | 1,159,809,849 | 5.60 | 2.18 | 4.95 | 11.66 | 27.47 | 27.47 | 7.86 | 6.88 | 5.08 | N/A | 6.69 | 08/01/2010 |
| MSCI ACW Ex US Index (USD) (Net) | | | 2.24 | 5.00 | 11.48 | 27.19 | 27.19 | 7.83 | 6.80 | 4.93 | 1.84 | 6.60 | |
| Difference | | | -0.06 | -0.05 | 0.18 | 0.28 | 0.28 | 0.03 | 0.08 | 0.15 | N/A | 0.09 | |
| Fisher Investments | 463,071,218 | 2.24 | 0.84 | 2.83 | 9.82 | 29.58 | 29.58 | 8.71 | 8.00 | 6.02 | 3.46 | 7.63 | 09/01/2004 |
| MSCI ACW Ex US Index (USD) (Net) | | | 2.24 | 5.00 | 11.48 | 27.19 | 27.19 | 7.83 | 6.80 | 4.93 | 1.45 | 6.12 | |
| Difference | | | -1.40 | -2.17 | -1.66 | 2.39 | 2.39 | 0.88 | 1.20 | 1.09 | 2.01 | 1.51 | |
| Core Real Estate Composite | 608,894,114 | 2.94 | 2.01 | 2.01 | 3.69 | 6.96 | 6.96 | 9.30 | 10.06 | 10.64 | 3.83 | 5.70 | 01/01/2006 |
| NCREIF ODCE Index (AWA) (Net) | | | 1.86 | 1.86 | 3.53 | 6.68 | 6.68 | 9.43 | 10.52 | 11.04 | 4.07 | 5.83 | |
| Difference | | | 0.15 | 0.15 | 0.16 | 0.28 | 0.28 | -0.13 | -0.46 | -0.40 | -0.24 | -0.13 | |
| Clarion Lion | 331,478,696 | 1.60 | 1.90 | 1.90 | 3.88 | 8.27 | 8.27 | 10.44 | 11.11 | 11.88 | 3.17 | 5.20 | 01/01/2006 |
| NCREIF ODCE Index (AWA) (Net) | | | 1.86 | 1.86 | 3.53 | 6.68 | 6.68 | 9.43 | 10.52 | 11.04 | 4.07 | 5.83 | |
| Difference | | | 0.04 | 0.04 | 0.35 | 1.59 | 1.59 | 1.01 | 0.59 | 0.84 | -0.90 | -0.63 | |
| UBS Trumbull | 277,415,418 | 1.34 | 2.15 | 2.15 | 3.46 | 5.42 | 5.42 | 7.77 | 8.63 | 9.17 | 4.23 | 5.54 | 07/01/2006 |
| NCREIF ODCE Index (AWA) (Net) | | | 1.86 | 1.86 | 3.53 | 6.68 | 6.68 | 9.43 | 10.52 | 11.04 | 4.07 | 5.43 | |
| Difference | | | 0.29 | 0.29 | -0.07 | -1.26 | -1.26 | -1.66 | -1.89 | -1.87 | 0.16 | 0.11 | |
| Absolute Return Composite (Net) | 520,399,554 | 2.51 | 1.04 | 1.34 | 2.62 | 4.94 | 4.94 | 1.27 | 3.85 | 3.42 | 2.47 | 2.50 | 12/01/2007 |
| HFRI FOF Comp Index | | | 0.90 | 2.02 | 4.39 | 7.73 | 7.73 | 2.60 | 3.99 | 2.66 | 1.08 | 1.12 | |
| Difference | | | 0.14 | -0.68 | -1.77 | -2.79 | -2.79 | -1.33 | -0.14 | 0.76 | 1.39 | 1.38 | |
| PAAMCO - Jackalope Fund (Net) | 520,399,554 | 2.51 | 1.04 | 1.34 | 2.62 | 4.94 | 4.94 | 1.20 | 4.04 | 3.30 | 2.22 | 2.24 | 12/01/2007 |
| HFRI FOF Comp Index | | | 0.90 | 2.02 | 4.39 | 7.73 | 7.73 | 2.60 | 3.99 | 2.66 | 1.08 | 1.12 | |
| Difference | | | 0.14 | -0.68 | -1.77 | -2.79 | -2.79 | -1.40 | 0.05 | 0.64 | 1.14 | 1.12 | |

Performance shown is net of fees and excludes Public Purpose Investments (PPIs). Investment manager fees are accounted for on a quarterly basis. Performance and market values shown are preliminary and subject to change. Performance is annualized for periods greater than one year.

| | Allocation | | Performance (%) | | | | | | | | | | |
|--|-----------------------|--------------|-----------------|-------------|-------------|--------------|--------------|-------------|-------------|-------------|-------------|--------------|-------------------|
| | Market Value (\$) | % | MTD | QTD | FYTD | CYTD | 1 Year | 3 Years | 5 Years | 7 Years | 10 Years | Since Incep. | Inception Date |
| Total Fixed Income Composite | 12,075,100,784 | 58.29 | 0.45 | 0.65 | 1.70 | 4.42 | 4.42 | 2.68 | 2.16 | 3.35 | 4.40 | 5.47 | 10/01/1996 |
| Bloomberg US Agg Bond Index | | | 0.46 | 0.39 | 1.24 | 3.54 | 3.54 | 2.24 | 2.10 | 3.20 | 4.01 | 5.29 | |
| Difference | | | -0.01 | 0.26 | 0.46 | 0.88 | 0.88 | 0.44 | 0.06 | 0.15 | 0.39 | 0.18 | |
| Total Fixed Income (Ex. Convertibles) Composite | 11,568,631,236 | 55.85 | 0.48 | 0.53 | 1.51 | 3.99 | 3.99 | 2.54 | 1.81 | 3.11 | 4.21 | 5.45 | 10/01/1996 |
| Bloomberg US Agg Bond Index | | | 0.46 | 0.39 | 1.24 | 3.54 | 3.54 | 2.24 | 2.10 | 3.20 | 4.01 | 5.29 | |
| Difference | | | 0.02 | 0.14 | 0.27 | 0.45 | 0.45 | 0.30 | -0.29 | -0.09 | 0.20 | 0.16 | |
| US Fixed Income (Ex. Convertibles) Composite | 10,832,319,219 | 52.29 | 0.42 | 0.46 | 1.29 | 3.41 | 3.41 | 2.43 | 1.96 | 3.15 | N/A | 3.51 | 12/01/2009 |
| Bloomberg US Agg Bond Index | | | 0.46 | 0.39 | 1.24 | 3.54 | 3.54 | 2.24 | 2.10 | 3.20 | 4.01 | 3.37 | |
| Difference | | | -0.04 | 0.07 | 0.05 | -0.13 | -0.13 | 0.19 | -0.14 | -0.05 | N/A | 0.14 | |
| Externally Mgd Fixed Income Composite | 9,519,821,497 | 45.96 | 0.56 | 0.90 | 2.13 | 4.98 | 4.98 | 2.87 | 2.29 | 3.51 | 4.56 | 5.24 | 10/01/1996 |
| Bloomberg US Agg Bond Index | | | 0.46 | 0.39 | 1.24 | 3.54 | 3.54 | 2.24 | 2.10 | 3.20 | 4.01 | 5.29 | |
| Difference | | | 0.10 | 0.51 | 0.89 | 1.44 | 1.44 | 0.63 | 0.19 | 0.31 | 0.55 | -0.05 | |
| Allianz Global Investors | 506,469,548 | 2.44 | -0.01 | 2.28 | 6.18 | 14.76 | 14.76 | 6.17 | 9.90 | 8.40 | 7.73 | 5.86 | 09/01/2000 |
| BofA ML All Cnvrts Index (All Qual) | | | -0.20 | 1.56 | 5.39 | 13.70 | 13.70 | 6.71 | 10.68 | 8.85 | 7.32 | 5.42 | |
| Difference | | | 0.19 | 0.72 | 0.79 | 1.06 | 1.06 | -0.54 | -0.78 | -0.45 | 0.41 | 0.44 | |
| Core Fixed Income Composite | 5,643,287,723 | 27.24 | 0.44 | 0.45 | 1.38 | 3.56 | 3.56 | 2.30 | 2.05 | N/A | N/A | 2.05 | 01/01/2013 |
| Bloomberg US Agg Bond Index | | | 0.46 | 0.39 | 1.24 | 3.54 | 3.54 | 2.24 | 2.10 | 3.20 | 4.01 | 2.10 | |
| Difference | | | -0.02 | 0.06 | 0.14 | 0.02 | 0.02 | 0.06 | -0.05 | N/A | N/A | -0.05 | |
| C.S. McKee | 1,265,942,557 | 6.11 | 0.50 | 0.55 | 1.43 | 3.50 | 3.50 | 2.45 | 2.08 | N/A | N/A | 2.08 | 01/01/2013 |
| Bloomberg US Agg Bond Index | | | 0.46 | 0.39 | 1.24 | 3.54 | 3.54 | 2.24 | 2.10 | 3.20 | 4.01 | 2.10 | |
| Difference | | | 0.04 | 0.16 | 0.19 | -0.04 | -0.04 | 0.21 | -0.02 | N/A | N/A | -0.02 | |
| JP Morgan | 2,157,651,658 | 10.42 | 0.38 | 0.26 | 1.02 | 3.42 | 3.42 | 2.32 | 2.19 | N/A | N/A | 2.19 | 01/01/2013 |
| Bloomberg US Agg Bond Index | | | 0.46 | 0.39 | 1.24 | 3.54 | 3.54 | 2.24 | 2.10 | 3.20 | 4.01 | 2.10 | |
| Difference | | | -0.08 | -0.13 | -0.22 | -0.12 | -0.12 | 0.08 | 0.09 | N/A | N/A | 0.09 | |
| PIMCO | 2,219,693,500 | 10.72 | 0.47 | 0.57 | 1.71 | 4.16 | 4.16 | 2.54 | 2.09 | N/A | N/A | 2.09 | 01/01/2013 |
| Bloomberg US Agg Bond Index | | | 0.46 | 0.39 | 1.24 | 3.54 | 3.54 | 2.24 | 2.10 | 3.20 | 4.01 | 2.10 | |
| Difference | | | 0.01 | 0.18 | 0.47 | 0.62 | 0.62 | 0.30 | -0.01 | N/A | N/A | -0.01 | |

Performance shown is net of fees and excludes Public Purpose Investments (PPIs). Investment manager fees are accounted for on a quarterly basis. Performance and market values shown are preliminary and subject to change. Performance is annualized for periods greater than one year.

Wyoming State Treasurer's Office
Asset Allocation & Performance

As of December 31, 2017

| | Allocation | | Performance (%) | | | | | | | | | | |
|--|----------------------|--------------|-----------------|--------------|-------------|--------------|--------------|-------------|-------------|-------------|-------------|--------------|-------------------|
| | Market Value (\$) | % | MTD | QTD | FYTD | CYTD | 1 Year | 3 Years | 5 Years | 7 Years | 10 Years | Since Incep. | Inception Date |
| Credit Fixed Income Composite | 1,905,709,317 | 9.20 | 0.61 | 0.92 | 2.17 | 4.84 | 4.84 | 4.50 | N/A | N/A | N/A | 3.69 | 03/01/2013 |
| Credit Custom Index | | | 0.46 | 0.96 | 2.27 | 5.20 | 5.20 | 4.69 | 4.24 | 5.04 | 5.65 | 4.16 | |
| Difference | | | 0.15 | -0.04 | -0.10 | -0.36 | -0.36 | -0.19 | N/A | N/A | N/A | -0.47 | |
| Neuberger Berman | 937,737,844 | 4.53 | 0.59 | 0.71 | 1.85 | 4.03 | 4.03 | 3.94 | N/A | N/A | N/A | 3.67 | 04/01/2013 |
| Credit Custom Index | | | 0.46 | 0.96 | 2.27 | 5.20 | 5.20 | 4.69 | 4.24 | 5.04 | 5.65 | 4.08 | |
| Difference | | | 0.13 | -0.25 | -0.42 | -1.17 | -1.17 | -0.75 | N/A | N/A | N/A | -0.41 | |
| Seix | 967,971,473 | 4.67 | 0.63 | 1.12 | 2.47 | 5.40 | 5.40 | 4.98 | N/A | N/A | N/A | 3.86 | 05/01/2013 |
| Credit Custom Index | | | 0.46 | 0.96 | 2.27 | 5.20 | 5.20 | 4.69 | 4.24 | 5.04 | 5.65 | 3.91 | |
| Difference | | | 0.17 | 0.16 | 0.20 | 0.20 | 0.20 | 0.29 | N/A | N/A | N/A | -0.05 | |
| Grosvenor Silvery Lupine Fund | 308,922,535 | 1.49 | 0.50 | 2.41 | 4.59 | 9.44 | 9.44 | 7.55 | N/A | N/A | N/A | 6.53 | 07/01/2014 |
| CS Western Euro Hi Yld Index | | | 0.26 | 0.87 | 3.19 | 8.41 | 8.41 | 7.10 | 7.03 | 8.06 | 8.58 | 5.82 | |
| Difference | | | 0.24 | 1.54 | 1.40 | 1.03 | 1.03 | 0.45 | N/A | N/A | N/A | 0.71 | |
| Emerging Market Debt Fixed Income Composite | 427,389,482 | 2.06 | 2.15 | 0.83 | 4.68 | 15.88 | 15.88 | 1.94 | N/A | N/A | N/A | -2.84 | 03/01/2013 |
| JPM GBI-EM Gbl Dvf'd Index (USD) (TR) (Unhedged) | | | 2.02 | 0.82 | 4.40 | 15.21 | 15.21 | 2.53 | -1.55 | 0.85 | 3.56 | -1.68 | |
| Difference | | | 0.13 | 0.01 | 0.28 | 0.67 | 0.67 | -0.59 | N/A | N/A | N/A | -1.16 | |
| Investec | 218,863,062 | 1.06 | 2.24 | 1.30 | 5.23 | 16.95 | 16.95 | 1.79 | N/A | N/A | N/A | -1.97 | 04/01/2013 |
| JPM GBI-EM Gbl Dvf'd Index (USD) (TR) (Unhedged) | | | 2.02 | 0.82 | 4.40 | 15.21 | 15.21 | 2.53 | -1.55 | 0.85 | 3.56 | -1.60 | |
| Difference | | | 0.22 | 0.48 | 0.83 | 1.74 | 1.74 | -0.74 | N/A | N/A | N/A | -0.37 | |
| Stone Harbor | 208,526,420 | 1.01 | 2.05 | 0.34 | 4.11 | 14.78 | 14.78 | 2.10 | N/A | N/A | N/A | -3.12 | 04/01/2013 |
| JPM GBI-EM Gbl Dvf'd Index (USD) (TR) (Unhedged) | | | 2.02 | 0.82 | 4.40 | 15.21 | 15.21 | 2.53 | -1.55 | 0.85 | 3.56 | -1.60 | |
| Difference | | | 0.03 | -0.48 | -0.29 | -0.43 | -0.43 | -0.43 | N/A | N/A | N/A | -1.52 | |
| State Street TIPS | 728,042,892 | 3.51 | 1.04 | 1.42 | 2.39 | 3.10 | 3.10 | 2.07 | 0.15 | N/A | N/A | 0.15 | 01/01/2013 |
| Bloomberg US Trsy: US TIPS Index (Series B) | | | 1.01 | 1.41 | 2.33 | 3.30 | 3.30 | 2.10 | 0.17 | 3.04 | 3.60 | 0.17 | |
| Difference | | | 0.03 | 0.01 | 0.06 | -0.20 | -0.20 | -0.03 | -0.02 | N/A | N/A | -0.02 | |
| Internal Fixed Income Portfolio | 2,555,279,287 | 12.34 | 0.05 | -0.24 | 0.14 | 1.84 | 1.84 | 1.54 | 1.33 | 2.14 | 2.62 | 4.70 | 10/01/1996 |
| Bloomberg US Gov't Int Term Bond Index | | | 0.03 | -0.40 | -0.06 | 1.14 | 1.14 | 1.12 | 0.92 | 1.76 | 2.73 | 4.70 | |
| Difference | | | 0.02 | 0.16 | 0.20 | 0.70 | 0.70 | 0.42 | 0.41 | 0.38 | -0.11 | 0.00 | |

Performance shown is net of fees and excludes Public Purpose Investments (PPIs). Investment manager fees are accounted for on a quarterly basis. Performance and market values shown are preliminary and subject to change. Performance is annualized for periods greater than one year.



Wyoming State Treasurer's Office
Asset Allocation & Performance

As of December 31, 2017

| | Allocation | | Performance (%) | | | | | | | | | | |
|---------------------------------|----------------------|-------------|-----------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|-------------------|
| | Market Value (\$) | % | MTD | QTD | FYTD | CYTD | 1 Year | 3 Years | 5 Years | 7 Years | 10 Years | Since Incep. | Inception Date |
| JP Morgan Cash Composite | 1,878,555,540 | 9.07 | 0.04 | 0.16 | 0.43 | 0.84 | 0.84 | 0.46 | 0.33 | 0.33 | 0.71 | 1.46 | 01/01/2006 |
| JP Morgan Cash Custom Index | | | 0.11 | 0.24 | 0.50 | 0.84 | 0.84 | 0.47 | 0.34 | 0.37 | 0.75 | 1.47 | |
| Difference | | | -0.07 | -0.08 | -0.07 | 0.00 | 0.00 | -0.01 | -0.01 | -0.04 | -0.04 | -0.01 | |
| Wyo-Star Cash Composite | 653,920,650 | 3.16 | 0.08 | 0.14 | 0.41 | 0.78 | 0.78 | 0.46 | 0.36 | 0.37 | 0.82 | 3.33 | 10/01/1996 |
| Wyo-Star Cash Custom Index | | | 0.10 | 0.16 | 0.43 | 0.80 | 0.80 | 0.48 | 0.38 | 0.43 | 0.83 | 2.68 | |
| Difference | | | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.02 | -0.06 | -0.01 | 0.65 | |

- Wyoming State Treasurer's Office fiscal year ends on June 30th.
- Since Inception date shown represents the first full month following initial funding.
- The Wyoming State Actual Allocation Index is calculated using beginning month asset class weights applied to the appropriate asset class benchmark return.
- The Total Equity Index consists of the MSCI World Index (USD) (Net) through July 2010 and the MSCI ACW Index (USD) (Net) thereafter.
- The US Equity Index consists of the S&P 500 Index (Cap Wtd) through September 2014 and the Russell 3000 Index thereafter.
- The International Equity Custom Index and Fisher Index both consist of the MSCI EAFE Index (USD) (Gross) through July 2010 and the MSCI ACW Ex US Index (USD) (Net) thereafter.
- The Credit Custom Index consists of 20% Bloomberg US Credit Index, 20% BofA ML US HY Master II Const. Index, and 60% S&P/LSTA Leveraged Loan Index.
- The Internal Fixed Income Portfolio Index consists of the Bloomberg US Gov't Int Term Bond Index; prior to December 2009 the index consisted of the Bloomberg US Gov't Crdt Bond Index.
- The State Street All Cap Custom Index consists of 69% Russell 3000 Index, 24% FTSE RAFI US 1000 Index, and 7% MSCI US Min Vol Index (USD) (Gross).
- Performance shown for the JP Morgan Cash Composite and the Wyo-Star Cash Composite consists of the respective operating and extended cash accounts.
- The JP Morgan Cash Custom Index is calculated monthly using beginning of the month investment weights applied to each corresponding primary benchmark return. Currently, the primary benchmark for JP Morgan Cash is the BofA ML 3 Mo US T-Bill Index and for JP Morgan Extd is the JP Morgan Blended Index.
- The Wyo-Star Cash Custom Index is calculated monthly using beginning of the month investment weights applied to each corresponding primary benchmark return. Currently, the primary benchmark for Wyo-Star Cash is the BofA ML 3 Mo US T-Bill Index and for Wyo-Star Extd is the JP Morgan Blended Index.

Performance shown is net of fees and excludes Public Purpose Investments (PPIs). Investment manager fees are accounted for on a quarterly basis. Performance and market values shown are preliminary and subject to change. Performance is annualized for periods greater than one year.



PORTLAND

CHICAGO

NEW YORK

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