



Montana Board of Investments

Investment Performance Analysis

Period Ended: June 30, 2017



Montana Board of Investments
Comparative Performance
Retirement Plans

As of June 30, 2017

| | QTD | CYTD | FYTD/ 1 Year | 3 Years | 5 Years | 7 Years | 10 Years | 20 Years | 2016 | 2015 | 2014 | 2013 | 2012 |
|---|-------------|-------------|-----------------|-------------|--------------|--------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|
| Public Employees' Retirement - Net | 3.03 | 7.27 | 11.94 | 6.12 | 9.62 | 10.20 | 5.33 | 6.48 | 7.32 | 1.86 | 8.07 | 17.38 | 13.24 |
| Public Employees' Benchmark | 2.55 | 7.02 | 11.96 | 6.58 | 10.05 | 10.56 | 5.65 | N/A | 9.09 | 1.40 | 9.08 | 17.94 | 14.88 |
| Difference | 0.48 | 0.25 | -0.02 | -0.46 | -0.43 | -0.36 | -0.32 | N/A | -1.77 | 0.46 | -1.01 | -0.56 | -1.64 |
| Public Employees' Retirement - Gross | 3.16 | 7.53 | 12.43 | 6.59 | 10.12 | 10.74 | 5.87 | 6.80 | 7.78 | 2.31 | 8.61 | 17.96 | 13.83 |
| All Public Plans > \$3B Total Fund Median | 3.25 | 7.73 | 12.65 | 5.38 | 8.63 | 9.18 | 5.23 | 6.86 | 7.96 | 0.52 | 6.61 | 14.49 | 13.30 |
| Rank | 60 | 63 | 57 | 4 | 4 | 1 | 13 | 58 | 57 | 8 | 7 | 8 | 34 |
| Teachers' Retirement - Net | 3.03 | 7.26 | 11.92 | 6.12 | 9.62 | 10.21 | 5.34 | 6.49 | 7.33 | 1.86 | 8.09 | 17.38 | 13.24 |
| Teachers' Benchmark | 2.55 | 7.02 | 11.95 | 6.58 | 10.06 | 10.57 | 5.65 | N/A | 9.08 | 1.40 | 9.11 | 17.94 | 14.89 |
| Difference | 0.48 | 0.24 | -0.03 | -0.46 | -0.44 | -0.36 | -0.31 | N/A | -1.75 | 0.46 | -1.02 | -0.56 | -1.65 |
| Teachers' Retirement - Gross | 3.16 | 7.51 | 12.41 | 6.59 | 10.13 | 10.76 | 5.87 | 6.81 | 7.80 | 2.32 | 8.63 | 17.96 | 13.84 |
| All Public Plans > \$3B Total Fund Median | 3.25 | 7.73 | 12.65 | 5.38 | 8.63 | 9.18 | 5.23 | 6.86 | 7.96 | 0.52 | 6.61 | 14.49 | 13.30 |
| Rank | 60 | 66 | 57 | 3 | 4 | 1 | 13 | 58 | 57 | 8 | 7 | 8 | 33 |
| Police Retirement - Net | 3.03 | 7.27 | 11.93 | 6.11 | 9.62 | 10.18 | 5.30 | 6.41 | 7.32 | 1.86 | 8.07 | 17.41 | 13.23 |
| Police Benchmark | 2.55 | 7.02 | 11.96 | 6.58 | 10.04 | 10.52 | 5.61 | N/A | 9.08 | 1.41 | 9.10 | 17.92 | 14.80 |
| Difference | 0.48 | 0.25 | -0.03 | -0.47 | -0.42 | -0.34 | -0.31 | N/A | -1.76 | 0.45 | -1.03 | -0.51 | -1.57 |
| Police Retirement - Gross | 3.16 | 7.52 | 12.41 | 6.58 | 10.13 | 10.71 | 5.83 | 6.72 | 7.78 | 2.31 | 8.61 | 18.00 | 13.78 |
| All Public Plans > \$3B Total Fund Median | 3.25 | 7.73 | 12.65 | 5.38 | 8.63 | 9.18 | 5.23 | 6.86 | 7.96 | 0.52 | 6.61 | 14.49 | 13.30 |
| Rank | 60 | 63 | 57 | 4 | 4 | 1 | 19 | 65 | 57 | 8 | 7 | 7 | 37 |

Net performance shown is net of all manager fees and expenses (Net-All). All Public Plans > \$3B Total Fund Median is reported gross of fees. Benchmark returns reflect unmanaged indices which are not impacted by management fees. Fiscal year ends on June 30.

Montana Board of Investments
Comparative Performance
Retirement Plans

As of June 30, 2017

| | QTD | CYTD | FYTD/ 1 Year | 3 Years | 5 Years | 7 Years | 10 Years | 20 Years | 2016 | 2015 | 2014 | 2013 | 2012 |
|---|-------------|-------------|-----------------|-------------|--------------|--------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|
| Firefighters' Retirement - Net | 3.03 | 7.27 | 11.93 | 6.12 | 9.62 | 10.18 | 5.33 | 6.42 | 7.32 | 1.87 | 8.07 | 17.41 | 13.22 |
| Firefighters' Benchmark | 2.55 | 7.03 | 11.97 | 6.59 | 10.04 | 10.52 | 5.63 | N/A | 9.09 | 1.41 | 9.10 | 17.92 | 14.80 |
| Difference | 0.48 | 0.24 | -0.04 | -0.47 | -0.42 | -0.34 | -0.30 | N/A | -1.77 | 0.46 | -1.03 | -0.51 | -1.58 |
| Firefighters' Retirement - Gross | 3.16 | 7.53 | 12.42 | 6.59 | 10.13 | 10.72 | 5.86 | 6.74 | 7.78 | 2.32 | 8.61 | 17.99 | 13.81 |
| All Public Plans > \$3B Total Fund Median | 3.25 | 7.73 | 12.65 | 5.38 | 8.63 | 9.18 | 5.23 | 6.86 | 7.96 | 0.52 | 6.61 | 14.49 | 13.30 |
| Rank | 60 | 63 | 57 | 4 | 4 | 1 | 17 | 60 | 57 | 8 | 7 | 7 | 35 |
| Sheriffs' Retirement - Net | 3.03 | 7.28 | 11.96 | 6.12 | 9.61 | 10.18 | 5.33 | 6.46 | 7.33 | 1.86 | 8.05 | 17.35 | 13.19 |
| Sheriffs' Benchmark | 2.55 | 7.03 | 11.98 | 6.59 | 10.04 | 10.53 | 5.67 | N/A | 9.10 | 1.40 | 9.07 | 17.91 | 14.84 |
| Difference | 0.48 | 0.25 | -0.02 | -0.47 | -0.43 | -0.35 | -0.34 | N/A | -1.77 | 0.46 | -1.02 | -0.56 | -1.65 |
| Sheriffs' Retirement - Gross | 3.16 | 7.53 | 12.45 | 6.59 | 10.12 | 10.72 | 5.86 | 6.77 | 7.79 | 2.32 | 8.59 | 17.93 | 13.79 |
| All Public Plans > \$3B Total Fund Median | 3.25 | 7.73 | 12.65 | 5.38 | 8.63 | 9.18 | 5.23 | 6.86 | 7.96 | 0.52 | 6.61 | 14.49 | 13.30 |
| Rank | 60 | 62 | 57 | 3 | 5 | 1 | 16 | 59 | 57 | 8 | 7 | 8 | 37 |
| Highway Patrol Retirement - Net | 3.03 | 7.26 | 11.93 | 6.11 | 9.62 | 10.20 | 5.33 | 6.44 | 7.30 | 1.87 | 8.08 | 17.38 | 13.24 |
| Highway Patrol Benchmark | 2.54 | 7.02 | 11.95 | 6.58 | 10.06 | 10.55 | 5.66 | N/A | 9.09 | 1.41 | 9.10 | 17.94 | 14.88 |
| Difference | 0.49 | 0.24 | -0.02 | -0.47 | -0.44 | -0.35 | -0.33 | N/A | -1.79 | 0.46 | -1.02 | -0.56 | -1.64 |
| Highway Patrol Retirement - Gross | 3.15 | 7.52 | 12.41 | 6.58 | 10.13 | 10.74 | 5.87 | 6.76 | 7.77 | 2.32 | 8.62 | 17.96 | 13.84 |
| All Public Plans > \$3B Total Fund Median | 3.25 | 7.73 | 12.65 | 5.38 | 8.63 | 9.18 | 5.23 | 6.86 | 7.96 | 0.52 | 6.61 | 14.49 | 13.30 |
| Rank | 60 | 65 | 57 | 4 | 4 | 1 | 14 | 60 | 57 | 8 | 7 | 8 | 33 |

Net performance shown is net of all manager fees and expenses (Net-All). All Public Plans > \$3B Total Fund Median is reported gross of fees. Benchmark returns reflect unmanaged indices which are not impacted by management fees. Fiscal year ends on June 30.

Montana Board of Investments
Comparative Performance
Retirement Plans

As of June 30, 2017

| | QTD | CYTD | FYTD/ 1 Year | 3 Years | 5 Years | 7 Years | 10 Years | 20 Years | 2016 | 2015 | 2014 | 2013 | 2012 |
|---|-------------|-------------|-----------------|-------------|--------------|--------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|
| Game Wardens' Retirement - Net | 3.03 | 7.28 | 11.96 | 6.12 | 9.60 | 10.18 | 5.33 | 6.45 | 7.31 | 1.88 | 8.03 | 17.34 | 13.20 |
| Game Wardens' Benchmark | 2.54 | 7.03 | 11.99 | 6.59 | 10.04 | 10.54 | 5.67 | N/A | 9.11 | 1.41 | 9.06 | 17.90 | 14.85 |
| Difference | 0.49 | 0.25 | -0.03 | -0.47 | -0.44 | -0.36 | -0.34 | N/A | -1.80 | 0.47 | -1.03 | -0.56 | -1.65 |
| Game Wardens' Retirement - Gross | 3.15 | 7.54 | 12.45 | 6.59 | 10.11 | 10.72 | 5.86 | 6.76 | 7.78 | 2.33 | 8.57 | 17.92 | 13.79 |
| All Public Plans > \$3B Total Fund Median | 3.25 | 7.73 | 12.65 | 5.38 | 8.63 | 9.18 | 5.23 | 6.86 | 7.96 | 0.52 | 6.61 | 14.49 | 13.30 |
| Rank | 60 | 62 | 57 | 3 | 5 | 1 | 17 | 59 | 57 | 8 | 7 | 8 | 36 |
| Judges' Retirement - Net | 3.03 | 7.28 | 11.96 | 6.12 | 9.61 | 10.19 | 5.34 | 6.45 | 7.32 | 1.86 | 8.06 | 17.36 | 13.20 |
| Judges' Benchmark | 2.55 | 7.04 | 11.98 | 6.59 | 10.05 | 10.54 | 5.67 | N/A | 9.10 | 1.40 | 9.08 | 17.92 | 14.84 |
| Difference | 0.48 | 0.24 | -0.02 | -0.47 | -0.44 | -0.35 | -0.33 | N/A | -1.78 | 0.46 | -1.02 | -0.56 | -1.64 |
| Judges' Retirement - Gross | 3.16 | 7.54 | 12.45 | 6.59 | 10.12 | 10.73 | 5.87 | 6.76 | 7.79 | 2.32 | 8.60 | 17.94 | 13.79 |
| All Public Plans > \$3B Total Fund Median | 3.25 | 7.73 | 12.65 | 5.38 | 8.63 | 9.18 | 5.23 | 6.86 | 7.96 | 0.52 | 6.61 | 14.49 | 13.30 |
| Rank | 60 | 62 | 57 | 3 | 5 | 1 | 13 | 59 | 57 | 8 | 7 | 8 | 36 |
| Volunteer Firefighters' Retirement - Net | 3.04 | 7.26 | 11.93 | 6.09 | 9.60 | 10.18 | 5.32 | 6.67 | 7.16 | 1.91 | 8.09 | 17.42 | 13.18 |
| Volunteer Firefighters' Benchmark | 2.54 | 7.00 | 11.94 | 6.58 | 10.06 | 10.55 | 5.65 | N/A | 9.08 | 1.42 | 9.11 | 17.97 | 14.79 |
| Difference | 0.50 | 0.26 | -0.01 | -0.49 | -0.46 | -0.37 | -0.33 | N/A | -1.92 | 0.49 | -1.02 | -0.55 | -1.61 |
| Volunteer Firefighters' Retirement - Gross | 3.17 | 7.51 | 12.42 | 6.56 | 10.11 | 10.72 | 5.85 | 6.98 | 7.63 | 2.36 | 8.63 | 18.00 | 13.77 |
| All Public Plans > \$3B Total Fund Median | 3.25 | 7.73 | 12.65 | 5.38 | 8.63 | 9.18 | 5.23 | 6.86 | 7.96 | 0.52 | 6.61 | 14.49 | 13.30 |
| Rank | 59 | 66 | 57 | 4 | 5 | 1 | 18 | 36 | 65 | 7 | 7 | 7 | 37 |

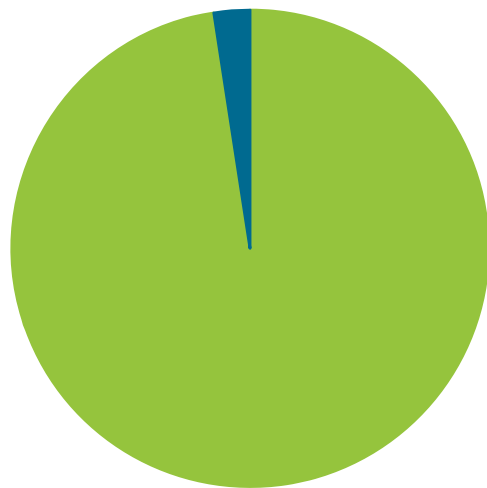
Net performance shown is net of all manager fees and expenses (Net-All). All Public Plans > \$3B Total Fund Median is reported gross of fees. Benchmark returns reflect unmanaged indices which are not impacted by management fees. Fiscal year ends on June 30.

Montana Board of Investments
 Asset Allocation by Segment
 Retirement Plans

As of June 30, 2017

| | Consolidated Asset Pension Pool (CAPP) | | Short Term Investment Pool (STIP) | | Total Fund | |
|--|--|--------------|-----------------------------------|-------------|-----------------------|---------------|
| | (\$) | % | (\$) | % | (\$) | % |
| Public Employees' Retirement | 5,326,159,180 | 50.07 | 130,616,937 | 49.10 | 5,456,776,117 | 50.05 |
| Teachers' Retirement | 3,820,401,751 | 35.92 | 98,397,995 | 36.99 | 3,918,799,746 | 35.94 |
| Police Retirement | 360,470,610 | 3.39 | 9,153,513 | 3.44 | 369,624,123 | 3.39 |
| Firefighters' Retirement | 371,008,295 | 3.49 | 9,437,652 | 3.55 | 380,445,947 | 3.49 |
| Sheriffs' Retirement | 321,979,697 | 3.03 | 8,282,850 | 3.11 | 330,262,547 | 3.03 |
| Highway Patrol Retirement | 136,347,861 | 1.28 | 3,027,415 | 1.14 | 139,375,276 | 1.28 |
| Game Wardens' Retirement | 171,201,691 | 1.61 | 3,944,064 | 1.48 | 175,145,755 | 1.61 |
| Judges' Retirement | 93,937,764 | 0.88 | 2,234,957 | 0.84 | 96,172,721 | 0.88 |
| Volunteer Firefighters' Retirement | 35,426,802 | 0.33 | 904,821 | 0.34 | 36,331,623 | 0.33 |
| Retirement Plans Total Fund Composite | 10,636,933,650 | 97.56 | 266,000,205 | 2.44 | 10,902,933,855 | 100.00 |

June 30, 2017 : \$10,902,933,855

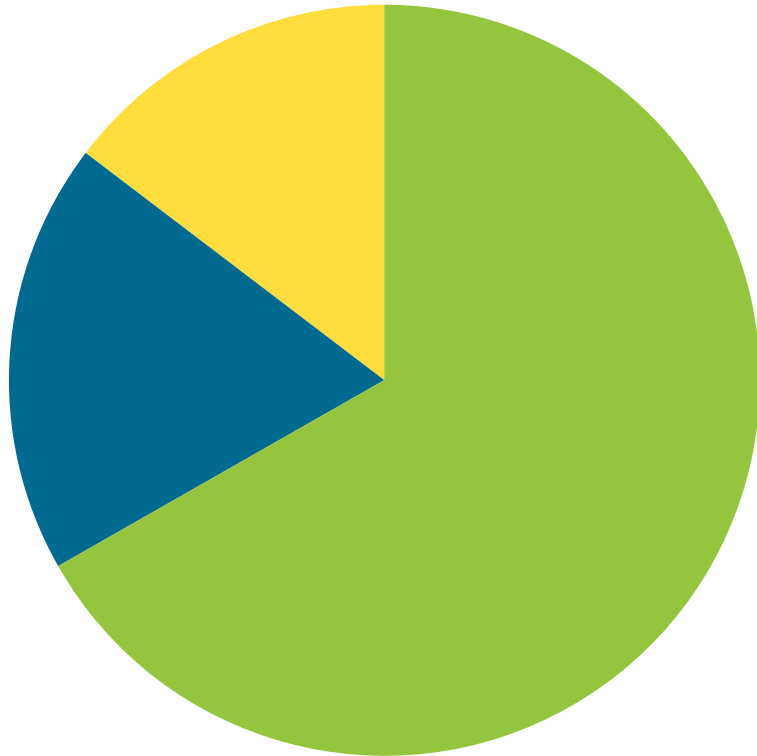


Segments

| | Market Value (\$) | Allocation (%) |
|--|-------------------|----------------|
| Consolidated Asset Pension Pool (CAPP) | 10,636,933,650 | 97.56 |
| Short Term Investment Pool (STIP) | 266,000,205 | 2.44 |

Allocations shown may not sum up to 100% exactly due to rounding. Retirement Plan market values may differ from State Street due to uninvested amounts not included in segment totals.

June 30, 2017 : \$15,932,249,292



| | Market Value (\$) | Allocation (%) |
|--|----------------------|-------------------|
| Consolidated Asset Pension Pool (CAPP) | 10,636,933,606 | 66.76 |
| Short Term Investment Pool | 2,961,499,765 | 18.59 |
| Trust Funds Investment Pool | 2,333,815,921 | 14.65 |

Allocations shown may not sum up to 100% exactly due to rounding.

Montana Board of Investments
Comparative Performance
Investment Pools

As of June 30, 2017

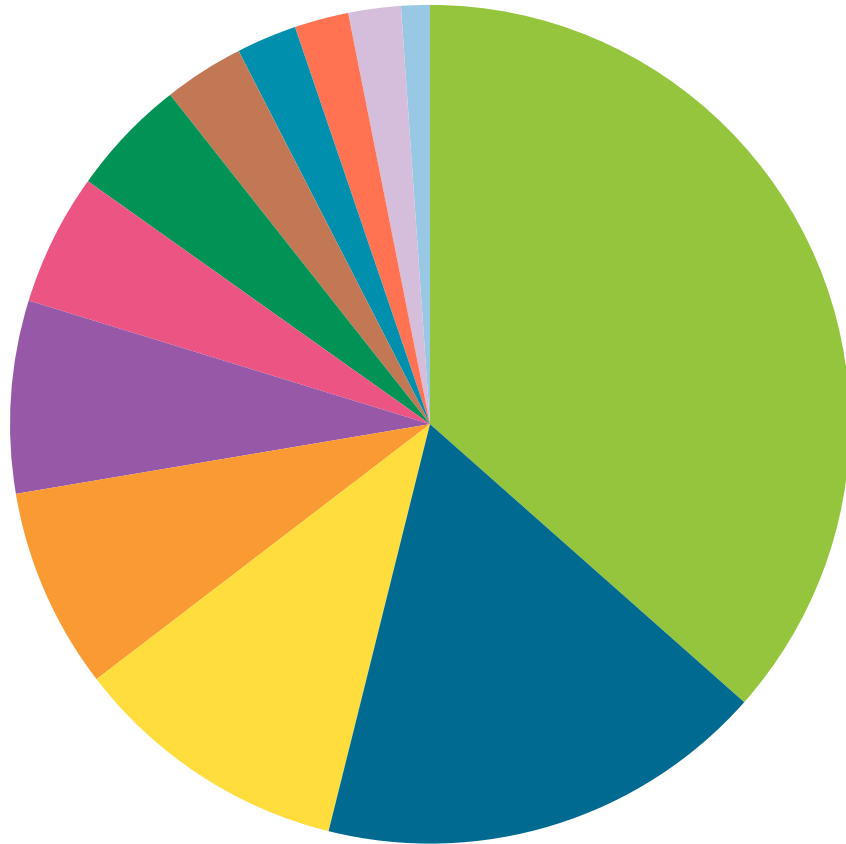
| | QTD | CYTD | FYTD/ 1 Year | 3 Years | 5 Years | 7 Years | 10 Years | 2016 | 2015 | 2014 | 2013 | 2012 |
|---|-------------|-------------|-----------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|-------------|
| Consolidated Asset Pension Pool (CAPP) | 3.12 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| CAPP Custom Benchmark | 2.62 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Difference | 0.50 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Trust Funds Investment Pool | 1.60 | 2.58 | 0.86 | 3.61 | 3.69 | 4.70 | 5.59 | 4.02 | 1.83 | 6.96 | -0.25 | 6.99 |
| Bloomberg US Agg Bond Index | 1.45 | 2.27 | -0.31 | 2.48 | 2.21 | 3.19 | 4.48 | 2.65 | 0.55 | 5.97 | -2.02 | 4.21 |
| Difference | 0.15 | 0.31 | 1.17 | 1.13 | 1.48 | 1.51 | 1.11 | 1.37 | 1.28 | 0.99 | 1.77 | 2.78 |
| Short Term Investment Pool | 0.26 | 0.48 | 0.83 | 0.45 | 0.35 | 0.34 | 0.85 | 0.61 | 0.22 | 0.10 | 0.19 | 0.30 |
| ICE 1 Mo LIBOR Index (USD) | 0.27 | 0.49 | 0.78 | 0.43 | 0.33 | 0.31 | 0.78 | 0.52 | 0.21 | 0.16 | 0.19 | 0.23 |
| Difference | -0.01 | -0.01 | 0.05 | 0.02 | 0.02 | 0.03 | 0.07 | 0.09 | 0.01 | -0.06 | 0.00 | 0.07 |
| iMoney.net Money Fund (Gross) Median | 0.29 | 0.53 | 0.88 | 0.49 | 0.39 | 0.36 | 0.90 | 0.61 | 0.25 | 0.17 | 0.22 | 0.30 |
| Difference | -0.03 | -0.05 | -0.05 | -0.04 | -0.04 | -0.02 | -0.05 | 0.00 | -0.03 | -0.07 | -0.03 | 0.00 |

Performance shown is net of all manager fees and expenses (Net-All).
Benchmark returns reflect unmanaged indices which are not impacted by management fees. Fiscal year ends on June 30. Please see Addendum for custom index specification.

Montana Board of Investments
 Asset Allocation
 Consolidated Pension Asset Pool (CAPP)

As of June 30, 2017

June 30, 2017 : \$10,636,933,620



| | Market Value (\$) | Allocation (%) |
|-------------------------|-------------------|----------------|
| Domestic Equity | 3,885,903,245 | 36.53 |
| International Equity | 1,844,865,337 | 17.34 |
| Private Equity | 1,140,212,818 | 10.72 |
| Real Estate | 823,743,715 | 7.74 |
| US Treasury & Agency | 789,417,695 | 7.42 |
| Investment Grade Credit | 540,542,499 | 5.08 |
| Mortgage - Backed | 482,495,678 | 4.54 |
| TIPS | 329,559,871 | 3.10 |
| Broad Fixed Income | 247,020,585 | 2.32 |
| Natural Resources | 221,217,285 | 2.08 |
| High Yield | 215,242,314 | 2.02 |
| Cash Pension | 116,712,579 | 1.10 |

Allocations shown may not sum up to 100% exactly due to rounding.



Montana Board of Investments
Comparative Performance
Consolidated Asset Pension Pool (CAPP)

As of June 30, 2017

| | QTD | CYTD | FYTD/ 1 Year | 3 Years | 5 Years | 7 Years | 10 Years | 2016 | 2015 | 2014 | 2013 | 2012 |
|---|--------------|--------------|-----------------|--------------|--------------|--------------|-------------|--------------|--------------|--------------|--------------|--------------|
| Domestic Equity | 2.85 | 8.88 | 17.95 | 8.78 | 14.48 | 15.07 | 6.96 | 11.46 | 0.86 | 12.28 | 34.19 | 16.44 |
| Domestic Equity Custom Index | 2.93 | 8.83 | 18.05 | 9.50 | 14.68 | 15.44 | 7.33 | 13.03 | 1.01 | 13.08 | 32.80 | 16.17 |
| Difference | -0.08 | 0.05 | -0.10 | -0.72 | -0.20 | -0.37 | -0.37 | -1.57 | -0.15 | -0.80 | 1.39 | 0.27 |
| International Equity | 6.33 | 15.11 | 20.41 | 1.66 | 7.90 | 7.09 | 0.42 | 3.87 | -3.57 | -4.00 | 16.39 | 17.11 |
| International Equity Custom Index | 5.85 | 14.30 | 20.43 | 1.14 | 7.51 | 6.88 | 1.30 | 4.41 | -4.60 | -4.03 | 15.62 | 16.96 |
| Difference | 0.48 | 0.81 | -0.02 | 0.52 | 0.39 | 0.21 | -0.88 | -0.54 | 1.03 | 0.03 | 0.77 | 0.15 |
| Broad Fixed Income | 1.08 | 1.29 | -0.50 | 2.55 | 2.89 | 4.17 | 5.14 | 3.98 | 0.48 | 6.19 | -0.95 | 7.31 |
| Bloomberg US Agg Bond Index | 1.45 | 2.27 | -0.31 | 2.48 | 2.21 | 3.19 | 4.48 | 2.65 | 0.55 | 5.97 | -2.02 | 4.21 |
| Difference | -0.37 | -0.98 | -0.19 | 0.07 | 0.68 | 0.98 | 0.66 | 1.33 | -0.07 | 0.22 | 1.07 | 3.10 |
| Investment Grade Credit | 1.56 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Bloomberg US Corp Int Bond Index | 1.49 | 2.67 | 1.68 | 2.83 | 3.29 | 4.21 | 5.08 | 4.04 | 1.08 | 4.35 | 0.08 | 8.84 |
| Difference | 0.07 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| US Treasury & Agency | 0.80 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Bloomberg US Trsy: Int Trm Index | 0.66 | 1.21 | -1.33 | 1.48 | 1.06 | 1.90 | 3.47 | 1.06 | 1.18 | 2.57 | -1.34 | 1.71 |
| Difference | 0.14 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| High Yield | 1.91 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Bloomberg US Hi Yld - 2% Issuer Cap Index | 2.17 | 4.92 | 12.69 | 4.50 | 6.90 | 8.14 | 7.76 | 17.13 | -4.43 | 2.46 | 7.44 | 15.78 |
| Difference | -0.26 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Mortgage - Backed | 1.12 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Bloomberg US MBS Index | 0.87 | 1.35 | -0.06 | 2.17 | 2.00 | 2.67 | 4.31 | 1.67 | 1.51 | 6.08 | -1.41 | 2.59 |
| Difference | 0.25 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| TIPS | -0.40 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Bloomberg US Trsy Infl Notes: 1-10 Yr Index | -0.40 | 0.65 | -0.26 | 0.35 | 0.28 | 2.12 | 3.57 | 4.01 | -0.52 | 0.91 | -5.58 | 5.04 |
| Difference | 0.00 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Natural Resources | 4.97 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| MSCI ACW Cmtdy Producers Index (USD) (Net) | -3.85 | -5.35 | 4.33 | -10.16 | -2.51 | -0.04 | -2.45 | 32.44 | -25.83 | -14.69 | 3.31 | 1.96 |
| Difference | 8.82 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Real Estate | 1.91 | 5.93 | 9.96 | 11.72 | 11.07 | 11.89 | 3.18 | 8.82 | 14.27 | 12.13 | 10.16 | 9.90 |
| Real Estate Custom Index | 1.34 | 3.25 | 7.15 | 10.69 | 10.89 | 12.40 | 4.60 | 9.08 | 13.86 | 11.36 | 11.97 | 10.47 |
| Difference | 0.57 | 2.68 | 2.81 | 1.03 | 0.18 | -0.51 | -1.42 | -0.26 | 0.41 | 0.77 | -1.81 | -0.57 |

Performance shown is net of all manager fees and expenses (Net-All).
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Montana Board of Investments
 Comparative Performance
 Consolidated Asset Pension Pool (CAPP)

As of June 30, 2017

| | QTD | CYTD | FYTD/ 1 Year | 3 Years | 5 Years | 7 Years | 10 Years | 2016 | 2015 | 2014 | 2013 | 2012 |
|-----------------------------|-------------|-------------|-----------------|-------------|--------------|--------------|-------------|-------------|-------------|--------------|--------------|--------------|
| Private Equity | 4.25 | 6.76 | 12.98 | 9.02 | 11.19 | 12.59 | 8.44 | 7.37 | 7.20 | 15.47 | 14.52 | 14.28 |
| Private Equity Custom Index | 2.09 | 7.54 | 17.00 | 12.95 | 16.81 | 16.80 | 11.48 | 20.11 | 3.68 | 23.31 | 25.24 | 35.39 |
| Difference | 2.16 | -0.78 | -4.02 | -3.93 | -5.62 | -4.21 | -3.04 | -12.74 | 3.52 | -7.84 | -10.72 | -21.11 |
| Cash Pension | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| ICE 1 Mo LIBOR Index (USD) | 0.27 | 0.49 | 0.78 | 0.43 | 0.33 | 0.31 | 0.78 | 0.52 | 0.21 | 0.16 | 0.19 | 0.23 |
| Difference | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

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Montana Board of Investments
Comparative Performance
Investment Pools

As of June 30, 2017

| | QTD | CYTD | FYTD/ 1 Year | 3 Years | 5 Years | 7 Years | 10 Years | 2016 | 2015 | 2014 | 2013 | 2012 |
|---|-------------|--------------|-----------------|--------------|--------------|--------------|-------------|--------------|--------------|--------------|--------------|--------------|
| Domestic Equity | 2.97 | 9.08 | 18.31 | 9.09 | 14.80 | 15.43 | 7.32 | 11.76 | 1.14 | 12.59 | 34.61 | 16.77 |
| All Public Plans-US Equity Segment Median | 3.05 | 8.70 | 18.48 | 8.60 | 14.22 | 15.11 | 7.21 | 12.85 | 0.21 | 11.42 | 33.76 | 16.57 |
| Rank | 58 | 37 | 52 | 32 | 22 | 26 | 42 | 72 | 24 | 21 | 41 | 39 |
| Population | 109 | 108 | 96 | 87 | 74 | 66 | 42 | 101 | 86 | 50 | 48 | 44 |
| International Equity | 6.41 | 15.27 | 20.75 | 1.92 | 8.20 | 7.41 | 0.78 | 4.15 | -3.35 | -3.77 | 16.80 | 17.45 |
| All Public Plans-Intl. Equity Segment Median | 6.41 | 15.43 | 20.59 | 2.44 | 8.93 | 8.44 | 2.20 | 3.94 | -2.51 | -3.00 | 18.68 | 18.94 |
| Rank | 51 | 54 | 46 | 74 | 75 | 84 | 96 | 46 | 68 | 75 | 78 | 81 |
| Population | 105 | 105 | 97 | 84 | 69 | 58 | 38 | 96 | 82 | 47 | 44 | 39 |
| Broad Fixed Income | 1.25 | 1.59 | -0.16 | 2.74 | 3.06 | 4.32 | 5.27 | 4.09 | 0.59 | 6.30 | -0.83 | 7.44 |
| All Public Plans-US Fixed Income Segment Median | 1.50 | 2.74 | 1.61 | 2.79 | 3.01 | 4.14 | 4.95 | 4.54 | 0.32 | 6.01 | -1.39 | 7.57 |
| Rank | 63 | 95 | 85 | 53 | 49 | 48 | 34 | 60 | 37 | 39 | 38 | 54 |
| Population | 99 | 99 | 94 | 85 | 76 | 66 | 45 | 96 | 79 | 49 | 49 | 48 |
| Trust Funds Investment Pool | 1.62 | 2.62 | 0.96 | 3.69 | 3.78 | 4.80 | 5.67 | 4.12 | 1.89 | 7.08 | -0.14 | 7.11 |
| All Public Plans-US Fixed Income Segment Median | 1.50 | 2.74 | 1.61 | 2.79 | 3.01 | 4.14 | 4.95 | 4.54 | 0.32 | 6.01 | -1.39 | 7.57 |
| Rank | 40 | 56 | 61 | 25 | 33 | 29 | 23 | 59 | 5 | 26 | 27 | 59 |
| Population | 99 | 99 | 94 | 85 | 76 | 66 | 45 | 96 | 79 | 49 | 49 | 48 |
| Real Estate | 2.45 | 7.00 | 11.46 | 13.19 | 12.53 | 13.47 | 4.60 | 10.26 | 15.68 | 13.51 | 11.73 | 11.44 |
| All Public Plans-Real Estate Segment Median | 2.04 | 4.15 | 8.60 | 11.46 | 12.29 | 13.20 | 5.53 | 9.98 | 13.42 | 14.41 | 13.69 | 12.58 |
| Rank | 33 | 5 | 17 | 10 | 40 | 47 | 79 | 47 | 13 | 64 | 67 | 84 |
| Population | 52 | 47 | 36 | 26 | 23 | 16 | 10 | 34 | 27 | 17 | 15 | 12 |

Performance shown is gross of fees. Fiscal year ends on June 30.

Montana Board of Investments
Comparative Performance
Equity Composites

As of June 30, 2017

| | QTD | CYTD | FYTD/ 1 Year | 3 Years | 5 Years | 7 Years | 10 Years | 2016 | 2015 | 2014 | 2013 | 2012 |
|--|-------------|--------------|-----------------|--------------|--------------|--------------|-------------|--------------|--------------|--------------|--------------|--------------|
| Domestic Large Cap Equity - Net | 6.25 | 12.88 | 21.91 | 10.76 | 15.53 | 15.86 | 7.35 | 11.30 | 1.76 | 13.82 | 33.14 | 16.14 |
| S&P 500 Index (Cap Wtd) | 3.09 | 9.34 | 17.90 | 9.61 | 14.63 | 15.41 | 7.18 | 11.96 | 1.38 | 13.69 | 32.39 | 16.00 |
| Difference | 3.16 | 3.54 | 4.01 | 1.15 | 0.90 | 0.45 | 0.17 | -0.66 | 0.38 | 0.13 | 0.75 | 0.14 |
| Domestic Large Cap Equity - Gross | 6.35 | 13.03 | 22.14 | 10.94 | 15.71 | 16.10 | 7.59 | 11.45 | 1.91 | 13.99 | 33.34 | 16.39 |
| IM U.S. Large Cap Equity (SA+CF) Median | 3.06 | 9.02 | 18.49 | 9.01 | 14.62 | 15.33 | 7.47 | 10.99 | 0.94 | 12.90 | 33.50 | 15.82 |
| Rank | 7 | 20 | 21 | 18 | 22 | 25 | 47 | 46 | 40 | 32 | 53 | 42 |
| Domestic Large Cap Active - Net | 2.89 | 9.37 | 18.51 | 9.38 | 15.07 | 15.34 | 6.82 | 9.63 | 2.40 | 14.01 | 34.90 | 16.03 |
| S&P 500 Index (Cap Wtd) | 3.09 | 9.34 | 17.90 | 9.61 | 14.63 | 15.41 | 7.18 | 11.96 | 1.38 | 13.69 | 32.39 | 16.00 |
| Difference | -0.20 | 0.03 | 0.61 | -0.23 | 0.44 | -0.07 | -0.36 | -2.33 | 1.02 | 0.32 | 2.51 | 0.03 |
| Domestic Large Cap Active - Gross | 3.01 | 9.60 | 19.02 | 9.88 | 15.61 | 15.87 | 7.29 | 10.12 | 2.88 | 14.56 | 35.55 | 16.56 |
| IM U.S. Large Cap Equity (SA+CF) Median | 3.06 | 9.02 | 18.49 | 9.01 | 14.62 | 15.33 | 7.47 | 10.99 | 0.94 | 12.90 | 33.50 | 15.82 |
| Rank | 53 | 41 | 45 | 32 | 24 | 31 | 57 | 57 | 32 | 25 | 33 | 39 |
| Domestic Mid Cap Equity - Net | 2.91 | 8.64 | 17.49 | 5.64 | 13.56 | 14.06 | 7.28 | 12.29 | -3.31 | 6.45 | 38.18 | 16.27 |
| Russell Mid Cap Index | 2.70 | 7.99 | 16.48 | 7.69 | 14.72 | 15.28 | 7.67 | 13.80 | -2.44 | 13.22 | 34.76 | 17.28 |
| Difference | 0.21 | 0.65 | 1.01 | -2.05 | -1.16 | -1.22 | -0.39 | -1.51 | -0.87 | -6.77 | 3.42 | -1.01 |
| Domestic Mid Cap Equity - Gross | 3.08 | 8.98 | 18.20 | 6.27 | 14.22 | 14.69 | 7.91 | 12.96 | -2.74 | 7.07 | 38.95 | 16.83 |
| IM U.S. Mid Cap Equity (SA+CF) Median | 2.71 | 8.24 | 18.67 | 7.96 | 14.68 | 15.38 | 8.47 | 12.41 | -1.15 | 9.76 | 36.35 | 16.46 |
| Rank | 46 | 48 | 58 | 80 | 60 | 74 | 67 | 48 | 68 | 73 | 34 | 48 |
| Domestic Small Cap Equity - Net | 1.85 | 4.72 | 21.77 | 7.63 | 14.50 | 14.66 | 7.10 | 19.31 | -1.61 | 5.44 | 40.65 | 15.76 |
| Russell 2000 Index | 2.46 | 4.99 | 24.60 | 7.36 | 13.70 | 14.35 | 6.92 | 21.31 | -4.41 | 4.89 | 38.82 | 16.35 |
| Difference | -0.61 | -0.27 | -2.83 | 0.27 | 0.80 | 0.31 | 0.18 | -2.00 | 2.80 | 0.55 | 1.83 | -0.59 |
| Domestic Small Cap Equity - Gross | 1.97 | 5.02 | 22.55 | 8.30 | 15.22 | 15.41 | 7.80 | 19.97 | -0.93 | 6.16 | 41.54 | 16.40 |
| IM U.S. Small Cap Equity (SA+CF) Median | 2.29 | 4.97 | 23.31 | 8.09 | 14.84 | 15.56 | 8.00 | 20.88 | -2.33 | 5.37 | 41.32 | 16.48 |
| Rank | 56 | 50 | 59 | 47 | 45 | 54 | 56 | 57 | 35 | 43 | 49 | 51 |

Net performance shown is net of all manager fees and expenses (Net-All). Gross returns are compared to median performance of similar managers. A peer group of similar managers may not exist for all composites. Fiscal year ends on June 30.

Montana Board of Investments
Comparative Performance
Equity Composites

As of June 30, 2017

| | QTD | CYTD | FYTD/ 1 Year | 3 Years | 5 Years | 7 Years | 10 Years | 2016 | 2015 | 2014 | 2013 | 2012 |
|---|-------------|--------------|-----------------|-------------|--------------|--------------|--------------|-------------|--------------|--------------|--------------|--------------|
| International Large Cap Passive - Net | 5.87 | 14.47 | 20.85 | 1.39 | 7.56 | 6.95 | N/A | 4.87 | -4.71 | -3.70 | 14.95 | 16.92 |
| MSCI ACW Ex US Index (USD) (Net) | 5.78 | 14.10 | 20.45 | 0.80 | 7.22 | 6.66 | 1.13 | 4.50 | -5.66 | -3.87 | 15.29 | 16.83 |
| Difference | 0.09 | 0.37 | 0.40 | 0.59 | 0.34 | 0.29 | N/A | 0.37 | 0.95 | 0.17 | -0.34 | 0.09 |
| International Large Cap Passive - Gross | 5.89 | 14.52 | 20.94 | 1.47 | 7.65 | 7.04 | N/A | 4.96 | -4.63 | -3.62 | 15.05 | 17.02 |
| International Equity Active - Net | 7.67 | 16.89 | 20.72 | 3.22 | 9.40 | 8.08 | 1.05 | 2.63 | 0.41 | -4.39 | 19.23 | 17.87 |
| MSCI ACW Ex US Index (USD) (Net) | 5.78 | 14.10 | 20.45 | 0.80 | 7.22 | 6.66 | 1.13 | 4.50 | -5.66 | -3.87 | 15.29 | 16.83 |
| Difference | 1.89 | 2.79 | 0.27 | 2.42 | 2.18 | 1.42 | -0.08 | -1.87 | 6.07 | -0.52 | 3.94 | 1.04 |
| International Equity Active - Gross | 7.82 | 17.20 | 21.37 | 3.75 | 9.92 | 8.60 | 1.55 | 3.17 | 0.90 | -3.94 | 19.75 | 18.36 |
| IM International Large Cap Core Equity (SA+CF) Median | 6.62 | 15.00 | 20.86 | 2.53 | 9.71 | 9.21 | 2.32 | 1.14 | 0.33 | -3.83 | 23.21 | 19.44 |
| Rank | 18 | 17 | 45 | 21 | 44 | 65 | 80 | 26 | 44 | 51 | 74 | 66 |
| International Value - Net | 7.33 | 15.63 | 21.20 | 1.61 | 8.50 | 7.29 | -0.41 | 5.59 | -5.94 | -1.49 | 17.15 | 15.88 |
| MSCI ACW Ex US Val Index (USD) (Net) | 4.08 | 11.03 | 23.62 | -1.00 | 6.35 | 5.82 | 0.31 | 8.92 | -10.06 | -5.10 | 15.04 | 16.97 |
| Difference | 3.25 | 4.60 | -2.42 | 2.61 | 2.15 | 1.47 | -0.72 | -3.33 | 4.12 | 3.61 | 2.11 | -1.09 |
| International Value - Gross | 7.47 | 15.93 | 21.85 | 2.15 | 9.09 | 7.89 | 0.17 | 6.17 | -5.46 | -0.94 | 17.82 | 16.55 |
| IM International Large Cap Value Equity (SA+CF) Median | 6.24 | 14.21 | 22.48 | 2.10 | 9.60 | 8.83 | 2.45 | 3.78 | -1.91 | -4.30 | 23.27 | 18.00 |
| Rank | 25 | 27 | 55 | 50 | 58 | 74 | 95 | 27 | 84 | 14 | 77 | 66 |
| International Growth - Net | 7.41 | 16.96 | 17.83 | 3.45 | 8.42 | 7.69 | 1.11 | 0.51 | 1.69 | -6.15 | 18.55 | 18.37 |
| MSCI ACW Ex US Grth Index (USD) (Net) | 7.56 | 17.38 | 17.38 | 2.55 | 8.04 | 7.45 | 1.89 | 0.12 | -1.25 | -2.65 | 15.49 | 16.67 |
| Difference | -0.15 | -0.42 | 0.45 | 0.90 | 0.38 | 0.24 | -0.78 | 0.39 | 2.94 | -3.50 | 3.06 | 1.70 |
| International Growth - Gross | 7.56 | 17.30 | 18.54 | 4.02 | 8.97 | 8.24 | 1.64 | 1.12 | 2.21 | -5.72 | 19.09 | 18.89 |
| IM International Large Cap Growth Equity (SA+CF) Median | 7.40 | 16.67 | 19.43 | 3.25 | 9.42 | 9.22 | 3.20 | -0.04 | 2.12 | -3.37 | 20.74 | 19.64 |
| Rank | 44 | 41 | 55 | 35 | 69 | 85 | 82 | 33 | 49 | 80 | 69 | 59 |
| International Small Cap - Net | 7.35 | 17.54 | 22.64 | 3.98 | 11.38 | 10.29 | 2.44 | 1.84 | 5.16 | -4.87 | 25.30 | 18.64 |
| MSCI ACWI Ex US Sm Cap Index IMI (USD) (Net) | 6.24 | 15.56 | 20.32 | 3.31 | 10.02 | 8.83 | 2.91 | 3.91 | 2.60 | -4.03 | 19.73 | 18.52 |
| Difference | 1.11 | 1.98 | 2.32 | 0.67 | 1.36 | 1.46 | -0.47 | -2.07 | 2.56 | -0.84 | 5.57 | 0.12 |
| International Small Cap - Gross | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| IM International Small Cap Equity (SA+CF) Median | 8.47 | 17.72 | 22.86 | 5.95 | 14.02 | 12.54 | 5.02 | 1.13 | 10.39 | -3.38 | 31.13 | 23.53 |
| Rank | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

Gross of fees performance is not available (N/A) for the International Small Cap composite which currently consists of DFA Intl Sm Co;l (DFISX), DFA Emg Mkts Sm Cap;l (DEMSX), BlackRock ACWI Ex-US Small Cap (CF), Templeton Investment Counsel (SA), and American Century Investment Mgmt (SA).

Net performance shown is net of all manager fees and expenses (Net-All). Gross returns are compared to median performance of similar managers. A peer group of similar managers may not exist for all composites. Fiscal year ends on June 30.

Montana Board of Investments
Comparative Performance
Equity Sub Composites

As of June 30, 2017

| | QTD | CYTD | FYTD/ 1 Year | 3 Years | 5 Years | 7 Years | 10 Years | 2016 | 2015 | 2014 | 2013 | 2012 |
|---|-------------|--------------|-----------------|--------------|--------------|--------------|-------------|--------------|-------------|--------------|--------------|--------------|
| Domestic Large Cap Passive - Net | 2.73 | 9.01 | 17.58 | 9.33 | 14.46 | 15.32 | 7.12 | 12.01 | 0.83 | 13.73 | 32.41 | 16.06 |
| S&P 500 Index (Cap Wtd) | 3.09 | 9.34 | 17.90 | 9.61 | 14.63 | 15.41 | 7.18 | 11.96 | 1.38 | 13.69 | 32.39 | 16.00 |
| Difference | -0.36 | -0.33 | -0.32 | -0.28 | -0.17 | -0.09 | -0.06 | 0.05 | -0.55 | 0.04 | 0.02 | 0.06 |
| Domestic Large Cap Passive - Gross | 2.74 | 9.01 | 17.59 | 9.34 | 14.47 | 15.33 | 7.18 | 12.03 | 0.84 | 13.74 | 32.42 | 16.07 |
| IM U.S. Large Cap Index Equity (SA+CF) Median | 3.08 | 9.26 | 18.03 | 9.49 | 14.63 | 15.40 | 7.26 | 12.03 | 0.94 | 13.28 | 32.58 | 16.20 |
| Rank | 77 | 59 | 73 | 54 | 77 | 71 | 70 | 52 | 56 | 18 | 64 | 56 |
| Domestic Large Cap Enhanced - Net | 4.35 | 11.44 | 18.85 | 10.18 | 14.99 | 15.90 | 6.82 | 9.73 | 3.18 | 13.19 | 32.89 | 16.87 |
| S&P 500 Index (Cap Wtd) | 3.09 | 9.34 | 17.90 | 9.61 | 14.63 | 15.41 | 7.18 | 11.96 | 1.38 | 13.69 | 32.39 | 16.00 |
| Difference | 1.26 | 2.10 | 0.95 | 0.57 | 0.36 | 0.49 | -0.36 | -2.23 | 1.80 | -0.50 | 0.50 | 0.87 |
| Domestic Large Cap Enhanced - Gross | 4.42 | 11.59 | 19.17 | 10.51 | 15.34 | 16.25 | 7.14 | 10.05 | 3.50 | 13.54 | 33.31 | 17.21 |
| IM U.S. Large Cap Core Equity (SA+CF) Median | 2.92 | 8.98 | 17.53 | 9.22 | 14.54 | 15.32 | 7.53 | 10.52 | 1.32 | 13.42 | 32.94 | 15.68 |
| Rank | 11 | 14 | 35 | 20 | 28 | 20 | 66 | 58 | 23 | 49 | 47 | 31 |
| Domestic Large Cap 130/30 - Net | 1.40 | 7.28 | 18.19 | 8.57 | 15.14 | 15.11 | N/A | 9.54 | 1.61 | 14.84 | 36.94 | 18.42 |
| S&P 500 Index (Cap Wtd) | 3.09 | 9.34 | 17.90 | 9.61 | 14.63 | 15.41 | 7.18 | 11.96 | 1.38 | 13.69 | 32.39 | 16.00 |
| Difference | -1.69 | -2.06 | 0.29 | -1.04 | 0.51 | -0.30 | N/A | -2.42 | 0.23 | 1.15 | 4.55 | 2.42 |
| Domestic Large Cap 130/30 - Gross | 1.55 | 7.59 | 18.90 | 9.25 | 15.87 | 15.86 | N/A | 10.22 | 2.26 | 15.59 | 37.83 | 19.18 |
| IM U.S. Large Cap Core Equity (SA+CF) Median | 2.92 | 8.98 | 17.53 | 9.22 | 14.54 | 15.32 | 7.53 | 10.52 | 1.32 | 13.42 | 32.94 | 15.68 |
| Rank | 89 | 75 | 37 | 50 | 20 | 31 | N/A | 56 | 37 | 21 | 13 | 15 |

Net performance shown is net of all manager fees and expenses (Net-All). Gross returns are compared to median performance of similar managers. A peer group of similar managers may not exist for all composites. Fiscal year ends on June 30.

Montana Board of Investments
Comparative Performance
Domestic Equity Managers

As of June 30, 2017

| | QTD | CYTD | FYTD/ 1 Year | 3 Years | 5 Years | 7 Years | 10 Years | 2016 | 2015 | 2014 | 2013 | 2012 | Since Incep. | Inception Date |
|--|-------|-------|-----------------|------------|------------|------------|-------------|-------|-------|-------|-------|-------|-----------------|-------------------|
| Domestic Large Cap Equity | | | | | | | | | | | | | | |
| BlackRock MSCI US Equity Index (CF) - Net | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 07/01/2017 |
| S&P 500 Index (Cap Wtd) | 3.09 | 9.34 | 17.90 | 9.61 | 14.63 | 15.41 | 7.18 | 11.96 | 1.38 | 13.69 | 32.39 | 16.00 | N/A | |
| Difference | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| BlackRock MSCI US Equity Index (CF) - Gross | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 07/01/2017 |
| SPDR S&P 500 ETF (SPY) - Net | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 07/01/2017 |
| S&P 500 Index (Cap Wtd) | 3.09 | 9.34 | 17.90 | 9.61 | 14.63 | 15.41 | 7.18 | 11.96 | 1.38 | 13.69 | 32.39 | 16.00 | N/A | |
| Difference | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| Domestic Equity Pool STIF - Net | 0.24 | 0.40 | 0.69 | N/A | N/A | N/A | N/A | 0.50 | N/A | N/A | N/A | N/A | 0.44 | 04/01/2015 |
| ICE 1 Mo LIBOR Index (USD) | 0.27 | 0.49 | 0.78 | 0.43 | 0.33 | 0.31 | 0.78 | 0.52 | 0.21 | 0.16 | 0.19 | 0.23 | 0.52 | |
| Difference | -0.03 | -0.09 | -0.09 | N/A | N/A | N/A | N/A | -0.02 | N/A | N/A | N/A | N/A | -0.08 | |
| T. Rowe U.S. Structured Research (SA) - Net | 4.12 | 11.21 | 19.81 | 10.28 | 15.13 | 15.71 | 7.70 | 10.68 | 3.30 | 12.58 | 33.23 | 16.42 | 8.82 | 06/01/2006 |
| S&P 500 Index (Cap Wtd) | 3.09 | 9.34 | 17.90 | 9.61 | 14.63 | 15.41 | 7.18 | 11.96 | 1.38 | 13.69 | 32.39 | 16.00 | 8.28 | |
| Difference | 1.03 | 1.87 | 1.91 | 0.67 | 0.50 | 0.30 | 0.52 | -1.28 | 1.92 | -1.11 | 0.84 | 0.42 | 0.54 | |
| T. Rowe U.S. Structured Research (SA) - Gross | 4.19 | 11.34 | 20.09 | 10.59 | 15.46 | 16.04 | 8.02 | 10.98 | 3.61 | 12.92 | 33.63 | 16.77 | 9.15 | 06/01/2006 |
| IM U.S. Large Cap Core Equity (SA+CF) Median | 2.92 | 8.98 | 17.53 | 9.22 | 14.54 | 15.32 | 7.53 | 10.52 | 1.32 | 13.42 | 32.94 | 15.68 | 8.52 | |
| Rank | 14 | 15 | 29 | 20 | 25 | 25 | 28 | 46 | 23 | 59 | 44 | 36 | 27 | |
| Analytic Investors 130/30 (SA) - Net | 0.45 | 3.73 | 10.27 | 8.38 | 13.88 | 14.98 | N/A | 8.74 | 5.94 | 13.33 | 35.22 | 17.38 | 7.85 | 03/01/2008 |
| S&P 500 Index (Cap Wtd) | 3.09 | 9.34 | 17.90 | 9.61 | 14.63 | 15.41 | 7.18 | 11.96 | 1.38 | 13.69 | 32.39 | 16.00 | 8.98 | |
| Difference | -2.64 | -5.61 | -7.63 | -1.23 | -0.75 | -0.43 | N/A | -3.22 | 4.56 | -0.36 | 2.83 | 1.38 | -1.13 | |
| Analytic Investors 130/30 (SA) - Gross | 0.55 | 3.94 | 10.72 | 8.86 | 14.40 | 15.53 | N/A | 9.22 | 6.42 | 13.88 | 35.86 | 17.94 | 8.40 | 03/01/2008 |
| IM U.S. Large Cap Core Equity (SA+CF) Median | 2.92 | 8.98 | 17.53 | 9.22 | 14.54 | 15.32 | 7.53 | 10.52 | 1.32 | 13.42 | 32.94 | 15.68 | 9.17 | |
| Rank | 98 | 97 | 91 | 57 | 53 | 43 | N/A | 66 | 6 | 40 | 25 | 24 | 75 | |
| J.P. Morgan 130/30 (SA) - Net | 2.00 | 9.43 | 22.88 | 9.04 | 15.84 | 15.35 | N/A | 10.30 | 0.01 | 15.38 | 37.55 | 18.64 | 10.18 | 03/01/2008 |
| S&P 500 Index (Cap Wtd) | 3.09 | 9.34 | 17.90 | 9.61 | 14.63 | 15.41 | 7.18 | 11.96 | 1.38 | 13.69 | 32.39 | 16.00 | 8.98 | |
| Difference | -1.09 | 0.09 | 4.98 | -0.57 | 1.21 | -0.06 | N/A | -1.66 | -1.37 | 1.69 | 5.16 | 2.64 | 1.20 | |
| J.P. Morgan 130/30 (SA) - Gross | 2.18 | 9.82 | 23.75 | 9.82 | 16.66 | 16.18 | N/A | 11.09 | 0.72 | 16.21 | 38.53 | 19.48 | 10.97 | 03/01/2008 |
| IM U.S. Large Cap Core Equity (SA+CF) Median | 2.92 | 8.98 | 17.53 | 9.22 | 14.54 | 15.32 | 7.53 | 10.52 | 1.32 | 13.42 | 32.94 | 15.68 | 9.17 | |
| Rank | 74 | 33 | 8 | 32 | 11 | 20 | N/A | 44 | 58 | 15 | 11 | 13 | 7 | |

Net performance shown is net of all manager fees and expenses (Net-All). Gross returns are compared to median performance of similar managers. A peer group of similar managers may not exist for all funds. Fiscal year ends on June 30.



Montana Board of Investments
Comparative Performance
Domestic Equity Managers

As of June 30, 2017

| | QTD | CYTD | FYTD/ 1 Year | 3 Years | 5 Years | 7 Years | 10 Years | 2016 | 2015 | 2014 | 2013 | 2012 | Since Incep. | Inception Date |
|--|-------|-------|-----------------|------------|------------|------------|-------------|--------|-------|--------|-------|-------|-----------------|-------------------|
| Domestic Mid Cap Equity | | | | | | | | | | | | | | |
| Artisan Partners (SA) - Net | 1.53 | 4.68 | 17.82 | 4.32 | 12.15 | 13.19 | 7.51 | 23.60 | -9.68 | 2.12 | 37.20 | 12.02 | 8.09 | 03/01/2007 |
| Russell Mid Cap Val Index | 1.37 | 5.18 | 15.93 | 7.46 | 15.14 | 15.29 | 7.23 | 20.00 | -4.78 | 14.75 | 33.46 | 18.51 | 7.48 | |
| Difference | 0.16 | -0.50 | 1.89 | -3.14 | -2.99 | -2.10 | 0.28 | 3.60 | -4.90 | -12.63 | 3.74 | -6.49 | 0.61 | |
| Artisan Partners (SA) - Gross | 1.69 | 5.01 | 18.57 | 5.00 | 12.88 | 13.94 | 8.27 | 24.41 | -9.09 | 2.79 | 38.11 | 12.79 | 8.85 | 03/01/2007 |
| IM U.S. Mid Cap Value Equity (SA+CF) Median | 1.47 | 5.84 | 19.20 | 7.67 | 15.64 | 15.29 | 7.95 | 18.21 | -3.23 | 11.60 | 35.97 | 17.15 | 8.53 | |
| Rank | 43 | 59 | 52 | 84 | 90 | 81 | 44 | 14 | 89 | 97 | 40 | 86 | 42 | |
| Iridian Asset Management (SA) - Net | 3.83 | 13.01 | 20.07 | 5.15 | N/A | N/A | N/A | 3.29 | -1.62 | 12.84 | N/A | N/A | 12.67 | 05/01/2013 |
| Russell Mid Cap Val Index | 1.37 | 5.18 | 15.93 | 7.46 | 15.14 | 15.29 | 7.23 | 20.00 | -4.78 | 14.75 | 33.46 | 18.51 | 11.83 | |
| Difference | 2.46 | 7.83 | 4.14 | -2.31 | N/A | N/A | N/A | -16.71 | 3.16 | -1.91 | N/A | N/A | 0.84 | |
| Iridian Asset Management (SA) - Gross | 4.02 | 13.42 | 20.96 | 5.95 | N/A | N/A | N/A | 4.07 | -0.87 | 13.73 | N/A | N/A | 13.54 | 05/01/2013 |
| IM U.S. Mid Cap Value Equity (SA+CF) Median | 1.47 | 5.84 | 19.20 | 7.67 | 15.64 | 15.29 | 7.95 | 18.21 | -3.23 | 11.60 | 35.97 | 17.15 | 12.47 | |
| Rank | 8 | 5 | 35 | 74 | N/A | N/A | N/A | 100 | 21 | 24 | N/A | N/A | 29 | |
| iShares:Core S&P Md-Cp (IJH) - Net | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 07/01/2017 |
| S&P Mid Cap 400 Index (Cap Wtd) | 1.97 | 5.99 | 18.57 | 8.53 | 14.92 | 15.42 | 8.56 | 20.74 | -2.18 | 9.77 | 33.50 | 17.88 | N/A | |
| Difference | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| TimesSquare Capital Management (SA) - Net | 4.12 | 11.05 | 16.34 | 7.11 | 13.96 | 14.19 | 8.40 | 7.91 | 0.96 | 5.69 | 37.79 | 19.19 | 8.91 | 03/01/2007 |
| Russell Mid Cap Grth Index | 4.21 | 11.40 | 17.05 | 7.83 | 14.19 | 15.24 | 7.87 | 7.33 | -0.20 | 11.90 | 35.74 | 15.81 | 8.35 | |
| Difference | -0.09 | -0.35 | -0.71 | -0.72 | -0.23 | -1.05 | 0.53 | 0.58 | 1.16 | -6.21 | 2.05 | 3.38 | 0.56 | |
| TimesSquare Capital Management (SA) - Gross | 4.31 | 11.42 | 17.12 | 7.84 | 14.74 | 14.99 | 9.18 | 8.65 | 1.65 | 6.42 | 38.75 | 20.03 | 9.68 | 03/01/2007 |
| IM U.S. Mid Cap Growth Equity (SA+CF) Median | 4.54 | 12.60 | 19.15 | 7.80 | 13.81 | 15.11 | 8.47 | 5.41 | 0.79 | 8.63 | 36.40 | 15.13 | 9.28 | |
| Rank | 56 | 67 | 72 | 50 | 26 | 58 | 30 | 21 | 42 | 71 | 36 | 15 | 38 | |

Net performance shown is net of all manager fees and expenses (Net-All). Gross returns are compared to median performance of similar managers. A peer group of similar managers may not exist for all funds. Fiscal year ends on June 30.



Montana Board of Investments
Comparative Performance
Domestic Equity Managers

As of June 30, 2017

| | QTD | CYTD | FYTD/ 1 Year | 3 Years | 5 Years | 7 Years | 10 Years | 2016 | 2015 | 2014 | 2013 | 2012 | Since Incep. | Inception Date |
|---|--------------|--------------|-----------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-----------------|-------------------|
| Domestic Small Cap Equity | | | | | | | | | | | | | | |
| Vaughan Nelson Management (SA) - Net | -1.68 | -1.14 | 14.53 | 6.87 | 14.44 | 14.36 | 9.15 | 20.50 | 0.16 | 9.09 | 39.30 | 15.36 | 9.78 | 03/01/2007 |
| Russell 2000 Val Index | 0.67 | 0.54 | 24.86 | 7.02 | 13.39 | 13.50 | 5.92 | 31.74 | -7.47 | 4.22 | 34.52 | 18.05 | 6.08 | |
| Difference | -2.35 | -1.68 | -10.33 | -0.15 | 1.05 | 0.86 | 3.23 | -11.24 | 7.63 | 4.87 | 4.78 | -2.69 | 3.70 | |
| Vaughan Nelson Management (SA) - Gross | -1.49 | -0.74 | 15.46 | 7.75 | 15.39 | 15.31 | 10.11 | 21.49 | 0.98 | 10.00 | 40.47 | 16.32 | 10.72 | 03/01/2007 |
| IM U.S. Small Cap Value Equity (SA+CF) Median | 0.94 | 2.08 | 23.12 | 7.70 | 15.00 | 15.04 | 7.95 | 26.17 | -4.30 | 5.71 | 38.09 | 17.48 | 8.45 | |
| Rank | 95 | 81 | 94 | 50 | 41 | 45 | 9 | 76 | 8 | 10 | 36 | 60 | 9 | |
| BlackRock MSCI US Sm Cap Equity Index (CF) - Net | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 07/01/2017 |
| MSCI US Small Cap Index (USD) (Net) | 2.09 | 5.75 | 20.50 | 6.91 | 14.00 | 14.73 | 7.51 | 19.15 | -4.11 | 7.07 | 37.64 | 17.52 | N/A | |
| Difference | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| BlackRock MSCI US Sm Cap Equity Index (CF) - Gross | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 07/01/2017 |
| DFA US Small Cap Trust (CF) - Net | 1.41 | 2.11 | 22.56 | 8.12 | 15.07 | 15.60 | 7.95 | 24.42 | -2.64 | 4.75 | 42.42 | 18.20 | 12.67 | 03/01/2003 |
| Russell 2000 Index | 2.46 | 4.99 | 24.60 | 7.36 | 13.70 | 14.35 | 6.92 | 21.31 | -4.41 | 4.89 | 38.82 | 16.35 | 11.49 | |
| Difference | -1.05 | -2.88 | -2.04 | 0.76 | 1.37 | 1.25 | 1.03 | 3.11 | 1.77 | -0.14 | 3.60 | 1.85 | 1.18 | |
| DFA US Small Cap Trust (CF) - Gross | 1.50 | 2.30 | 23.00 | 8.51 | 15.47 | 16.00 | 8.31 | 24.85 | -2.29 | 5.12 | 42.90 | 18.59 | 12.99 | 03/01/2003 |
| IM U.S. Small Cap Core Equity (SA+CF) Median | 2.40 | 5.08 | 23.06 | 8.87 | 15.41 | 15.86 | 7.91 | 20.64 | -1.36 | 6.56 | 41.26 | 16.84 | 12.76 | |
| Rank | 68 | 80 | 51 | 58 | 50 | 47 | 42 | 21 | 63 | 63 | 41 | 33 | 41 | |
| Alliance Bernstein (SA) - Net | 6.13 | 16.45 | 28.56 | 6.03 | 12.70 | N/A | N/A | 6.82 | -0.84 | -1.61 | 45.22 | N/A | 10.88 | 04/01/2012 |
| Russell 2000 Grth Index | 4.39 | 9.97 | 24.40 | 7.64 | 13.98 | 15.16 | 7.82 | 11.32 | -1.38 | 5.60 | 43.30 | 14.59 | 12.41 | |
| Difference | 1.74 | 6.48 | 4.16 | -1.61 | -1.28 | N/A | N/A | -4.50 | 0.54 | -7.21 | 1.92 | N/A | -1.53 | |
| Alliance Bernstein (SA) - Gross | 6.37 | 16.94 | 29.70 | 6.98 | 13.71 | N/A | N/A | 7.80 | 0.05 | -0.71 | 46.52 | N/A | 11.87 | 04/01/2012 |
| IM U.S. Small Cap Growth Equity (SA+CF) Median | 4.95 | 11.04 | 24.12 | 8.51 | 14.41 | 16.07 | 8.11 | 11.38 | -0.73 | 3.99 | 45.47 | 14.76 | 12.83 | |
| Rank | 24 | 11 | 18 | 62 | 66 | N/A | N/A | 70 | 42 | 81 | 46 | N/A | 66 | |
| Voya Investment Management (SA) - Net | 3.33 | 9.87 | 23.51 | 8.21 | N/A | N/A | N/A | 13.14 | -1.01 | 5.41 | N/A | N/A | 12.21 | 05/01/2013 |
| Russell 2000 Grth Index | 4.39 | 9.97 | 24.40 | 7.64 | 13.98 | 15.16 | 7.82 | 11.32 | -1.38 | 5.60 | 43.30 | 14.59 | 12.35 | |
| Difference | -1.06 | -0.10 | -0.89 | 0.57 | N/A | N/A | N/A | 1.82 | 0.37 | -0.19 | N/A | N/A | -0.14 | |
| Voya Investment Management (SA) - Gross | 3.56 | 10.34 | 24.59 | 9.16 | N/A | N/A | N/A | 14.14 | -0.15 | 6.35 | N/A | N/A | 13.19 | 05/01/2013 |
| IM U.S. Small Cap Growth Equity (SA+CF) Median | 4.95 | 11.04 | 24.12 | 8.51 | 14.41 | 16.07 | 8.11 | 11.38 | -0.73 | 3.99 | 45.47 | 14.76 | 13.11 | |
| Rank | 70 | 56 | 47 | 41 | N/A | N/A | N/A | 36 | 44 | 31 | N/A | N/A | 48 | |

Gross of fees performance is not available (N/A) for the following funds: SPDR S&P 500 ETF (SPY), Domestic Equity Pool STIF, and iShares:Core S&P Md-Cp (IJH).

The current annual expense ratios for the SPDR S&P 500 ETF (SPY), Domestic Equity Pool STIF, and iShares:Core S&P Md-Cp (IJH) are 0.09%, 0.18%, and 0.07%, respectively.

Net performance shown is net of all manager fees and expenses (Net-All). Gross returns are compared to median performance of similar managers. A peer group of similar managers may not exist for all funds. Fiscal year ends on June 30.



Montana Board of Investments
Comparative Performance
International Equity Managers

As of June 30, 2017

| | QTD | CYTD | FYTD/ 1 Year | 3 Years | 5 Years | 7 Years | 10 Years | 2016 | 2015 | 2014 | 2013 | 2012 | Since Incep. | Inception Date |
|---|-------------|--------------|-----------------|-------------|--------------|--------------|-------------|--------------|--------------|--------------|--------------|--------------|-----------------|-------------------|
| International Developed Large Cap Equity | | | | | | | | | | | | | | |
| Acadian Asset Non-US Equity (SA) - Net | 8.37 | 18.33 | 31.39 | 3.87 | 10.55 | 9.93 | 0.68 | 12.40 | -7.75 | 0.00 | 17.60 | 18.66 | 2.80 | 11/01/2006 |
| MSCI ACW Ex US Val Index (USD) (Net) | 4.08 | 11.03 | 23.62 | -1.00 | 6.35 | 5.82 | 0.31 | 8.92 | -10.06 | -5.10 | 15.04 | 16.97 | 1.96 | |
| Difference | 4.29 | 7.30 | 7.77 | 4.87 | 4.20 | 4.11 | 0.37 | 3.48 | 2.31 | 5.10 | 2.56 | 1.69 | 0.84 | |
| Acadian Asset Non-US Equity (SA) - Gross | 8.51 | 18.63 | 32.08 | 4.41 | 11.13 | 10.53 | 1.26 | 13.01 | -7.26 | 0.52 | 18.22 | 19.37 | 3.38 | 11/01/2006 |
| IM International Large Cap Value Equity (SA+CF) Median | 6.24 | 14.21 | 22.48 | 2.10 | 9.60 | 8.83 | 2.45 | 3.78 | -1.91 | -4.30 | 23.27 | 18.00 | 3.88 | |
| Rank | 13 | 10 | 3 | 20 | 21 | 18 | 89 | 6 | 90 | 10 | 77 | 35 | 72 | |
| Lazard Asset Management (SA) - Net | 6.37 | 13.19 | 12.87 | N/A | N/A | N/A | N/A | 0.22 | N/A | N/A | N/A | N/A | 1.57 | 06/01/2015 |
| MSCI ACW Ex US Val Index (USD) (Net) | 4.08 | 11.03 | 23.62 | -1.00 | 6.35 | 5.82 | 0.31 | 8.92 | -10.06 | -5.10 | 15.04 | 16.97 | 1.35 | |
| Difference | 2.29 | 2.16 | -10.75 | N/A | N/A | N/A | N/A | -8.70 | N/A | N/A | N/A | N/A | 0.22 | |
| Lazard Asset Management (SA) - Gross | 6.51 | 13.48 | 13.48 | N/A | N/A | N/A | N/A | 0.77 | N/A | N/A | N/A | N/A | 2.13 | 06/01/2015 |
| IM International Large Cap Value Equity (SA+CF) Median | 6.24 | 14.21 | 22.48 | 2.10 | 9.60 | 8.83 | 2.45 | 3.78 | -1.91 | -4.30 | 23.27 | 18.00 | 3.38 | |
| Rank | 43 | 63 | 94 | N/A | N/A | N/A | N/A | 84 | N/A | N/A | N/A | N/A | 72 | |
| BlackRock ACWI Ex-US SuperFund A (CF) - Net | 5.91 | 14.32 | 20.76 | 1.02 | 7.43 | 6.87 | N/A | 4.77 | -5.49 | -3.73 | 15.51 | 17.07 | 7.12 | 06/01/2009 |
| MSCI ACW Ex US Index (USD) (Net) | 5.78 | 14.10 | 20.45 | 0.80 | 7.22 | 6.66 | 1.13 | 4.50 | -5.66 | -3.87 | 15.29 | 16.83 | 6.90 | |
| Difference | 0.13 | 0.22 | 0.31 | 0.22 | 0.21 | 0.21 | N/A | 0.27 | 0.17 | 0.14 | 0.22 | 0.24 | 0.22 | |
| BlackRock ACWI Ex-US SuperFund A (CF) - Gross | 5.93 | 14.37 | 20.85 | 1.10 | 7.52 | 6.96 | N/A | 4.86 | -5.42 | -3.65 | 15.61 | 17.17 | 7.20 | 06/01/2009 |
| iShares:MSCI EAFE ETF (EFA) - Net | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 07/01/2017 |
| MSCI EAFE Index (USD) (Net) | 6.12 | 13.81 | 20.27 | 1.15 | 8.69 | 7.91 | 1.03 | 1.00 | -0.81 | -4.90 | 22.78 | 17.32 | N/A | |
| Difference | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| Baillie Gifford (SA) - Net | 8.80 | 19.62 | 20.22 | N/A | N/A | N/A | N/A | 0.73 | N/A | N/A | N/A | N/A | 5.54 | 06/01/2015 |
| MSCI ACW Ex US Grth Index (USD) (Net) | 7.56 | 17.38 | 17.38 | 2.55 | 8.04 | 7.45 | 1.89 | 0.12 | -1.25 | -2.65 | 15.49 | 16.67 | 3.41 | |
| Difference | 1.24 | 2.24 | 2.84 | N/A | N/A | N/A | N/A | 0.61 | N/A | N/A | N/A | N/A | 2.13 | |
| Baillie Gifford (SA) - Gross | 8.94 | 19.92 | 20.86 | N/A | N/A | N/A | N/A | 1.28 | N/A | N/A | N/A | N/A | 6.10 | 06/01/2015 |
| IM International Large Cap Growth Equity (SA+CF) Median | 7.40 | 16.67 | 19.43 | 3.25 | 9.42 | 9.22 | 3.20 | -0.04 | 2.12 | -3.37 | 20.74 | 19.64 | 3.72 | |
| Rank | 21 | 18 | 33 | N/A | N/A | N/A | N/A | 32 | N/A | N/A | N/A | N/A | 15 | |
| Invesco (SA) - Net | 6.30 | 14.89 | 15.97 | N/A | N/A | N/A | N/A | 0.32 | N/A | N/A | N/A | N/A | 2.63 | 06/01/2015 |
| MSCI ACW Ex US Grth Index (USD) (Net) | 7.56 | 17.38 | 17.38 | 2.55 | 8.04 | 7.45 | 1.89 | 0.12 | -1.25 | -2.65 | 15.49 | 16.67 | 3.41 | |
| Difference | -1.26 | -2.49 | -1.41 | N/A | N/A | N/A | N/A | 0.20 | N/A | N/A | N/A | N/A | -0.78 | |

Net performance shown is net of all manager fees and expenses (Net-All). Gross returns are compared to median performance of similar managers. A peer group of similar managers may not exist for all funds. Fiscal year ends on June 30.

Montana Board of Investments
Comparative Performance
International Equity Managers

As of June 30, 2017

| | QTD | CYTD | FYTD/ 1 Year | 3 Years | 5 Years | 7 Years | 10 Years | 2016 | 2015 | 2014 | 2013 | 2012 | Since Incep. | Inception Date |
|---|-------------|--------------|-----------------|-------------|--------------|--------------|-------------|--------------|--------------|--------------|--------------|--------------|-----------------|-------------------|
| Invesco (SA) - Gross | 6.47 | 15.26 | 16.73 | N/A | N/A | N/A | N/A | 1.01 | N/A | N/A | N/A | N/A | 3.32 | 06/01/2015 |
| IM International Large Cap Growth Equity (SA+CF) Median | 7.40 | 16.67 | 19.43 | 3.25 | 9.42 | 9.22 | 3.20 | -0.04 | 2.12 | -3.37 | 20.74 | 19.64 | 3.72 | |
| Rank | 78 | 77 | 77 | N/A | N/A | N/A | N/A | 35 | N/A | N/A | N/A | N/A | 56 | |
| International Equity Pool STIF - Net | 0.21 | 0.36 | 0.62 | N/A | N/A | N/A | N/A | 0.47 | N/A | N/A | N/A | N/A | 0.42 | 04/01/2015 |
| ICE 1 Mo LIBOR Index (USD) | 0.27 | 0.49 | 0.78 | 0.43 | 0.33 | 0.31 | 0.78 | 0.52 | 0.21 | 0.16 | 0.19 | 0.23 | 0.52 | |
| Difference | -0.06 | -0.13 | -0.16 | N/A | N/A | N/A | N/A | -0.05 | N/A | N/A | N/A | N/A | -0.10 | |
| International Developed Small Cap Equity | | | | | | | | | | | | | | |
| American Century Investment Mgmt (SA) - Net | 9.03 | 20.65 | 19.68 | 4.52 | N/A | N/A | N/A | -5.31 | 11.32 | N/A | N/A | N/A | 4.10 | 03/01/2014 |
| MSCI ACW Ex US SCG Index (USD) (Net) | 6.95 | 16.58 | 17.17 | 3.78 | 9.77 | 8.94 | 2.56 | -0.28 | 6.50 | -3.59 | 18.52 | 16.87 | 4.36 | |
| Difference | 2.08 | 4.07 | 2.51 | 0.74 | N/A | N/A | N/A | -5.03 | 4.82 | N/A | N/A | N/A | -0.26 | |
| American Century Investment Mgmt (SA) - Gross | 9.27 | 21.14 | 20.69 | 5.42 | N/A | N/A | N/A | -4.49 | 12.25 | N/A | N/A | N/A | 4.98 | 03/01/2014 |
| IM International Small Cap Growth Equity (SA+CF) Median | 9.09 | 18.78 | 20.68 | 6.41 | 13.62 | 11.97 | 5.14 | -1.67 | 12.85 | -3.62 | 31.15 | 23.67 | 6.03 | |
| Rank | 45 | 23 | 50 | 63 | N/A | N/A | N/A | 82 | 52 | N/A | N/A | N/A | 65 | |
| BlackRock ACWI Ex-US Small Cap (CF) - Net | 6.37 | 15.71 | 20.64 | 3.61 | 10.23 | N/A | N/A | 4.26 | 2.87 | -3.84 | 19.87 | N/A | 8.54 | 02/01/2012 |
| MSCI ACWI Ex US Sm Cap Index IMI (USD) (Net) | 6.24 | 15.56 | 20.32 | 3.31 | 10.02 | 8.83 | 2.91 | 3.91 | 2.60 | -4.03 | 19.73 | 18.52 | 8.32 | |
| Difference | 0.13 | 0.15 | 0.32 | 0.30 | 0.21 | N/A | N/A | 0.35 | 0.27 | 0.19 | 0.14 | N/A | 0.22 | |
| BlackRock ACWI Ex-US Small Cap (CF) - Gross | 6.42 | 15.81 | 20.85 | 3.79 | 10.42 | N/A | N/A | 4.44 | 3.04 | -3.67 | 20.08 | N/A | 8.73 | 02/01/2012 |
| DFA Intl Sm Co;l (DFISX) - Net | 7.37 | 16.39 | 24.01 | 4.54 | 12.24 | 10.88 | 3.67 | 5.74 | 5.89 | -6.29 | 27.49 | 18.75 | 8.45 | 11/01/2004 |
| MSCI Wrld Ex US Sm Cap Index (USD) (Net) | 7.28 | 15.45 | 21.26 | 4.02 | 11.43 | 10.28 | 2.92 | 4.32 | 5.46 | -5.35 | 25.55 | 17.48 | 7.64 | |
| Difference | 0.09 | 0.94 | 2.75 | 0.52 | 0.81 | 0.60 | 0.75 | 1.42 | 0.43 | -0.94 | 1.94 | 1.27 | 0.81 | |
| Templeton Investment Counsel (SA) - Net | 9.12 | 19.17 | 24.13 | 3.43 | N/A | N/A | N/A | -1.13 | 1.81 | N/A | N/A | N/A | 4.29 | 03/01/2014 |
| MSCI ACW Ex US Sm Cap Val Index (USD) (Net) | 5.57 | 14.60 | 23.55 | 2.80 | 10.23 | 8.70 | 3.22 | 8.24 | -1.25 | -4.49 | 20.92 | 20.15 | 3.85 | |
| Difference | 3.55 | 4.57 | 0.58 | 0.63 | N/A | N/A | N/A | -9.37 | 3.06 | N/A | N/A | N/A | 0.44 | |
| Templeton Investment Counsel (SA) - Gross | 9.36 | 19.68 | 25.22 | 4.37 | N/A | N/A | N/A | -0.23 | 2.73 | N/A | N/A | N/A | 5.24 | 03/01/2014 |
| IM International Small Cap Value Equity (SA+CF) Median | 7.75 | 15.59 | 25.63 | 4.80 | 13.10 | 12.09 | 5.08 | 6.47 | 5.36 | -4.24 | 30.48 | 23.53 | 5.61 | |
| Rank | 8 | 12 | 53 | 67 | N/A | N/A | N/A | 90 | 76 | N/A | N/A | N/A | 63 | |

Net performance shown is net of all manager fees and expenses (Net-All). Gross returns are compared to median performance of similar managers. A peer group of similar managers may not exist for all funds. Fiscal year ends on June 30.

Montana Board of Investments
Comparative Performance
International Equity Managers

As of June 30, 2017

| | QTD | CYTD | FYTD/ 1 Year | 3 Years | 5 Years | 7 Years | 10 Years | 2016 | 2015 | 2014 | 2013 | 2012 | Since Incep. | Inception Date |
|---|-------------|--------------|-----------------|-------------|-------------|------------|-------------|--------------|---------------|--------------|--------------|------------|-----------------|-------------------|
| International Emerging Equity | | | | | | | | | | | | | | |
| BlackRock Emerging Mkts (CF) - Net | 6.31 | 18.35 | 23.49 | 0.82 | 3.69 | N/A | N/A | 10.85 | -15.15 | -2.49 | -2.79 | N/A | 2.08 | 02/01/2012 |
| MSCI Emg Mkts Index (USD) (Net) | 6.27 | 18.43 | 23.75 | 1.07 | 3.96 | 3.87 | 1.92 | 11.19 | -14.92 | -2.19 | -2.60 | 18.23 | 2.34 | |
| Difference | 0.04 | -0.08 | -0.26 | -0.25 | -0.27 | N/A | N/A | -0.34 | -0.23 | -0.30 | -0.19 | N/A | -0.26 | |
| BlackRock Emerging Mkts (CF) - Gross | 6.27 | 18.39 | 23.66 | 0.99 | 3.89 | N/A | N/A | 11.08 | -14.99 | -2.30 | -2.57 | N/A | 2.28 | 02/01/2012 |
| iShares:MSCI Em Mkts (EEM) - Net | 5.32 | 18.50 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 18.50 | 01/01/2017 |
| MSCI Emg Mkts Index (USD) (Net) | 6.27 | 18.43 | 23.75 | 1.07 | 3.96 | 3.87 | 1.92 | 11.19 | -14.92 | -2.19 | -2.60 | 18.23 | 18.43 | |
| Difference | -0.95 | 0.07 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.07 | |
| DFA Emg Mkts Sm Cap;I (DEMSX) - Net | 2.27 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 5.44 | 03/01/2017 |
| MSCI Emg Mkts Sm Cap Index (USD) (Net) | 2.63 | 15.99 | 17.03 | 0.81 | 5.15 | 3.88 | 2.17 | 2.28 | -6.85 | 1.01 | 1.04 | 22.22 | 5.32 | |
| Difference | -0.36 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.12 | |

Gross of fees performance is not available (N/A) for the following funds: iShares:MSCI EAFE ETF (EFA), International Equity Pool STIF, DFA Intl Sm Co;I (DFISX), iShares:MSCI Em Mkts (EEM), and DFA Emg Mkts Sm Cap;I (DEMSX).

The current annual expense ratios for the iShares:MSCI EAFE ETF (EFA), International Equity Pool STIF, DFA Intl Sm Co;I (DFISX), iShares:MSCI Em Mkts (EEM), and DFA Emg Mkts Sm Cap;I (DEMSX) are 0.33%, 0.18%, 0.53%, 0.72%, and 0.72%, respectively.

Net performance shown is net of all manager fees and expenses (Net-All). Gross returns are compared to median performance of similar managers. A peer group of similar managers may not exist for all funds. Fiscal year ends on June 30.

Montana Board of Investments
Comparative Performance
Fixed Income Managers

As of June 30, 2017

| | QTD | CYTD | FYTD/ 1 Year | 3 Years | 5 Years | 7 Years | 10 Years | 2016 | 2015 | 2014 | 2013 | 2012 | Since Incep. | Inception Date |
|---|-------------|-------------|-----------------|-------------|-------------|-------------|-------------|--------------|--------------|-------------|--------------|--------------|-----------------|-------------------|
| Trust Funds Bond Portfolio | 1.57 | 2.45 | 0.02 | 3.06 | 3.03 | 4.06 | 5.13 | 3.41 | 1.03 | 6.79 | -1.43 | 6.15 | 6.10 | 10/01/1995 |
| Bloomberg US Agg Bond Index | 1.45 | 2.27 | -0.31 | 2.48 | 2.21 | 3.19 | 4.48 | 2.65 | 0.55 | 5.97 | -2.02 | 4.21 | 5.33 | |
| Difference | 0.12 | 0.18 | 0.33 | 0.58 | 0.82 | 0.87 | 0.65 | 0.76 | 0.48 | 0.82 | 0.59 | 1.94 | 0.77 | |
| Trust Funds Bond Portfolio | 1.57 | 2.45 | 0.02 | 3.06 | 3.03 | 4.06 | 5.13 | 3.41 | 1.03 | 6.79 | -1.43 | 6.15 | 6.10 | 10/01/1995 |
| IM U.S. Broad Market Core FI (SA+CF) Median | 1.53 | 2.51 | 0.29 | 2.75 | 2.69 | 3.72 | 4.97 | 3.10 | 0.82 | 6.15 | -1.56 | 5.85 | 5.72 | |
| Rank | 43 | 55 | 63 | 27 | 29 | 26 | 39 | 42 | 29 | 25 | 42 | 44 | 9 | |
| Reams Asset Core Plus (SA) - Net | 1.29 | 2.09 | -0.34 | 2.61 | 2.65 | 4.06 | N/A | 4.18 | 0.07 | 4.47 | -0.85 | 8.64 | 5.91 | 10/01/2008 |
| Reams Custom Index | 1.45 | 2.55 | 0.84 | 2.73 | 2.72 | 3.66 | 4.72 | 3.91 | 0.43 | 5.56 | -1.35 | 5.53 | 4.82 | |
| Difference | -0.16 | -0.46 | -1.18 | -0.12 | -0.07 | 0.40 | N/A | 0.27 | -0.36 | -1.09 | 0.50 | 3.11 | 1.09 | |
| Reams Asset Core Plus (SA) - Gross | 1.34 | 2.18 | -0.17 | 2.79 | 2.83 | 4.23 | N/A | 4.35 | 0.24 | 4.65 | -0.68 | 8.83 | 6.09 | 10/01/2008 |
| IM U.S. Broad Market Core+ FI (SA+CF) Median | 1.71 | 3.00 | 2.39 | 3.02 | 3.44 | 4.61 | 5.62 | 4.76 | 0.24 | 6.20 | -0.51 | 8.14 | 6.18 | |
| Rank | 91 | 97 | 100 | 71 | 86 | 65 | N/A | 59 | 51 | 91 | 57 | 43 | 55 | |
| Post High Yield Plus (SA) - Net | 2.45 | 4.56 | 9.70 | 4.57 | 7.56 | 8.49 | N/A | 9.58 | 0.82 | 4.99 | 10.19 | 16.97 | 9.88 | 06/01/2009 |
| Bloomberg US Hi Yld - 2% Issuer Cap Index | 2.17 | 4.92 | 12.69 | 4.50 | 6.90 | 8.14 | 7.76 | 17.13 | -4.43 | 2.46 | 7.44 | 15.78 | 10.58 | |
| Difference | 0.28 | -0.36 | -2.99 | 0.07 | 0.66 | 0.35 | N/A | -7.55 | 5.25 | 2.53 | 2.75 | 1.19 | -0.70 | |
| Post High Yield Plus (SA) - Gross | 2.60 | 4.86 | 10.36 | 5.19 | 8.20 | 9.14 | N/A | 10.23 | 1.43 | 5.62 | 10.85 | 17.67 | 10.54 | 06/01/2009 |
| IM U.S. High Yield Bonds (SA+CF) Median | 2.06 | 4.59 | 11.77 | 4.17 | 6.79 | 8.02 | 7.40 | 14.06 | -2.16 | 2.55 | 7.57 | 15.31 | 10.35 | |
| Rank | 9 | 38 | 73 | 22 | 8 | 6 | N/A | 84 | 7 | 3 | 10 | 13 | 38 | |
| Post Trad'l High Yield LP (CF) - Gross | 2.51 | 4.82 | 10.28 | 5.60 | 8.16 | 9.16 | N/A | 10.62 | 1.42 | 6.01 | 9.98 | 18.62 | 9.87 | 09/01/2009 |
| IM U.S. High Yield Bonds (SA+CF) Median | 2.06 | 4.59 | 11.77 | 4.17 | 6.79 | 8.02 | 7.40 | 14.06 | -2.16 | 2.55 | 7.57 | 15.31 | 9.24 | |
| Rank | 14 | 39 | 74 | 11 | 9 | 6 | N/A | 81 | 7 | 2 | 13 | 10 | 22 | |
| Neuberger Berman High Yield (SA) - Net | 1.43 | 3.87 | 10.52 | 3.52 | 6.27 | 7.66 | N/A | 14.98 | -4.32 | 1.93 | 7.78 | 15.90 | 7.83 | 01/01/2010 |
| Bloomberg US Hi Yld - 2% Issuer Cap Index | 2.17 | 4.92 | 12.69 | 4.50 | 6.90 | 8.14 | 7.76 | 17.13 | -4.43 | 2.46 | 7.44 | 15.78 | 8.20 | |
| Difference | -0.74 | -1.05 | -2.17 | -0.98 | -0.63 | -0.48 | N/A | -2.15 | 0.11 | -0.53 | 0.34 | 0.12 | -0.37 | |
| Neuberger Berman High Yield (SA) - Gross | 1.55 | 4.10 | 11.02 | 3.98 | 6.75 | 8.14 | N/A | 15.50 | -3.89 | 2.38 | 8.26 | 16.42 | 8.32 | 01/01/2010 |
| IM U.S. High Yield Bonds (SA+CF) Median | 2.06 | 4.59 | 11.77 | 4.17 | 6.79 | 8.02 | 7.40 | 14.06 | -2.16 | 2.55 | 7.57 | 15.31 | 8.17 | |
| Rank | 81 | 74 | 61 | 59 | 52 | 44 | N/A | 32 | 75 | 55 | 31 | 29 | 41 | |

Trust Funds Bond Portfolio and Post Trad'l High Yield LP (CF) are part of the Trust Fund Investment Pool.

Net performance shown is net of all manager fees and expenses (Net-All). Gross returns are compared to median performance of similar managers. Fiscal year ends on June 30.

Montana Board of Investments
Comparative Performance
Trust Accounts

As of June 30, 2017

| | QTD | CYTD | FYTD/ 1 Year | 3 Years | 5 Years | 7 Years | 10 Years | 2016 | 2015 | 2014 | 2013 | 2012 |
|-----------------------------------|------|------|-----------------|------------|------------|------------|-------------|------|------|------|-------|------|
| Abandoned Mine Trust | 0.27 | 0.51 | 0.64 | 1.00 | 1.19 | 1.43 | 2.50 | 1.10 | 0.90 | 1.49 | 0.63 | 2.82 |
| Big Sky Economic Development Fund | 1.59 | 2.54 | 0.89 | 3.56 | 3.62 | 4.61 | 5.47 | 3.98 | 1.82 | 6.77 | -0.22 | 6.72 |
| Butte Area One Restoration | 1.12 | 1.82 | 0.80 | 2.30 | 2.18 | 2.71 | N/A | 2.60 | 1.20 | 3.57 | -0.08 | 3.68 |
| Clark Fork River Restoration | 1.08 | 1.75 | 0.82 | 2.45 | 2.41 | 3.06 | N/A | 2.72 | 1.37 | 4.26 | -0.12 | 4.36 |
| Coal Tax Cultural Trust Fund | 1.59 | 2.54 | 0.89 | 3.54 | 3.62 | 4.61 | 5.46 | 3.95 | 1.79 | 6.79 | -0.23 | 6.76 |
| Coal Tax Park Acquisition | 1.58 | 2.53 | 0.86 | 3.51 | 3.57 | 4.58 | 5.44 | 3.90 | 1.78 | 6.66 | -0.25 | 6.78 |
| East Helena Compensation Fund | 0.94 | 1.54 | 0.89 | 1.87 | N/A | N/A | N/A | 2.12 | 0.91 | 3.01 | -0.13 | N/A |
| Endowment for Children | 1.55 | 2.47 | 0.89 | 3.38 | 3.48 | 4.48 | N/A | 3.66 | 1.70 | 6.66 | -0.28 | 6.69 |
| FWP License Account | 0.30 | 0.60 | 0.57 | 0.75 | 0.77 | 0.89 | 1.78 | 0.84 | 0.61 | 0.59 | 0.42 | 1.64 |
| FWP Mitigation Trust Fund | 0.34 | 0.67 | 0.35 | 0.90 | 1.11 | 1.36 | 2.33 | 0.67 | 0.87 | 1.37 | 0.61 | 2.85 |
| FWP Real Property Trust | 1.51 | 2.43 | 0.85 | 3.41 | 3.46 | 4.42 | 5.26 | 3.82 | 1.73 | 6.47 | -0.24 | 6.51 |
| Group Benefits | 0.36 | 0.65 | 0.43 | 1.09 | 1.08 | 1.25 | 2.34 | 1.16 | 1.06 | 1.17 | 0.32 | 2.22 |
| Harold Hamm Endowment | 0.26 | 0.48 | 0.83 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Montana Pole | 1.32 | 2.12 | 0.87 | 2.94 | 2.96 | 3.79 | 4.64 | 3.23 | 1.56 | 5.44 | -0.17 | 5.50 |
| Montana Tech-UM Agency Funds | 0.31 | 0.56 | 0.83 | 0.56 | 0.47 | 0.51 | 1.09 | 0.72 | 0.27 | 0.35 | 0.17 | 0.57 |
| Montana State University | 0.39 | 0.67 | 0.85 | 0.78 | 0.71 | 0.83 | 1.44 | 0.95 | 0.39 | 0.85 | 0.12 | 1.07 |
| MT BOI - Clark Fork Site | 1.44 | 2.32 | 0.83 | 3.14 | 3.06 | 3.75 | N/A | 3.63 | 1.56 | 5.37 | -0.09 | 5.23 |
| MT BOI UOFM Other | 0.65 | 1.17 | 0.77 | 1.84 | 1.69 | 1.90 | 2.37 | 2.34 | 1.13 | 2.57 | -0.12 | 2.54 |
| MUS Group Insurance | 0.29 | 0.54 | 0.52 | 1.19 | 1.08 | N/A | N/A | 1.33 | 1.26 | 1.30 | 0.17 | 1.56 |
| MUS Workers Compensation | 0.58 | 0.98 | 0.78 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Older Montanans Trust | 1.54 | 2.47 | 0.87 | 3.44 | 3.52 | 4.12 | N/A | 3.86 | 1.72 | 6.57 | -0.23 | 6.01 |
| Permanent Coal Trust Excl Crp | 1.39 | 2.17 | 1.48 | 3.47 | 3.67 | 4.47 | 5.07 | 3.79 | 2.23 | 6.14 | 0.99 | 6.29 |
| PERS Defined Cont Disability | 2.78 | 6.85 | 10.49 | N/A | N/A | N/A | N/A | 3.42 | N/A | N/A | N/A | N/A |
| Potter Trust Fund | 1.55 | 2.48 | 0.86 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Resource Indemnity Trust | 1.61 | 2.58 | 0.88 | 3.60 | 3.67 | 4.67 | 5.49 | 4.02 | 1.82 | 6.94 | -0.27 | 6.86 |
| Smelter Hill Up Restorative | 0.64 | 1.09 | 0.73 | 1.54 | 1.50 | 1.77 | N/A | 1.79 | 0.92 | 2.49 | 0.01 | 2.47 |
| State Fund Insurance | 1.38 | 2.88 | 2.49 | 3.44 | 3.99 | 4.74 | 5.03 | 3.50 | 2.21 | 5.00 | 3.11 | 7.25 |
| Streamside Tailings Operable Unit | 1.46 | 2.33 | 0.92 | 3.27 | 3.31 | 4.17 | 5.06 | 3.58 | 1.69 | 6.22 | -0.21 | 6.14 |
| Tobacco Trust Fund | 1.58 | 2.54 | 0.84 | 3.58 | 3.64 | 4.63 | 5.50 | 3.99 | 1.82 | 6.89 | -0.27 | 6.77 |
| Treasurers | 0.25 | 0.46 | 0.77 | 0.50 | 0.39 | 0.37 | 0.93 | 0.68 | 0.27 | 0.19 | 0.23 | 0.31 |
| Treasure State Endowment | 1.60 | 2.57 | 0.89 | 3.58 | 3.64 | 4.64 | 5.49 | 3.98 | 1.82 | 6.84 | -0.21 | 6.76 |
| Treasure State Reg. Water System | 1.60 | 2.56 | 0.89 | 3.56 | 3.62 | 4.62 | 5.47 | 3.96 | 1.82 | 6.80 | -0.22 | 6.73 |
| Trust and Legacy Account | 1.60 | 2.57 | 0.87 | 3.60 | 3.66 | 4.63 | 5.49 | 4.01 | 1.82 | 6.92 | -0.26 | 6.78 |
| UCFRB Assess/Litig Cost Rec | 1.50 | 2.41 | 0.86 | 3.36 | 3.45 | 4.23 | 5.26 | 3.84 | 1.65 | 6.40 | -0.24 | 6.45 |
| UCFRB Restoration Fund | 1.48 | 2.38 | 0.93 | 3.26 | 3.35 | 4.32 | 5.18 | 3.52 | 1.70 | 6.28 | -0.20 | 6.43 |
| Upper Blackfoot Response | 0.66 | 1.10 | 0.77 | 1.43 | 1.23 | N/A | N/A | 1.74 | 0.84 | 1.59 | 0.13 | 1.60 |
| Weed Control Trust | 1.61 | 2.58 | 0.88 | 3.60 | 3.66 | 4.52 | 5.17 | 4.02 | 1.82 | 6.94 | -0.23 | 6.69 |
| Wildlife Habitat Trust | 1.50 | 2.40 | 0.81 | 3.36 | 3.44 | 4.40 | 5.25 | 3.79 | 1.73 | 6.49 | -0.24 | 6.46 |
| Zortman/Landusky LT H20 | 0.23 | 0.38 | 0.66 | 0.96 | 1.26 | 3.24 | 5.64 | 1.36 | 0.84 | 1.78 | -0.51 | 5.47 |
| Z/L Long Term H20 Trust Fund | 0.23 | 0.45 | 0.68 | 1.14 | 1.06 | 2.77 | 5.14 | 1.39 | 1.15 | 1.76 | -0.96 | 3.91 |

Performance shown is gross of fees. Fiscal year ends on June 30.

Performance Notes

- All gross and net performance data is provided by State Street Analytics (SSA). Reported gross returns for the retirement plans prior to July 1, 2002 are net of all fees.
- Gross performance for the retirement plans is calculated with fee accruals provided by Montana's Accounting department.
- Retirement plan custom benchmarks are provided by State Street Bank and are calculated daily using actual allocations.
- Gross of fees performance is not available (N/A) for the following funds: SPDR S&P 500 ETF (SPY), Domestic Equity Pool STIF, iShares:Core S&P Md-Cp (IJH), DFA Intl Sm Co;I (DFISX), iShares:MSCI EAFE ETF (EFA), International Equity Pool STIF, iShares:MSCI Em Mkts (EEM), and DFA Emg Mkts Sm Cap;I (DEMSX). The current annual expense ratios are as listed below.

Index Notes

- The Domestic Equity Custom Index consists of 100% S&P 1500 Comp Index through 04/30/2017 and 100% MSCI USA IM Index (USD) (Net) thereafter.
- The International Equity Custom Index consists of 100% MSCI EAFE Index (USD) (Net) through 10/31/2006, 100% MSCI ACW Ex US Index (USD) (Net) through 6/30/2007, 92.5% MSCI ACW Ex US Index (USD) (Net) and 7.5% MSCI ACW Ex US SC IM Index (USD) (Net) through 02/28/2014, and 100% MSCI ACW Ex-US IM Index thereafter.
- The Reams Custom Index consists of 100% Bloomberg US Unv Bond Index through 03/31/2017 and 100% Bloomberg US Agg Bond Index thereafter.
- The Real Estate Custom Index consists of 100% NCREIF ODCE Index (AWA) (Net) (1 Qtr Lag) through 03/31/2017 and 100% MSCI US REIT Index (USD) (Net) thereafter.
- The Private Equity Custom Index consists of 100% S&P 1500 Comp Index+4% (1 Qtr Lag) through 03/31/2017 and 100% MSCI US Small Cap Index (USD) (Net) thereafter.

Trust Accounts Comments

- The Potter Trust Fund and the Harold Hamm Endowment were added in June 2016.
- MUS Workers Compensation was added in April 2016.

Manager Transition Comments

- BlackRock MSCI US Equity Index (CF), BlackRock MSCI US Sm Cap Equity Index (CF), and iShares:Core S&P Md-Cp (IJH) were funded in June 2017.
- SPDR S&P 500 ETF (SPY) and iShares:MSCI EAFE ETF (EFA) were re-funded in June 2017.
- INTECH Enhanced Plus was liquidated in June 2017.
- Residual assets from the liquidation of AllianceBernstein Int'l Value (SA), Martin Currie (SA), Hansberger Global Investors (SA), and Aberdeen Total Return Bond Strategy (SA) were distributed in June 2017.
- BlackRock Equity Index Fund A (CF) and BlackRock Mid Cap Equity Index A (CF) were liquidated in May 2017.
- DFA Emg Mkts Sm Cap;I (DEMSX) was funded in February 2017.
- SPDR S&P 500 ETF (SPY) was liquidated in January 2017.
- iShares:MSCI Em Mkts (EEM) was funded in December 2016.
- SPDR S&P 500 ETF (SPY) was initially funded in September 2015, was then liquidated in December 2015, and was re-funded in October 2016.
- Wells Capital Management (SA), Domestic Equity Pool SPIF, and International Equity Pool SPIF were liquidated in October 2016. Wells Capital Management (SA) residual assets from liquidation were distributed in March 2017.
- Nicholas Investment Partners was liquidated in July 2016. Residual assets from liquidation were distributed in March 2017.
- Effective July 2016, the Metropolitan West Capital Management legal entity merged into the Wells Capital Management Incorporated legal entity. The Metropolitan West Capital Mgmt (SA) has been updated to Wells Capital Management (SA) to reflect the change.
- iShares S&P SmallCap 600 Index ETF (IJR) was liquidated in January 2016.
- Effective May 2014, ING rebranded to Voya. The ING Investment Management (SA) has been updated to Voya Investment Management (SA) to reflect the change.

Miscellaneous Comments

- Fiscal year ends on June 30.

Expense Ratios

| | |
|-----------------------------------|-------|
| • SPDR S&P 500 ETF (SPY): | 0.09% |
| • Domestic Equity Pool STIF: | 0.18% |
| • DFA Intl Sm Co;I (DFISX): | 0.53% |
| • iShares:MSCI EAFE ETF (EFA): | 0.33% |
| • International Equity Pool STIF: | 0.18% |
| • iShares:MSCI Em Mkts (EEM): | 0.72% |
| • DFA Emg Mkts Sm Cap;I (DEMSX): | 0.72% |

PORTLAND

CHICAGO

NEW YORK

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