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# Comprehensive Performance Report

June 30, 2018



## Description of SBI Investment Programs

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The Minnesota State Board of Investment is responsible for the investment management of various retirement funds, trust funds and cash accounts.

### **Combined Funds**

The Combined Funds represent the assets for both the active and retired public employees in the statewide retirement systems, the biggest of which are the Public Employees Retirement Association (PERA), the Teachers Retirement Association (TRA), and the Minnesota State Retirement System (MSRS). The SBI commingles the assets of these plans into the Combined Funds to capture investment efficiencies. All assets in the Combined Funds are managed externally by investment management firms retained by contract.

### **Participant Directed Investment Program**

The Participant Directed Investment Program (PDIP) provides investment vehicles for a variety of retirement or other tax-advantaged savings plans. Investment goals among the PDIP's many participants are varied. In order to meet the variety of goals, participants may allocate their investments among one or more accounts that are appropriate for their needs within statutory requirements and rules established by the participating organizations. At this time, the assets of various retirement programs, including local firefighter groups, are included here.

### **Non-Retirement**

The Non-Retirement Funds are funds established by the State of Minnesota and other government entities for various purposes which include the benefit of public schools, the environment, other post-employment benefits, workers compensation insurance, and other purposes.

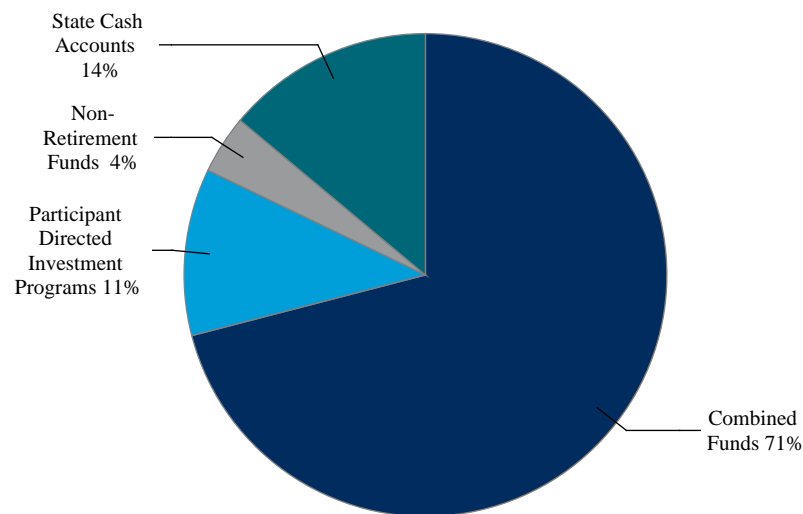
### **State Cash**

The State Cash accounts are cash balances of state government funds including the State General Fund. Most accounts are invested by SBI staff through a short-term pooled fund referred to as the Treasurer's Cash Pool. It contains the cash balances of special or dedicated accounts necessary for the operation of certain State agencies and non-dedicated cash in the State Treasury. Because of special legal restrictions, a small number of cash accounts cannot be commingled.



## Funds Under Management

|   | <u>\$ Millions</u> |
|---|--------------------|
| <b>COMBINED FUNDS</b>                           |                    |
| Combined Funds                                  | \$68,288           |
| <b>PARTICIPANT DIRECTED INVESTMENT PROGRAMS</b> |                    |
| Supplemental Investment Fund*                   | 3,731              |
| State Deferred Compensation Plan**              | 5,612              |
| Minnesota College Savings Plan                  | 1,422              |
| Achieve a Better Life Experience                | 3                  |
| <b>NON-RETIREMENT FUNDS</b>                     |                    |
| Assigned Risk Plan                              | 319                |
| Permanent School Fund                           | 1,391              |
| Environmental Trust Fund                        | 1,116              |
| Closed Landfill Investment Fund                 | 89                 |
| Miscellaneous Trust Accounts                    | 236                |
| Other Post Employment Benefits Accounts         | 636                |
| <b>STATE CASH ACCOUNTS</b>                      |                    |
| Treasurer's Cash                                | 13,124             |
| Other State Cash Accounts                       | 277                |
| <b>TOTAL</b>                                    |                    |
| SBI AUM   | 96,245             |



\* Includes assets of smaller retirement funds which are invested with the SBI but are not included in the Combined Funds

\*\* Does not include the Stable Value and Money Market accounts that are used by Deferred Compensation and Supplemental Investment Fund

Note: Differentials within column amounts may occur due to rounding



Quarterly Report

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Performance Reporting Legend

Manager Level Data

Aggregate Level Data

Sub-Asset Class Level Data

Asset Class Level Data

Note:

Throughout this report performance is calculated net of investment management fees, aggregates include terminated managers, and returns for all periods greater than one year are annualized. Inception Date and Since Inception Returns refer to the date of retention by the SBI. FYTD refers to the return generated by an account since July 1 of the most recent year. For historical benchmark details, please refer to the addendum of this report. Inception to date return information is included for manager accounts and total asset class but not other aggregates because of portfolio management decisions to group managers in different aggregates over time.



# Combined Funds

June 30, 2018



## Combined Funds Summary

### Combined Funds Change in Market Value (\$Millions)

|                        | <u>One Quarter</u> |
|------------------------|--------------------|
| COMBINED FUNDS         |                    |
| Beginning Market Value | \$67,819           |
| Net Contributions      | -567               |
| Investment Return      | 1,037              |
| Ending Market Value    | 68,288             |

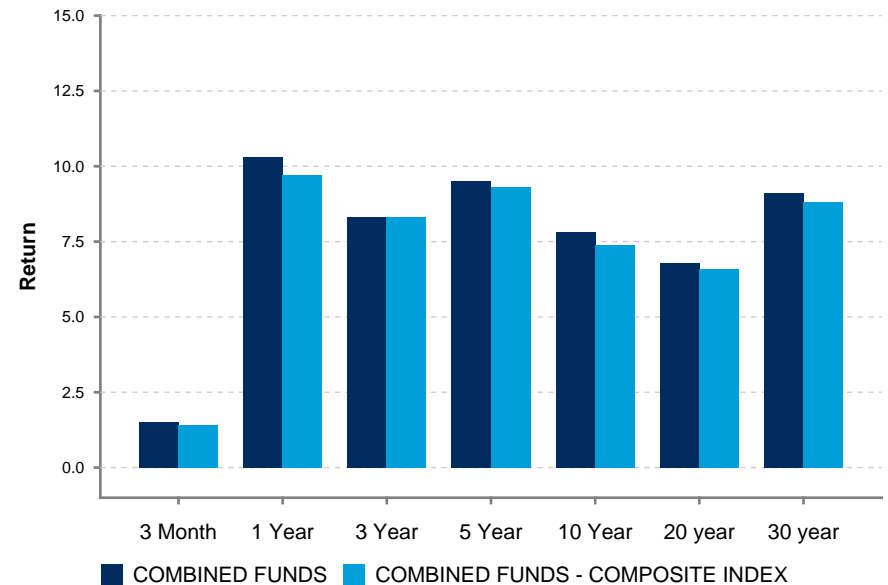
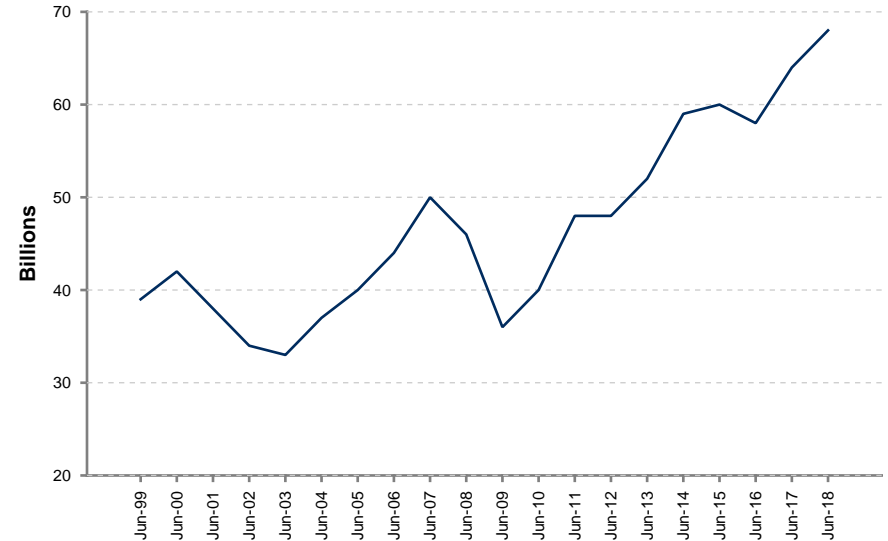
The change in market value of the Combined Funds since the end of last quarter is due to net contributions and investment returns.

### Performance (Net of Fees)

The Combined Funds' performance is evaluated relative to a composite of public market index and private market investment returns. The Composite performance is calculated by multiplying the beginning of month Composite weights and the monthly returns of the asset class benchmarks.

|                                  | <u>Qtr</u> | <u>FYTD</u> | <u>1 Yr</u> | <u>3 Yr</u> | <u>5 Yr</u> | <u>10 Yr</u> | <u>20 Yr</u> | <u>30 Yr</u> |
|----------------------------------|------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|
| COMBINED FUNDS                   | 1.5%       | 10.3%       | 10.3%       | 8.3%        | 9.5%        | 7.8%         | 6.8%         | 9.1%         |
| COMBINED FUNDS - COMPOSITE INDEX | 1.4        | 9.7         | 9.7         | 8.3         | 9.3         | 7.4          | 6.6          | 8.8          |
| Excess                           | 0.2        | 0.6         | 0.6         | 0.0         | 0.2         | 0.4          | 0.1          | 0.3          |

### Asset Growth



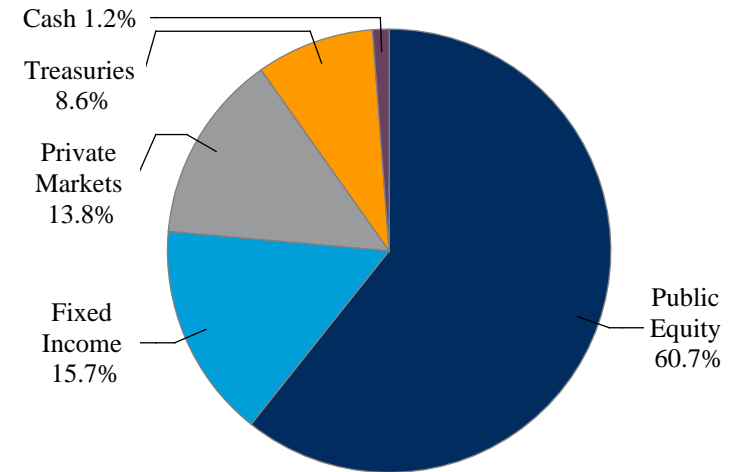


## Combined Funds Summary

### Asset Mix

The Combined Funds actual asset mix relative to the Strategic Asset Allocation Policy Target is shown below. Any uninvested portion of the Private Markets allocation is held in Public Equity.

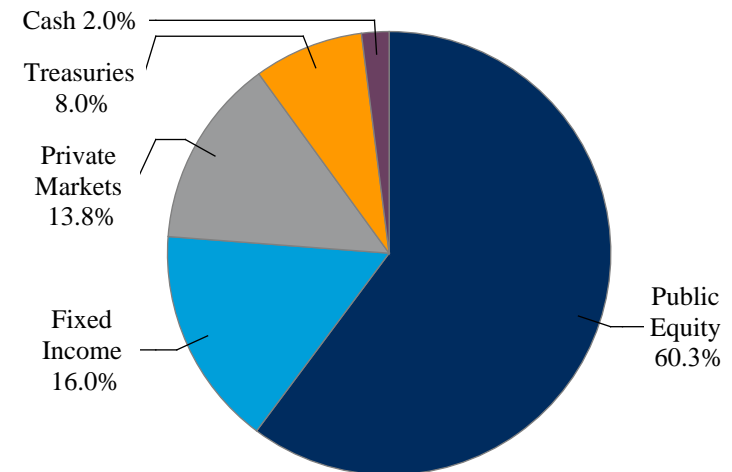
|                 | <u>(Millions)</u> | <u>Actual Mix</u> | <u>Policy Target</u> |
|-----------------|-------------------|-------------------|----------------------|
| Public Equity   | \$41,430          | 60.7%             | 49.0%                |
| Fixed Income    | 10,695            | 15.7              | 16.0                 |
| Private Markets | 9,432             | 13.8              | 25.0                 |
| Treasuries      | 5,880             | 8.6               | 8.0                  |
| Cash            | 851               | 1.2               | 2.0                  |
| <b>TOTAL</b>    | <b>68,288</b>     | <b>100.0</b>      |                      |



### Composite Index Comparison

The Combined Funds Composite is set as the Strategic Asset Allocation Policy Target with the uninvested portion of Private Markets allocated to Public Equity. Asset class weights for Public Equity and Private Markets are reset at the start of each month. The Combined Funds Composite weighting shown below is as of the first day of the quarter.

|                 | <u>Policy Weight</u> | <u>Market Index</u>                  |
|-----------------|----------------------|--------------------------------------|
| Public Equity   | 60.3%                | 67% Russell 3000/33% MSCI ACWI ex US |
| Fixed Income    | 16.0                 | BB Barclays U.S. Aggregate           |
| Private Markets | 13.8                 | Private Markets                      |
| Treasuries      | 8.0                  | BB Barclays Treasury 5+ Years        |
| Cash            | 2.0                  | 3 Month T-Bills                      |





## Combined Funds Asset Class Performance Summary

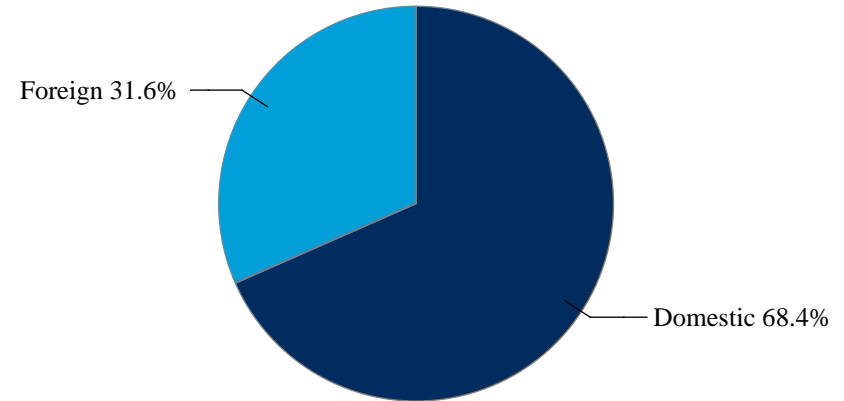
### Public Equity

The Combined Funds Public Equity includes Domestic Equity and International Equity.

The Public Equity benchmark is 67% Russell 3000 and 33% MSCI ACWI ex USA.

The Russell 3000 measures the performance of the 3000 largest U.S. companies based on total market capitalization.

The Morgan Stanley Capital International All Country World Index ex U.S. (net) is a free float-adjusted market capitalization index that is designed to measure equity market performance in developed and emerging markets other than the United States.



|                                | <u>Last Qtr</u> | <u>FYTD</u> | <u>1 Year</u> | <u>3 Year</u> | <u>5 Year</u> | <u>10 Year</u> | <u>20 Year</u> | <u>30 year</u> |
|--------------------------------|-----------------|-------------|---------------|---------------|---------------|----------------|----------------|----------------|
| Public Equity                  | 2.0%            | 12.8%       | 12.8%         | 9.7%          | 11.5%         | 8.4%           | 6.2%           | 9.5%           |
| Public Equity Benchmark        | 1.7             | 12.3        | 12.3          |               |               |                |                |                |
| Excess                         | 0.3             | 0.5         | 0.5           |               |               |                |                |                |
| Domestic Equity                | 4.2             | 15.4        | 15.4          | 11.3          | 13.3          | 10.2           | 6.5            | 9.9            |
| Domestic Equity Benchmark      | 3.9             | 14.8        | 14.8          | 11.6          | 13.3          | 10.2           | 6.6            | 10.1           |
| Excess                         | 0.3             | 0.7         | 0.7           | -0.3          | 0.0           | -0.0           | -0.2           | -0.2           |
| International Equity           | -2.4            | 7.5         | 7.5           | 5.3           | 6.4           | 3.0            | 5.2            |                |
| International Equity Benchmark | -2.6            | 7.3         | 7.3           | 5.1           | 6.0           | 2.5            | 4.9            |                |
| Excess                         | 0.2             | 0.2         | 0.2           | 0.2           | 0.4           | 0.5            | 0.3            |                |

Note:

Prior to 6/30/16 the returns of Domestic and International Equity were not reported as a total Public Equity return. For additional information regarding historical asset class performance and benchmarks, please refer to the Combined Funds Performance Report.





## Combined Funds Asset Class Performance Summary

### Fixed Income

The Combined Funds Fixed Income performance is shown here.

The Fixed Income benchmark is the Bloomberg Barclays U.S. Aggregate Index. This index reflects the performance of the broad bond market for investment grade (Baa or higher) bonds, U.S. Treasury and agency securities, and mortgage obligations with maturities greater than one year.

|                        | <u>Last Qtr</u> | <u>FYTD</u> | <u>1 Year</u> | <u>3 Year</u> | <u>5 Year</u> | <u>10 Year</u> | <u>20 Year</u> | <u>30 year</u> |
|------------------------|-----------------|-------------|---------------|---------------|---------------|----------------|----------------|----------------|
| Fixed Income           | 0.0%            | 0.1%        | 0.1%          | 2.3%          | 2.8%          | 4.4%           | 5.0%           | 6.5%           |
| Fixed Income Benchmark | -0.2            | -0.4        | -0.4          | 1.7           | 2.3           | 3.7            | 4.7            | 6.1            |
| Excess                 | 0.2             | 0.5         | 0.5           | 0.5           | 0.5           | 0.7            | 0.3            | 0.3            |

### Treasuries

The Combined Funds Treasuries performance is shown here. The Treasuries benchmark is the Bloomberg Barclays Treasury 5+ Years Index.

|                          | <u>Last Qtr</u> | <u>FYTD</u> | <u>1 Year</u> | <u>3 Year</u> | <u>5 Year</u> | <u>10 Year</u> | <u>20 Year</u> | <u>30 year</u> |
|--------------------------|-----------------|-------------|---------------|---------------|---------------|----------------|----------------|----------------|
| Treasuries               | 0.0%            |             |               |               |               |                |                |                |
| BBG BARC 5Y + Us Tsy Idx | 0.1             |             |               |               |               |                |                |                |
| Excess                   | -0.1            |             |               |               |               |                |                |                |

### Cash

The Combined Funds Cash performance is shown here. Cash is held by the Combined Funds to meet the liquidity needs of the retirement systems to pay benefits.

|               | <u>Last Qtr</u> | <u>FYTD</u> | <u>1 Year</u> | <u>3 Year</u> | <u>5 Year</u> | <u>10 Year</u> | <u>20 Year</u> | <u>30 year</u> |
|---------------|-----------------|-------------|---------------|---------------|---------------|----------------|----------------|----------------|
| Cash          | 0.5%            | 1.4%        | 1.4%          | 0.9%          | 0.6%          | 0.7%           | 2.5%           | 4.0%           |
| 90 DAY T-BILL | 0.5             | 1.4         | 1.4           | 0.7           | 0.4           | 0.4            | 2.0            | 3.2            |

Note:

For additional information regarding historical asset class performance and benchmarks, please refer to the Combined Funds Performance Report.



## Combined Funds Asset Class Performance Summary

### Private Markets

|                 | <u>Last Qtr</u> | <u>FYTD</u> | <u>1 Year</u> | <u>3 Year</u> | <u>5 Year</u> | <u>10 Year</u> | <u>20 Year</u> | <u>25 year</u> | <u>30 year</u> |
|-----------------|-----------------|-------------|---------------|---------------|---------------|----------------|----------------|----------------|----------------|
| Private Markets | 2.4%            | 14.8%       | 14.8%         | 11.3%         | 12.0%         | 9.2%           | 12.1%          | 13.4%          | 12.2%          |
| Private Equity  | 2.5%            | 19.7%       | 19.7%         | 15.1%         | 15.5%         | 11.7%          | 12.7%          | 15.3%          |                |
| Private Credit  | 4.3             | 12.0        | 12.0          | 14.2          | 14.4          | 11.2           | 13.0           |                |                |
| Resources       | 0.7             | 4.3         | 4.3           | -0.3          | 0.9           | 4.9            | 13.8           | 14.7           |                |
| Real Estate     | 2.7             | 12.1        | 12.1          | 9.4           | 13.1          | 4.8            | 8.7            | 9.1            |                |

### Private Markets

The time-weighted rates of return for the Private Markets portfolio are shown here. Private Markets included Private Equity, Private Credit, Resources, and Real Estate. Some of the existing investments are relatively immature and returns may not be indicative of future results.

### Private Equity Investments

The objectives of the Private Equity portfolio, which may include leveraged buyouts, growth equity, venture capital and special situations, are to achieve attractive returns and to provide overall portfolio diversification to the total plan.

### Private Credit Investments

The objectives of the Private Credit portfolio, which may include mezzanine debt, direct lending, and other forms of non-investment grade fixed income instruments, are to achieve a high total return over a full market cycle and to provide some degree of downside protection and typically provide current income in the form of a coupon. In certain situations, investments in the Private Credit portfolio also provide an equity component of return in the form of warrants or re-organized equity.

### Resource Investments

The objectives of the Resources portfolio, which may include energy, infrastructure, and other hard assets, are to provide protection against the risks associated with inflation and to provide overall portfolio diversification to the total plan.

### Real Estate Investments

The objectives of the Real Estate portfolio, which may include core and non-core real estate investments, are to achieve attractive returns, preserve capital, provide protection against risks associated with inflation, and provide overall portfolio diversification to the total plan.

The SBI also monitors Private Markets performance using money-weighted return metrics such as Internal Rate of Return and Multiple of Invested Capital. For money-weighted return metrics please refer to the Combined Funds Performance Report.



## Quarterly Report

# Asset Class & Manager Performance

## June 30, 2018

The assets of the Combined Funds are allocated to public equity, fixed income, private markets, and cash. Each asset class may be further differentiated by geography, management style, and/or strategy. Managers are hired to manage the assets accordingly. This diversification is intended to reduce wide fluctuations in investment returns on a year-to-year basis and enhances the Funds' ability to meet or exceed the actuarial return target over the long-term.

The Combined Funds consist of the assets of active employees and retired members of the statewide retirement plans. The SBI commingles the assets of these plans into the Combined Funds to capture investment efficiencies. This sharing is accomplished by grouping managers by asset class, geography, and management style, into several Investment Pools. The individual funds participate in the Investment Pools by purchasing units which function much like the shares of a mutual fund.

While the vast majority of the units of these pools are owned by the Combined Funds, the Supplemental Investment Fund also owns units of these pools. The Supplemental Investment Funds are mutual fund-like investment vehicles which are used by investors in the Participant Directed Investment Program. Please refer to the Participant Directed Investment Program report for more information.

The performance information presented on the following pages for Public Equity and Fixed Income includes both the Combined Funds and Supplemental Investment Fund. The Private Markets is Combined Funds only. All assets in the Combined Funds are managed externally by investment management firms retained by contract.

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# Domestic Equity

## June 30, 2018



|   | <u>Ending Market Value</u> | <u>Portfolio Weight</u> | <u>Last Qtr</u> | <u>Fiscal YTD</u> | <u>1 Year</u> | <u>3 Year</u> | <u>5 Year</u> | <u>10 Year</u> | <u>Since Inception</u> | <u>Inception Date</u> |
|---|----------------------------|-------------------------|-----------------|-------------------|---------------|---------------|---------------|----------------|------------------------|-----------------------|
| <b>Total Domestic Equity</b>                      |                            |                         |                 |                   |               |               |               |                |                        |                       |
| <b>ACTIVE DOMESTIC EQUITY AGGREGATE (1)</b>       | <b>\$4,874,690,373</b>     | <b>16.5%</b>            | <b>6.9%</b>     | <b>19.7%</b>      | <b>19.7%</b>  | <b>11.8%</b>  | <b>14.0%</b>  | <b>10.3%</b>   |                        |                       |
| Active Domestic Equity Benchmark                  |                            |                         | 5.7             | 15.8              | 15.8          | 11.8          | 13.3          | 10.3           |                        |                       |
| Excess  |                            |                         | 1.2             | 3.9               | 3.9           | -0.0          | 0.6           | 0.0            |                        |                       |
| <b>SEMI PASSIVE DOMESTIC EQUITY AGGREGATE (2)</b> | <b>2,596,436,350</b>       | <b>8.8</b>              | <b>3.3</b>      | <b>15.3</b>       | <b>15.3</b>   | <b>11.4</b>   | <b>13.4</b>   | <b>10.4</b>    |                        |                       |
| Semi Passive Domestic Equity Benchmark            |                            |                         | 3.6             | 14.5              | 14.5          | 11.6          | 13.4          | 10.2           |                        |                       |
| Excess  |                            |                         | -0.3            | 0.8               | 0.8           | -0.2          | 0.0           | 0.2            |                        |                       |
| <b>PASSIVE DOMESTIC EQUITY AGGREGATE (3)</b>      | <b>22,025,233,661</b>      | <b>74.7</b>             | <b>3.7</b>      | <b>14.6</b>       | <b>14.6</b>   | <b>11.5</b>   | <b>13.3</b>   | <b>10.2</b>    |                        |                       |
| Passive Domestic Equity Benchmark                 |                            |                         | 3.7             | 14.7              | 14.7          | 11.5          | 13.3          | 10.2           |                        |                       |
| Excess  |                            |                         | -0.0            | -0.1              | -0.1          | -0.0          | -0.0          | 0.0            |                        |                       |
| TRANSITION AGGREGATE DOMESTIC EQUITY (4)          | 3,980,515                  | 0.0                     |                 |                   |               |               |               |                |                        |                       |
| <b>TOTAL DOMESTIC EQUITY (5)</b>                  | <b>29,500,340,900</b>      | <b>100.0</b>            | <b>4.2</b>      | <b>15.4</b>       | <b>15.4</b>   | <b>11.3</b>   | <b>13.3</b>   | <b>10.2</b>    | <b>10.5</b>            | <b>01/1984</b>        |
| Domestic Equity Benchmark                         |                            |                         | 3.9             | 14.8              | 14.8          | 11.6          | 13.3          | 10.2           | 10.7                   | 01/1984               |
| Excess  |                            |                         | 0.3             | 0.7               | 0.7           | -0.3          | 0.0           | -0.0           | -0.2                   |                       |

(1) The Active Domestic Equity Benchmark is a weighted composite each of the individual active domestic equity manager's benchmarks.

(2) The current Semi-Passive Domestic Equity Benchmark is the Russell 1000 index.

(3) The current Passive Domestic Equity Benchmark is a weighted average of the Russell 1000 and Russell 3000.

(4) The Transition Domestic Equity Aggregate contains Domestic Equity securities that are being transitioned to a different manager.

(5) The current Domestic Equity Benchmark is the Russell 3000.

Note: All aggregates include the performance of terminated managers. For historical benchmark details please refer to the addendum of this report.



|   | <u>2017 Calendar Return</u> | <u>2016 Calendar Return</u> | <u>2015 Calendar Return</u> | <u>2014 Calendar Return</u> | <u>2013 Calendar Return</u> |
|---|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| <b>Total Domestic Equity</b>                      |                             |                             |                             |                             |                             |
| <b>ACTIVE DOMESTIC EQUITY AGGREGATE (1)</b>       | <b>20.6%</b>                | <b>10.9%</b>                | <b>-0.4%</b>                | <b>9.3%</b>                 | <b>40.2%</b>                |
| Active Domestic Equity Benchmark                  | 18.3                        | 15.7                        | -0.6                        | 11.0                        | 34.7                        |
| Excess  | 2.3                         | -4.8                        | 0.3                         | -1.7                        | 5.5                         |
| <b>SEMI PASSIVE DOMESTIC EQUITY AGGREGATE (2)</b> | <b>22.5</b>                 | <b>11.1</b>                 | <b>0.5</b>                  | <b>14.2</b>                 | <b>33.2</b>                 |
| Semi Passive Domestic Equity Benchmark            | 21.7                        | 12.1                        | 0.9                         | 13.2                        | 33.1                        |
| Excess  | 0.8                         | -1.0                        | -0.4                        | 1.0                         | 0.1                         |
| <b>PASSIVE DOMESTIC EQUITY AGGREGATE (3)</b>      | <b>21.3</b>                 | <b>12.6</b>                 | <b>0.5</b>                  | <b>12.6</b>                 | <b>33.5</b>                 |
| Passive Domestic Equity Benchmark                 | 21.5                        | 12.5                        | 0.5                         | 12.6                        | 33.6                        |
| Excess  | -0.2                        | 0.1                         | 0.0                         | 0.0                         | -0.0                        |
| <b>TRANSITION AGGREGATE DOMESTIC EQUITY (4)</b>   |                             |                             |                             |                             |                             |
| <b>TOTAL DOMESTIC EQUITY (5)</b>                  | <b>21.4%</b>                | <b>11.5</b>                 | <b>0.3</b>                  | <b>12.3</b>                 | <b>35.1</b>                 |
| Domestic Equity Benchmark                         | 21.1%                       | 12.7                        | 0.5                         | 12.6                        | 33.6                        |
| Excess  | 0.2%                        | -1.3                        | -0.2                        | -0.2                        | 1.6                         |

(1) The Active Domestic Equity Benchmark is a weighted composite each of the individual active domestic equity manager's benchmarks.

(2) The current Semi-Passive Domestic Equity Benchmark is the Russell 1000 index.

(3) The current Passive Domestic Equity Benchmark is a weighted average of the Russell 1000 and Russell 3000.

(4) The Transition Domestic Equity Aggregate contains Domestic Equity securities that are being transitioned to a different manager.

(5) The current Domestic Equity Benchmark is the Russell 3000.

Note: All aggregates include the performance of terminated managers. For historical benchmark details please refer to the addendum of this report.



|                                      | <u>Ending Market Value</u> | <u>Portfolio Weight</u> | <u>Last Qtr</u> | <u>Fiscal YTD</u> | <u>1 Year</u> | <u>3 Year</u> | <u>5 Year</u> | <u>10 Year</u> | <u>Since Inception</u> | <u>Inception Date</u> |
|--------------------------------------|----------------------------|-------------------------|-----------------|-------------------|---------------|---------------|---------------|----------------|------------------------|-----------------------|
| <b>Active Large Cap Growth</b>       |                            |                         |                 |                   |               |               |               |                |                        |                       |
| <b>SANDS</b>                         | <b>\$598,533,935</b>       | <b>2.0%</b>             | <b>10.7%</b>    | <b>34.7%</b>      | <b>34.7%</b>  | <b>16.1%</b>  | <b>17.6%</b>  | <b>14.6%</b>   | <b>11.5%</b>           | <b>01/2005</b>        |
| Russell 1000 Growth                  |                            |                         | 5.8             | 22.5              | 22.5          | 15.0          | 16.4          | 11.8           | 9.9                    | 01/2005               |
| Excess                               |                            |                         | 5.0             | 12.2              | 12.2          | 1.1           | 1.2           | 2.8            | 1.7                    |                       |
| <b>WINSLOW</b>                       | <b>240,227,799</b>         | <b>0.8</b>              | <b>7.6</b>      | <b>28.2</b>       | <b>28.2</b>   | <b>15.1</b>   | <b>16.9</b>   | <b>11.4</b>    | <b>10.9</b>            | <b>01/2005</b>        |
| Russell 1000 Growth                  |                            |                         | 5.8             | 22.5              | 22.5          | 15.0          | 16.4          | 11.8           | 9.9                    | 01/2005               |
| Excess                               |                            |                         | 1.8             | 5.7               | 5.7           | 0.1           | 0.5           | -0.4           | 1.0                    |                       |
| <b>ZEVENBERGEN</b>                   | <b>567,078,300</b>         | <b>1.9</b>              | <b>14.2</b>     | <b>34.2</b>       | <b>34.2</b>   | <b>16.6</b>   | <b>18.6</b>   | <b>13.4</b>    | <b>11.2</b>            | <b>04/1994</b>        |
| Russell 1000 Growth                  |                            |                         | 5.8             | 22.5              | 22.5          | 15.0          | 16.4          | 11.8           | 9.8                    | 04/1994               |
| Excess                               |                            |                         | 8.5             | 11.7              | 11.7          | 1.6           | 2.2           | 1.6            | 1.5                    |                       |
| <b>RUSSELL 1000 GROWTH AGGREGATE</b> | <b>1,405,840,034</b>       | <b>4.8</b>              | <b>11.6</b>     | <b>33.3</b>       | <b>33.3</b>   | <b>17.9</b>   | <b>18.6</b>   | <b>13.0</b>    |                        |                       |
| Russell 1000 Growth                  |                            |                         | 5.8             | 22.5              | 22.5          | 15.0          | 16.4          | 11.8           |                        |                       |
| Excess                               |                            |                         | 5.8             | 10.8              | 10.8          | 2.9           | 2.3           | 1.1            |                        |                       |





|  | <u>2017 Calendar Return</u> | <u>2016 Calendar Return</u> | <u>2015 Calendar Return</u> | <u>2014 Calendar Return</u> | <u>2013 Calendar Return</u> |
|--|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| <b>Active Large Cap Growth</b>           |                             |                             |                             |                             |                             |
| <b>SANDS</b>                             | <b>35.3%</b>                | <b>-6.9%</b>                | <b>2.9%</b>                 | <b>9.1%</b>                 | <b>42.4%</b>                |
| Russell 1000 Growth                      | 30.2                        | 7.1                         | 5.7                         | 13.0                        | 33.5                        |
| Excess                                   | 5.1                         | -13.9                       | -2.8                        | -3.9                        | 8.9                         |
| <b>WINSLOW</b>                           | <b>33.2</b>                 | <b>-1.9</b>                 | <b>6.7</b>                  | <b>11.0</b>                 | <b>37.4</b>                 |
| Russell 1000 Growth                      | 30.2                        | 7.1                         | 5.7                         | 13.0                        | 33.5                        |
| Excess                                   | 3.0                         | -9.0                        | 1.0                         | -2.0                        | 3.9                         |
| <b>ZEVENBERGEN</b>                       | <b>35.1</b>                 | <b>-2.8</b>                 | <b>6.4</b>                  | <b>3.4</b>                  | <b>60.6</b>                 |
| Russell 1000 Growth                      | 30.2                        | 7.1                         | 5.7                         | 13.0                        | 33.5                        |
| Excess                                   | 4.9                         | -9.9                        | 0.7                         | -9.6                        | 27.1                        |
| <b>RUSSELL 1000 GROWTH<br/>AGGREGATE</b> | <b>33.4%</b>                | <b>1.0</b>                  | <b>4.6</b>                  | <b>9.6</b>                  | <b>42.0</b>                 |
| Russell 1000 Growth                      | 30.2%                       | 7.1                         | 5.7                         | 13.0                        | 33.5                        |
| Excess                                   | 3.2%                        | -6.1                        | -1.1                        | -3.4                        | 8.5                         |



|                                     | <u>Ending Market Value</u> | <u>Portfolio Weight</u> | <u>Last Qtr</u> | <u>Fiscal YTD</u> | <u>1 Year</u> | <u>3 Year</u> | <u>5 Year</u> | <u>10 Year</u> | <u>Since Inception</u> | <u>Inception Date</u> |
|-------------------------------------|----------------------------|-------------------------|-----------------|-------------------|---------------|---------------|---------------|----------------|------------------------|-----------------------|
| <b>Active Large Cap Value</b>       |                            |                         |                 |                   |               |               |               |                |                        |                       |
| <b>BARROW HANLEY</b>                | <b>\$382,287,559</b>       | <b>1.3%</b>             | <b>3.3%</b>     | <b>8.3%</b>       | <b>8.3%</b>   | <b>7.8%</b>   | <b>10.6%</b>  | <b>8.9%</b>    | <b>8.0%</b>            | <b>04/2004</b>        |
| Russell 1000 Value                  |                            |                         | 1.2             | 6.8               | 6.8           | 8.3           | 10.3          | 8.5            | 7.7                    | 04/2004               |
| Excess                              |                            |                         | 2.1             | 1.5               | 1.5           | -0.5          | 0.2           | 0.4            | 0.3                    |                       |
| <b>EARNEST PARTNERS</b>             | <b>272,999,395</b>         | <b>0.9</b>              | <b>1.4</b>      | <b>12.9</b>       | <b>12.9</b>   | <b>10.0</b>   | <b>12.2</b>   | <b>9.1</b>     | <b>7.0</b>             | <b>07/2000</b>        |
| Russell 1000 Value                  |                            |                         | 1.2             | 6.8               | 6.8           | 8.3           | 10.3          | 8.5            | 7.1                    | 07/2000               |
| Excess                              |                            |                         | 0.2             | 6.1               | 6.1           | 1.7           | 1.9           | 0.6            | -0.1                   |                       |
| <b>LSV</b>                          | <b>419,135,723</b>         | <b>1.4</b>              | <b>0.0</b>      | <b>11.9</b>       | <b>11.9</b>   | <b>9.5</b>    | <b>12.5</b>   | <b>10.1</b>    | <b>9.2</b>             | <b>04/2004</b>        |
| Russell 1000 Value                  |                            |                         | 1.2             | 6.8               | 6.8           | 8.3           | 10.3          | 8.5            | 7.7                    | 04/2004               |
| Excess                              |                            |                         | -1.2            | 5.2               | 5.2           | 1.2           | 2.1           | 1.6            | 1.5                    |                       |
| <b>RUSSELL 1000 VALUE AGGREGATE</b> | <b>1,074,422,677</b>       | <b>3.6</b>              | <b>1.5</b>      | <b>10.9</b>       | <b>10.9</b>   | <b>8.7</b>    | <b>11.4</b>   | <b>9.0</b>     |                        |                       |
| Russell 1000 Value                  |                            |                         | 1.2             | 6.8               | 6.8           | 8.3           | 10.3          | 8.5            |                        |                       |
| Excess                              |                            |                         | 0.3             | 4.1               | 4.1           | 0.4           | 1.1           | 0.5            |                        |                       |



|   | <u>2017 Calendar Return</u> | <u>2016 Calendar Return</u> | <u>2015 Calendar Return</u> | <u>2014 Calendar Return</u> | <u>2013 Calendar Return</u> |
|---|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| <b>Active Large Cap Value</b>           |                             |                             |                             |                             |                             |
| <b>BARROW HANLEY</b>                    | <b>14.6%</b>                | <b>12.8%</b>                | <b>-2.1%</b>                | <b>13.0%</b>                | <b>35.5%</b>                |
| Russell 1000 Value                      | 13.7                        | 17.3                        | -3.8                        | 13.5                        | 32.5                        |
| Excess                                  | 0.9                         | -4.5                        | 1.7                         | -0.5                        | 3.0                         |
| <b>EARNEST PARTNERS</b>                 | <b>19.9</b>                 | <b>16.2</b>                 | <b>-2.7</b>                 | <b>14.0</b>                 | <b>32.0</b>                 |
| Russell 1000 Value                      | 13.7                        | 17.3                        | -3.8                        | 13.5                        | 32.5                        |
| Excess                                  | 6.2                         | -1.1                        | 1.1                         | 0.5                         | -0.5                        |
| <b>LSV</b>                              | <b>18.6</b>                 | <b>17.0</b>                 | <b>-2.2</b>                 | <b>14.0</b>                 | <b>41.2</b>                 |
| Russell 1000 Value                      | 13.7                        | 17.3                        | -3.8                        | 13.5                        | 32.5                        |
| Excess                                  | 4.9                         | -0.4                        | 1.6                         | 0.6                         | 8.7                         |
| <b>RUSSELL 1000 VALUE<br/>AGGREGATE</b> | <b>17.3%</b>                | <b>15.3</b>                 | <b>-3.2</b>                 | <b>13.1</b>                 | <b>36.5</b>                 |
| Russell 1000 Value                      | 13.7%                       | 17.3                        | -3.8                        | 13.5                        | 32.5                        |
| Excess                                  | 3.7%                        | -2.1                        | 0.6                         | -0.4                        | 3.9                         |



|   | <u>Ending Market Value</u> | <u>Portfolio Weight</u> | <u>Last Qtr</u> | <u>Fiscal YTD</u> | <u>1 Year</u> | <u>3 Year</u> | <u>5 Year</u> | <u>10 Year</u> | <u>Since Inception</u> | <u>Inception Date</u> |
|---|----------------------------|-------------------------|-----------------|-------------------|---------------|---------------|---------------|----------------|------------------------|-----------------------|
| <b>Semi-Passive Large Cap</b>                 |                            |                         |                 |                   |               |               |               |                |                        |                       |
| <b>BLACKROCK</b>                              | <b>\$1,060,666,411</b>     | <b>3.6%</b>             | <b>3.2%</b>     | <b>17.3%</b>      | <b>17.3%</b>  | <b>12.8%</b>  | <b>14.4%</b>  | <b>10.6%</b>   | <b>10.0%</b>           | <b>01/1995</b>        |
| Semi Passive Domestic Equity Benchmark        |                            |                         | 3.6             | 14.5              | 14.5          | 11.6          | 13.4          | 10.2           | 9.6                    | 01/1995               |
| Excess  |                            |                         | -0.4            | 2.8               | 2.8           | 1.1           | 1.0           | 0.4            | 0.5                    |                       |
| <b>J.P. MORGAN</b>                            |                            |                         |                 |                   |               |               |               |                |                        |                       |
|   | <b>1,535,769,939</b>       | <b>5.2</b>              | <b>3.4</b>      | <b>14.0</b>       | <b>14.0</b>   | <b>11.5</b>   | <b>13.6</b>   | <b>10.9</b>    | <b>9.8</b>             | <b>01/1995</b>        |
| Semi Passive Domestic Equity Benchmark        |                            |                         | 3.6             | 14.5              | 14.5          | 11.6          | 13.4          | 10.2           | 9.6                    | 01/1995               |
| Excess  |                            |                         | -0.2            | -0.6              | -0.6          | -0.1          | 0.2           | 0.7            | 0.3                    |                       |
| <b>SEMI-PASSIVE DOMESTIC EQUITY AGGREGATE</b> |                            |                         |                 |                   |               |               |               |                |                        |                       |
|   | <b>2,596,436,350</b>       | <b>8.8</b>              | <b>3.3</b>      | <b>15.3</b>       | <b>15.3</b>   | <b>11.4</b>   | <b>13.4</b>   | <b>10.4</b>    |                        |                       |
| Semi Passive Domestic Equity Benchmark        |                            |                         | 3.6             | 14.5              | 14.5          | 11.6          | 13.4          | 10.2           |                        |                       |
| Excess  |                            |                         | -0.3            | 0.8               | 0.8           | -0.2          | 0.0           | 0.2            |                        |                       |



|   | <u>2017 Calendar Return</u> | <u>2016 Calendar Return</u> | <u>2015 Calendar Return</u> | <u>2014 Calendar Return</u> | <u>2013 Calendar Return</u> |
|---|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| <b>Semi-Passive Large Cap</b>                 |                             |                             |                             |                             |                             |
| <b>BLACKROCK</b>                              | <b>24.6%</b>                | <b>12.5%</b>                | <b>0.8%</b>                 | <b>14.2%</b>                | <b>33.3%</b>                |
| Semi Passive Domestic Equity Benchmark        | 21.7                        | 12.1                        | 0.9                         | 13.2                        | 33.1                        |
| Excess  | 2.9                         | 0.5                         | -0.1                        | 1.0                         | 0.2                         |
| <b>J.P. MORGAN</b>                            |                             |                             |                             |                             |                             |
| <b>J.P. MORGAN</b>                            | <b>21.8</b>                 | <b>12.3</b>                 | <b>0.8</b>                  | <b>15.0</b>                 | <b>33.7</b>                 |
| Semi Passive Domestic Equity Benchmark        | 21.7                        | 12.1                        | 0.9                         | 13.2                        | 33.1                        |
| Excess  | 0.1                         | 0.2                         | -0.1                        | 1.8                         | 0.6                         |
| <b>SEMI-PASSIVE DOMESTIC EQUITY AGGREGATE</b> |                             |                             |                             |                             |                             |
| <b>SEMI-PASSIVE DOMESTIC EQUITY AGGREGATE</b> | <b>22.5%</b>                | <b>11.1</b>                 | <b>0.5</b>                  | <b>14.2</b>                 | <b>33.2</b>                 |
| Semi Passive Domestic Equity Benchmark        | 21.7%                       | 12.1                        | 0.9                         | 13.2                        | 33.1                        |
| Excess  | 0.8%                        | -1.0                        | -0.4                        | 1.0                         | 0.1                         |



|                                      | <u>Ending Market Value</u> | <u>Portfolio Weight</u> | <u>Last Qtr</u> | <u>Fiscal YTD</u> | <u>1 Year</u> | <u>3 Year</u> | <u>5 Year</u> | <u>10 Year</u> | <u>Since Inception</u> | <u>Inception Date</u> |
|--------------------------------------|----------------------------|-------------------------|-----------------|-------------------|---------------|---------------|---------------|----------------|------------------------|-----------------------|
| <b>Active Small Cap Growth</b>       |                            |                         |                 |                   |               |               |               |                |                        |                       |
| <b>ARROWMARK</b>                     | <b>\$235,548,264</b>       | <b>0.8%</b>             | <b>10.4%</b>    | <b>27.1%</b>      | <b>27.1%</b>  |               |               |                | <b>30.9%</b>           | <b>11/2016</b>        |
| Russell 2000 Growth                  |                            |                         | 7.2             | 21.9              | 21.9          |               |               |                | 26.6                   | 11/2016               |
| Excess                               |                            |                         | 3.2             | 5.2               | 5.2           |               |               |                | 4.3                    |                       |
| <b>HOOD RIVER</b>                    | <b>253,574,375</b>         | <b>0.9</b>              | <b>8.2</b>      | <b>16.5</b>       | <b>16.5</b>   |               |               |                | <b>24.9</b>            | <b>11/2016</b>        |
| Russell 2000 Growth                  |                            |                         | 7.2             | 21.9              | 21.9          |               |               |                | 26.6                   | 11/2016               |
| Excess                               |                            |                         | 0.9             | -5.4              | -5.4          |               |               |                | -1.7                   |                       |
| <b>RICE HALL JAMES</b>               | <b>246,064,871</b>         | <b>0.8</b>              | <b>6.5</b>      | <b>28.3</b>       | <b>28.3</b>   |               |               |                | <b>34.4</b>            | <b>11/2016</b>        |
| Russell 2000 Growth                  |                            |                         | 7.2             | 21.9              | 21.9          |               |               |                | 26.6                   | 11/2016               |
| Excess                               |                            |                         | -0.7            | 6.4               | 6.4           |               |               |                | 7.8                    |                       |
| <b>WELLINGTON</b>                    | <b>258,133,818</b>         | <b>0.9</b>              | <b>6.0</b>      | <b>19.0</b>       | <b>19.0</b>   |               |               |                | <b>26.2</b>            | <b>11/2016</b>        |
| Russell 2000 Growth                  |                            |                         | 7.2             | 21.9              | 21.9          |               |               |                | 26.6                   | 11/2016               |
| Excess                               |                            |                         | -1.3            | -2.9              | -2.9          |               |               |                | -0.4                   |                       |
| <b>RUSSELL 2000 GROWTH AGGREGATE</b> | <b>993,321,329</b>         | <b>3.4</b>              | <b>7.7</b>      | <b>22.1</b>       | <b>22.1</b>   | <b>8.5</b>    | <b>11.6</b>   | <b>8.5</b>     |                        |                       |
| Russell 2000 Growth                  |                            |                         | 7.2             | 21.9              | 21.9          | 10.6          | 13.6          | 11.2           |                        |                       |
| Excess                               |                            |                         | 0.5             | 0.3               | 0.3           | -2.1          | -2.1          | -2.8           |                        |                       |



|  | <u>2017 Calendar Return</u> | <u>2016 Calendar Return</u> | <u>2015 Calendar Return</u> | <u>2014 Calendar Return</u> | <u>2013 Calendar Return</u> |
|--|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| <b>Active Small Cap Growth</b>           |                             |                             |                             |                             |                             |
| <b>ARROWMARK</b>                         | <b>26.2%</b>                |                             |                             |                             |                             |
| Russell 2000 Growth                      | 22.2                        |                             |                             |                             |                             |
| Excess                                   | 4.1                         |                             |                             |                             |                             |
| <b>HOOD RIVER</b>                        | <b>21.3</b>                 |                             |                             |                             |                             |
| Russell 2000 Growth                      | 22.2                        |                             |                             |                             |                             |
| Excess                                   | -0.9                        |                             |                             |                             |                             |
| <b>RICE HALL JAMES</b>                   | <b>27.9</b>                 |                             |                             |                             |                             |
| Russell 2000 Growth                      | 22.2                        |                             |                             |                             |                             |
| Excess                                   | 5.8                         |                             |                             |                             |                             |
| <b>WELLINGTON</b>                        | <b>22.6</b>                 |                             |                             |                             |                             |
| Russell 2000 Growth                      | 22.2                        |                             |                             |                             |                             |
| Excess                                   | 0.4                         |                             |                             |                             |                             |
| <b>RUSSELL 2000 GROWTH<br/>AGGREGATE</b> | <b>22.0%</b>                | <b>4.7</b>                  | <b>1.0</b>                  | <b>-3.4</b>                 | <b>47.2</b>                 |
| Russell 2000 Growth                      | 22.2%                       | 11.3                        | -1.4                        | 5.6                         | 43.3                        |
| Excess                                   | -0.1%                       | -6.6                        | 2.4                         | -9.0                        | 3.9                         |



|                                     | <u>Ending Market Value</u> | <u>Portfolio Weight</u> | <u>Last Qtr</u> | <u>Fiscal YTD</u> | <u>1 Year</u> | <u>3 Year</u> | <u>5 Year</u> | <u>10 Year</u> | <u>Since Inception</u> | <u>Inception Date</u> |
|-------------------------------------|----------------------------|-------------------------|-----------------|-------------------|---------------|---------------|---------------|----------------|------------------------|-----------------------|
| <b>Active Small Cap Value</b>       |                            |                         |                 |                   |               |               |               |                |                        |                       |
| <b>GOLDMAN SACHS</b>                | <b>\$371,176,649</b>       | <b>1.3%</b>             | <b>3.8%</b>     | <b>12.2%</b>      | <b>12.2%</b>  | <b>9.6%</b>   | <b>11.8%</b>  | <b>11.7%</b>   | <b>10.0%</b>           | <b>01/2004</b>        |
| Russell 2000 Value                  |                            |                         | 8.3             | 13.1              | 13.1          | 11.2          | 11.2          | 9.9            | 8.6                    | 01/2004               |
| Excess                              |                            |                         | -4.5            | -0.9              | -0.9          | -1.6          | 0.6           | 1.8            | 1.4                    |                       |
| <b>HOTCHKIS AND WILEY</b>           | <b>326,297,788</b>         | <b>1.1</b>              | <b>9.1</b>      | <b>13.4</b>       | <b>13.4</b>   | <b>7.0</b>    | <b>11.5</b>   | <b>12.1</b>    | <b>9.0</b>             | <b>01/2004</b>        |
| Russell 2000 Value                  |                            |                         | 8.3             | 13.1              | 13.1          | 11.2          | 11.2          | 9.9            | 8.6                    | 01/2004               |
| Excess                              |                            |                         | 0.8             | 0.3               | 0.3           | -4.2          | 0.3           | 2.2            | 0.4                    |                       |
| <b>MARTINGALE</b>                   | <b>309,405,915</b>         | <b>1.0</b>              | <b>6.1</b>      | <b>12.6</b>       | <b>12.6</b>   | <b>11.3</b>   | <b>13.1</b>   | <b>10.5</b>    | <b>8.6</b>             | <b>01/2004</b>        |
| Russell 2000 Value                  |                            |                         | 8.3             | 13.1              | 13.1          | 11.2          | 11.2          | 9.9            | 8.6                    | 01/2004               |
| Excess                              |                            |                         | -2.2            | -0.5              | -0.5          | 0.1           | 1.9           | 0.6            | 0.0                    |                       |
| <b>PEREGRINE</b>                    | <b>394,225,982</b>         | <b>1.3</b>              | <b>6.1</b>      | <b>16.0</b>       | <b>16.0</b>   | <b>10.5</b>   | <b>11.4</b>   | <b>11.6</b>    | <b>10.8</b>            | <b>07/2000</b>        |
| Russell 2000 Value                  |                            |                         | 8.3             | 13.1              | 13.1          | 11.2          | 11.2          | 9.9            | 10.1                   | 07/2000               |
| Excess                              |                            |                         | -2.2            | 2.9               | 2.9           | -0.7          | 0.2           | 1.7            | 0.7                    |                       |
| <b>RUSSELL 2000 VALUE AGGREGATE</b> | <b>1,401,106,333</b>       | <b>4.7</b>              | <b>6.2</b>      | <b>13.6</b>       | <b>13.6</b>   | <b>9.6</b>    | <b>11.8</b>   | <b>11.4</b>    |                        |                       |
| Russell 2000 Value                  |                            |                         | 8.3             | 13.1              | 13.1          | 11.2          | 11.2          | 9.9            |                        |                       |
| Excess                              |                            |                         | -2.1            | 0.5               | 0.5           | -1.6          | 0.6           | 1.5            |                        |                       |





|                                     | <u>2017 Calendar Return</u> | <u>2016 Calendar Return</u> | <u>2015 Calendar Return</u> | <u>2014 Calendar Return</u> | <u>2013 Calendar Return</u> |
|-------------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| <b>Active Small Cap Value</b>       |                             |                             |                             |                             |                             |
| <b>GOLDMAN SACHS</b>                | <b>12.6%</b>                | <b>24.6%</b>                | <b>-5.2%</b>                | <b>7.4%</b>                 | <b>39.3%</b>                |
| Russell 2000 Value                  | 7.8                         | 31.7                        | -7.5                        | 4.2                         | 34.5                        |
| Excess                              | 4.7                         | -7.1                        | 2.3                         | 3.1                         | 4.8                         |
| <b>HOTCHKIS AND WILEY</b>           | <b>7.9</b>                  | <b>19.9</b>                 | <b>-8.5</b>                 | <b>13.0</b>                 | <b>46.0</b>                 |
| Russell 2000 Value                  | 7.8                         | 31.7                        | -7.5                        | 4.2                         | 34.5                        |
| Excess                              | 0.0                         | -11.8                       | -1.0                        | 8.8                         | 11.5                        |
| <b>MARTINGALE</b>                   | <b>6.9</b>                  | <b>34.3</b>                 | <b>-5.2</b>                 | <b>7.3</b>                  | <b>43.1</b>                 |
| Russell 2000 Value                  | 7.8                         | 31.7                        | -7.5                        | 4.2                         | 34.5                        |
| Excess                              | -0.9                        | 2.5                         | 2.3                         | 3.1                         | 8.5                         |
| <b>PEREGRINE</b>                    | <b>12.5</b>                 | <b>27.8</b>                 | <b>-6.7</b>                 | <b>4.1</b>                  | <b>37.3</b>                 |
| Russell 2000 Value                  | 7.8                         | 31.7                        | -7.5                        | 4.2                         | 34.5                        |
| Excess                              | 4.7                         | -3.9                        | 0.8                         | -0.1                        | 2.8                         |
| <b>RUSSELL 2000 VALUE AGGREGATE</b> | <b>10.2%</b>                | <b>26.5</b>                 | <b>-6.5</b>                 | <b>7.5</b>                  | <b>40.8</b>                 |
| Russell 2000 Value                  | 7.8%                        | 31.7                        | -7.5                        | 4.2                         | 34.5                        |
| Excess                              | 2.3%                        | -5.2                        | 1.0                         | 3.3                         | 6.3                         |



|  | <u>Ending Market Value</u> | <u>Portfolio Weight</u> | <u>Last Qtr</u> | <u>Fiscal YTD</u> | <u>1 Year</u> | <u>3 Year</u> | <u>5 Year</u> | <u>10 Year</u> | <u>Since Inception</u> | <u>Inception Date</u> |
|--|----------------------------|-------------------------|-----------------|-------------------|---------------|---------------|---------------|----------------|------------------------|-----------------------|
| <b>Total Passive Domestic Equity</b>     |                            |                         |                 |                   |               |               |               |                |                        |                       |
| <b>BLACKROCK RUSSELL 1000</b>            | <b>\$12,600,546,083</b>    | <b>42.7%</b>            | <b>3.6%</b>     | <b>14.5%</b>      | <b>14.5%</b>  |               |               |                | <b>18.4%</b>           | <b>11/2016</b>        |
| Russell 1000                             |                            |                         | 3.6             | 14.5              | 14.5          |               |               |                | 18.5                   | 11/2016               |
| Excess                                   |                            |                         | -0.0            | -0.0              | -0.0          |               |               |                | -0.0                   |                       |
| <b>BLACKROCK RUSSELL 3000 (1)</b>        | <b>9,424,687,578</b>       | <b>31.9</b>             | <b>3.9</b>      | <b>14.8</b>       | <b>14.8</b>   | <b>11.6%</b>  | <b>13.3%</b>  | <b>10.3%</b>   | <b>9.3</b>             | <b>07/1995</b>        |
| Passive Manager Benchmark                |                            |                         | 3.9             | 14.8              | 14.8          | 11.6          | 13.3          | 10.2           | 9.2                    | 07/1995               |
| Excess                                   |                            |                         | -0.0            | 0.0               | 0.0           | 0.0           | 0.0           | 0.0            | 0.1                    |                       |
| <b>PASSIVE DOMESTIC EQUITY AGGREGATE</b> | <b>22,025,233,661</b>      | <b>74.7</b>             | <b>3.7</b>      | <b>14.6</b>       | <b>14.6</b>   | <b>11.5</b>   | <b>13.3</b>   | <b>10.2</b>    |                        |                       |
| Passive Domestic Equity Benchmark        |                            |                         | 3.7             | 14.7              | 14.7          | 11.5          | 13.3          | 10.2           |                        |                       |
| Excess                                   |                            |                         | -0.0            | -0.1              | -0.1          | -0.0          | -0.0          | 0.0            |                        |                       |

(1) The current Passive Manager Benchmark is the Russell 3000. For historical benchmark details please refer to the addendum of this report.



|  | <u>2017 Calendar Return</u> | <u>2016 Calendar Return</u> | <u>2015 Calendar Return</u> | <u>2014 Calendar Return</u> | <u>2013 Calendar Return</u> |
|--|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| <b>Total Passive Domestic Equity</b>     |                             |                             |                             |                             |                             |
| <b>BLACKROCK RUSSELL 1000</b>            | <b>21.7%</b>                |                             |                             |                             |                             |
| Russell 1000                             | 21.7                        |                             |                             |                             |                             |
| Excess                                   | -0.0                        |                             |                             |                             |                             |
| <b>BLACKROCK RUSSELL 3000 (1)</b>        | <b>21.1</b>                 | <b>12.7%</b>                | <b>0.5%</b>                 | <b>12.6%</b>                | <b>33.5%</b>                |
| Passive Manager Benchmark                | 21.1                        | 12.7                        | 0.5                         | 12.6                        | 33.6                        |
| Excess                                   | 0.0                         | 0.0                         | 0.0                         | 0.0                         | -0.0                        |
| <b>PASSIVE DOMESTIC EQUITY AGGREGATE</b> | <b>21.3%</b>                | <b>12.6</b>                 | <b>0.5</b>                  | <b>12.6</b>                 | <b>33.5</b>                 |
| Passive Domestic Equity Benchmark        | 21.5%                       | 12.5                        | 0.5                         | 12.6                        | 33.6                        |
| Excess                                   | -0.2%                       | 0.1                         | 0.0                         | 0.0                         | -0.0                        |

(1) The current Passive Manager Benchmark is the Russell 3000. For historical benchmark details please refer to the addendum of this report.

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# International Equity

## June 30, 2018



|  | <u>Ending Market Value</u> | <u>Portfolio Weight</u> | <u>Last Qtr</u> | <u>Fiscal YTD</u> | <u>1 Year</u> | <u>3 Year</u> | <u>5 Year</u> | <u>10 Year</u> | <u>Since Inception</u> | <u>Inception Date</u> |
|--|----------------------------|-------------------------|-----------------|-------------------|---------------|---------------|---------------|----------------|------------------------|-----------------------|
| <b>Total International Equity</b>                |                            |                         |                 |                   |               |               |               |                |                        |                       |
| <b>DEVELOPED MARKETS (1)</b>                     | <b>\$10,091,941,311</b>    | <b>75.8%</b>            | <b>-0.4%</b>    | <b>7.8%</b>       | <b>7.8%</b>   | <b>5.3%</b>   | <b>6.9%</b>   | <b>3.4%</b>    |                        |                       |
| BENCHMARK DM                                     |                            |                         | -0.7            | 7.0               | 7.0           | 4.9           | 6.2           | 2.6            |                        |                       |
| Excess   |                            |                         | 0.4             | 0.7               | 0.7           | 0.4           | 0.7           | 0.7            |                        |                       |
| <b>EMERGING MARKETS (2)</b>                      | <b>3,218,923,800</b>       | <b>24.2</b>             | <b>-8.3</b>     | <b>6.8</b>        | <b>6.8</b>    | <b>5.1</b>    | <b>4.4</b>    | <b>1.8</b>     |                        |                       |
| BENCHMARK EM                                     |                            |                         | -8.0            | 8.2               | 8.2           | 5.6           | 5.0           | 2.3            |                        |                       |
| Excess   |                            |                         | -0.3            | -1.4              | -1.4          | -0.5          | -0.6          | -0.4           |                        |                       |
| TRANSITION AGGREGATE<br>INTERNATIONAL EQUITY (3) | 4,822,895                  | 0.0                     |                 |                   |               |               |               |                |                        |                       |
| <b>TOTAL INTERNATIONAL<br/>EQUITY (4)</b>        | <b>13,315,688,006</b>      | <b>100.0</b>            | <b>-2.4</b>     | <b>7.5</b>        | <b>7.5</b>    | <b>5.3</b>    | <b>6.4</b>    | <b>3.0</b>     | <b>6.6</b>             | <b>10/1992</b>        |
| International Equity Benchmark                   |                            |                         | -2.6            | 7.3               | 7.3           | 5.1           | 6.0           | 2.5            | 6.2                    | 10/1992               |
| Excess   |                            |                         | 0.2             | 0.2               | 0.2           | 0.2           | 0.4           | 0.5            | 0.5                    |                       |

(1) The current benchmark for Developed Markets, Benchmark DM, is the Standard (large + mid) MSCI World ex USA (net).

(2) The current benchmark for Emerging Markets, Benchmark EM, is the Standard (large + mid) MSCI Emerging Markets Free (net).

(3) The Transition Aggregate International Equity contains International Equity securities that are being transitioned to a different manager.

(4) Does not include impact of currency overlay on the passive EAFE portfolio from 12/1/95-10/31/00. This impact is included in the return for the Combined Funds portion of the International Equity portfolio. The current International Equity Benchmark is the Standard (large + mid) MSCI ACWI ex U.S. (net).

Note: All aggregates include the performance of terminated managers. For historical benchmark details please refer to the addendum of this report.



|  | <u>2017 Calendar Return</u> | <u>2016 Calendar Return</u> | <u>2015 Calendar Return</u> | <u>2014 Calendar Return</u> | <u>2013 Calendar Return</u> |
|--|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| <b>Total International Equity</b>                |                             |                             |                             |                             |                             |
| <b>DEVELOPED MARKETS (1)</b>                     | <b>24.9%</b>                | <b>1.3%</b>                 | <b>-0.3%</b>                | <b>-4.1%</b>                | <b>23.3%</b>                |
| BENCHMARK DM                                     | 24.2                        | 2.7                         | -3.0                        | -4.3                        | 21.0                        |
| Excess   | 0.7                         | -1.5                        | 2.8                         | 0.2                         | 2.2                         |
| <b>EMERGING MARKETS (2)</b>                      | <b>37.7</b>                 | <b>7.5</b>                  | <b>-13.1</b>                | <b>-3.8</b>                 | <b>0.2</b>                  |
| BENCHMARK EM                                     | 37.3                        | 11.2                        | -14.9                       | -2.2                        | -2.6                        |
| Excess   | 0.4                         | -3.7                        | 1.9                         | -1.6                        | 2.9                         |
| TRANSITION AGGREGATE<br>INTERNATIONAL EQUITY (3) |                             |                             |                             |                             |                             |
| <b>TOTAL INTERNATIONAL EQUITY (4)</b>            | <b>27.6%</b>                | <b>2.6</b>                  | <b>-2.9</b>                 | <b>-4.0</b>                 | <b>17.8</b>                 |
| International Equity Benchmark                   | 27.2%                       | 4.5                         | -5.7                        | -3.9                        | 15.3                        |
| Excess   | 0.4%                        | -1.8                        | 2.8                         | -0.2                        | 2.5                         |

(1) The current benchmark for Developed Markets, Benchmark DM, is the Standard (large + mid) MSCI World ex USA (net).

(2) The current benchmark for Emerging Markets, Benchmark EM, is the Standard (large + mid) MSCI Emerging Markets Free (net).

(3) The Transition Aggregate International Equity contains International Equity securities that are being transitioned to a different manager.

(4) Does not include impact of currency overlay on the passive EAFE portfolio from 12/1/95-10/31/00. This impact is included in the return for the Combined Funds portion of the International Equity portfolio. The current International Equity Benchmark is the Standard (large + mid) MSCI ACWI ex U.S. (net).

Note: All aggregates include the performance of terminated managers. For historical benchmark details please refer to the addendum of this report.



|   | <u>Ending Market Value</u> | <u>Portfolio Weight</u> | <u>Last Qtr</u> | <u>Fiscal YTD</u> | <u>1 Year</u> | <u>3 Year</u> | <u>5 Year</u> | <u>10 Year</u> | <u>Since Inception</u> | <u>Inception Date</u> |
|---|----------------------------|-------------------------|-----------------|-------------------|---------------|---------------|---------------|----------------|------------------------|-----------------------|
| <b>Active Developed Markets</b>               |                            |                         |                 |                   |               |               |               |                |                        |                       |
| <b>ACADIAN</b>                                | <b>\$452,616,172</b>       | <b>3.4%</b>             | <b>0.8%</b>     | <b>13.5%</b>      | <b>13.5%</b>  | <b>13.4%</b>  | <b>12.1%</b>  | <b>4.5%</b>    | <b>7.2%</b>            | <b>07/2005</b>        |
| BENCHMARK DM                                  |                            |                         | -0.7            | 7.0               | 7.0           | 4.9           | 6.2           | 2.6            | 5.1                    | 07/2005               |
| Excess  |                            |                         | 1.6             | 6.5               | 6.5           | 8.5           | 5.9           | 1.9            | 2.1                    |                       |
| <b>COLUMBIA</b>                               | <b>347,277,699</b>         | <b>2.6</b>              | <b>-0.4</b>     | <b>12.8</b>       | <b>12.8</b>   | <b>6.2</b>    | <b>7.8</b>    | <b>4.5</b>     | <b>3.1</b>             | <b>03/2000</b>        |
| BENCHMARK DM                                  |                            |                         | -0.7            | 7.0               | 7.0           | 4.9           | 6.2           | 2.6            | 3.5                    | 03/2000               |
| Excess  |                            |                         | 0.4             | 5.8               | 5.8           | 1.3           | 1.6           | 1.9            | -0.4                   |                       |
| <b>FIDELITY</b>                               | <b>431,061,143</b>         | <b>3.2</b>              | <b>0.5</b>      | <b>9.1</b>        | <b>9.1</b>    | <b>5.9</b>    | <b>7.0</b>    | <b>4.1</b>     | <b>6.7</b>             | <b>07/2005</b>        |
| BENCHMARK DM                                  |                            |                         | -0.7            | 7.0               | 7.0           | 4.9           | 6.2           | 2.6            | 5.1                    | 07/2005               |
| Excess  |                            |                         | 1.2             | 2.1               | 2.1           | 1.0           | 0.8           | 1.4            | 1.6                    |                       |
| <b>JP MORGAN</b>                              | <b>259,578,530</b>         | <b>1.9</b>              | <b>-1.2</b>     | <b>8.4</b>        | <b>8.4</b>    | <b>5.3</b>    | <b>6.3</b>    | <b>3.6</b>     | <b>5.3</b>             | <b>07/2005</b>        |
| BENCHMARK DM                                  |                            |                         | -0.7            | 7.0               | 7.0           | 4.9           | 6.2           | 2.6            | 5.1                    | 07/2005               |
| Excess  |                            |                         | -0.5            | 1.4               | 1.4           | 0.4           | 0.1           | 1.0            | 0.2                    |                       |
| <b>MARATHON</b>                               | <b>831,854,462</b>         | <b>6.2</b>              | <b>1.1</b>      | <b>7.3</b>        | <b>7.3</b>    | <b>5.6</b>    | <b>7.9</b>    | <b>5.4</b>     | <b>8.3</b>             | <b>11/1993</b>        |
| BENCHMARK DM                                  |                            |                         | -0.7            | 7.0               | 7.0           | 4.9           | 6.2           | 2.6            | 5.2                    | 11/1993               |
| Excess  |                            |                         | 1.8             | 0.2               | 0.2           | 0.7           | 1.6           | 2.8            | 3.1                    |                       |
| <b>MCKINLEY</b>                               | <b>266,441,965</b>         | <b>2.0</b>              | <b>0.7</b>      | <b>12.8</b>       | <b>12.8</b>   | <b>4.7</b>    | <b>7.0</b>    | <b>1.7</b>     | <b>5.1</b>             | <b>07/2005</b>        |
| BENCHMARK DM                                  |                            |                         | -0.7            | 7.0               | 7.0           | 4.9           | 6.2           | 2.6            | 5.1                    | 07/2005               |
| Excess  |                            |                         | 1.5             | 5.8               | 5.8           | -0.2          | 0.8           | -1.0           | -0.0                   |                       |
| <b>ACTIVE DEVELOPED MARKETS<br/>AGGREGATE</b> | <b>2,588,829,971</b>       | <b>19.4</b>             | <b>0.5</b>      | <b>10.2</b>       | <b>10.2</b>   | <b>6.8</b>    | <b>8.1</b>    | <b>4.4</b>     |                        |                       |
| BENCHMARK DM                                  |                            |                         | -0.7            | 7.0               | 7.0           | 4.9           | 6.2           | 2.6            |                        |                       |
| Excess  |                            |                         | 1.2             | 3.2               | 3.2           | 2.0           | 1.9           | 1.7            |                        |                       |





|   | <u>2017 Calendar Return</u> | <u>2016 Calendar Return</u> | <u>2015 Calendar Return</u> | <u>2014 Calendar Return</u> | <u>2013 Calendar Return</u> |
|---|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| <b>Active Developed Markets</b>               |                             |                             |                             |                             |                             |
| <b>ACADIAN</b>                                | <b>37.0%</b>                | <b>8.1%</b>                 | <b>2.4%</b>                 | <b>-1.7%</b>                | <b>26.1%</b>                |
| BENCHMARK DM                                  | 24.2                        | 2.7                         | -3.0                        | -4.3                        | 21.0                        |
| Excess  | 12.8                        | 5.4                         | 5.4                         | 2.6                         | 5.1                         |
| <b>COLUMBIA</b>                               | <b>32.7</b>                 | <b>-5.6</b>                 | <b>6.4</b>                  | <b>-5.6</b>                 | <b>23.9</b>                 |
| BENCHMARK DM                                  | 24.2                        | 2.7                         | -3.0                        | -4.3                        | 21.0                        |
| Excess  | 8.5                         | -8.3                        | 9.4                         | -1.2                        | 2.9                         |
| <b>FIDELITY</b>                               | <b>25.9</b>                 | <b>1.2</b>                  | <b>0.1</b>                  | <b>-5.6</b>                 | <b>26.7</b>                 |
| BENCHMARK DM                                  | 24.2                        | 2.7                         | -3.0                        | -4.3                        | 21.0                        |
| Excess  | 1.7                         | -1.5                        | 3.2                         | -1.3                        | 5.7                         |
| <b>JP MORGAN</b>                              | <b>28.3</b>                 | <b>4.0</b>                  | <b>-4.7</b>                 | <b>-5.1</b>                 | <b>19.5</b>                 |
| BENCHMARK DM                                  | 24.2                        | 2.7                         | -3.0                        | -4.3                        | 21.0                        |
| Excess  | 4.1                         | 1.2                         | -1.6                        | -0.7                        | -1.5                        |
| <b>MARATHON</b>                               | <b>23.1</b>                 | <b>-1.1</b>                 | <b>6.7</b>                  | <b>-4.0</b>                 | <b>28.5</b>                 |
| BENCHMARK DM                                  | 24.2                        | 2.7                         | -3.0                        | -4.3                        | 21.0                        |
| Excess  | -1.1                        | -3.8                        | 9.7                         | 0.3                         | 7.5                         |
| <b>MCKINLEY</b>                               | <b>28.5</b>                 | <b>-7.5</b>                 | <b>3.1</b>                  | <b>-2.7</b>                 | <b>28.0</b>                 |
| BENCHMARK DM                                  | 24.2                        | 2.7                         | -3.0                        | -4.3                        | 21.0                        |
| Excess  | 4.3                         | -10.2                       | 6.2                         | 1.6                         | 7.0                         |
| <b>ACTIVE DEVELOPED MARKETS<br/>AGGREGATE</b> | <b>28.4%</b>                | <b>-0.2</b>                 | <b>3.2</b>                  | <b>-4.1</b>                 | <b>25.4</b>                 |
| BENCHMARK DM                                  | 24.2%                       | 2.7                         | -3.0                        | -4.3                        | 21.0                        |
| Excess  | 4.2%                        | -3.0                        | 6.2                         | 0.2                         | 4.4                         |



|   | <u>Ending Market Value</u> | <u>Portfolio Weight</u> | <u>Last Qtr</u> | <u>Fiscal YTD</u> | <u>1 Year</u> | <u>3 Year</u> | <u>5 Year</u> | <u>10 Year</u> | <u>Since Inception</u> | <u>Inception Date</u> |
|---|----------------------------|-------------------------|-----------------|-------------------|---------------|---------------|---------------|----------------|------------------------|-----------------------|
| <b>Semi-Passive Developed Markets</b>           |                            |                         |                 |                   |               |               |               |                |                        |                       |
| AQR   | \$404,296,844              | 3.0%                    | -3.5%           | 4.4%              | 4.4%          | 4.9%          | 6.4%          | 3.4%           | 5.6%                   | 07/2005               |
| BENCHMARK DM                                    |                            |                         | -0.7            | 7.0               | 7.0           | 4.9           | 6.2           | 2.6            | 5.1                    | 07/2005               |
| Excess  |                            |                         | -2.8            | -2.6              | -2.6          | 0.0           | 0.2           | 0.7            | 0.5                    |                       |
| <br>  |                            |                         |                 |                   |               |               |               |                |                        |                       |
| <b>SEMI-PASSIVE DEVELOPED MARKETS AGGREGATE</b> | <b>404,296,844</b>         | <b>3.0</b>              | <b>-3.5</b>     | <b>2.7</b>        | <b>2.7</b>    | <b>3.0</b>    | <b>5.6</b>    | <b>2.4</b>     |                        |                       |
| BENCHMARK DM                                    |                            |                         | -0.7            | 7.0               | 7.0           | 4.9           | 6.2           | 2.6            |                        |                       |
| Excess  |                            |                         | -2.8            | -4.3              | -4.3          | -1.8          | -0.6          | -0.2           |                        |                       |



|   | <u>2017 Calendar Return</u> | <u>2016 Calendar Return</u> | <u>2015 Calendar Return</u> | <u>2014 Calendar Return</u> | <u>2013 Calendar Return</u> |
|---|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| <b>Semi-Passive Developed Markets</b>           |                             |                             |                             |                             |                             |
| AQR   | 25.1%                       | 0.8%                        | 0.9%                        | -4.4%                       | 24.1%                       |
| BENCHMARK DM                                    | 24.2                        | 2.7                         | -3.0                        | -4.3                        | 21.0                        |
| Excess  | 0.9                         | -2.0                        | 3.9                         | -0.1                        | 3.1                         |
| <br>  |                             |                             |                             |                             |                             |
| <b>SEMI-PASSIVE DEVELOPED MARKETS AGGREGATE</b> | <b>23.3%</b>                | <b>-0.4</b>                 | <b>-0.3</b>                 | <b>-4.4</b>                 | <b>24.0</b>                 |
| BENCHMARK DM                                    | 24.2%                       | 2.7                         | -3.0                        | -4.3                        | 21.0                        |
| Excess  | -0.9%                       | -3.1                        | 2.7                         | -0.1                        | 3.0                         |



|   | <u>Ending Market Value</u> | <u>Portfolio Weight</u> | <u>Last Qtr</u> | <u>Fiscal YTD</u> | <u>1 Year</u> | <u>3 Year</u> | <u>5 Year</u> | <u>10 Year</u> | <u>Since Inception</u> | <u>Inception Date</u> |
|---|----------------------------|-------------------------|-----------------|-------------------|---------------|---------------|---------------|----------------|------------------------|-----------------------|
| <b>Total Developed Markets</b>                  |                            |                         |                 |                   |               |               |               |                |                        |                       |
| <b>ACTIVE DEVELOPED MARKETS AGGREGATE</b>       | <b>\$2,588,829,971</b>     | <b>19.4%</b>            | <b>0.5%</b>     | <b>10.2%</b>      | <b>10.2%</b>  | <b>6.8%</b>   | <b>8.1%</b>   | <b>4.4%</b>    |                        |                       |
| BENCHMARK DM                                    |                            |                         | -0.7            | 7.0               | 7.0           | 4.9           | 6.2           | 2.6            |                        |                       |
| Excess  |                            |                         | 1.2             | 3.2               | 3.2           | 2.0           | 1.9           | 1.7            |                        |                       |
| <b>SEMI-PASSIVE DEVELOPED MARKETS AGGREGATE</b> | <b>404,296,844</b>         | <b>3.0</b>              | <b>-3.5</b>     | <b>2.7</b>        | <b>2.7</b>    | <b>3.0</b>    | <b>5.6</b>    | <b>2.4</b>     |                        |                       |
| BENCHMARK DM                                    |                            |                         | -0.7            | 7.0               | 7.0           | 4.9           | 6.2           | 2.6            |                        |                       |
| Excess  |                            |                         | -2.8            | -4.3              | -4.3          | -1.8          | -0.6          | -0.2           |                        |                       |
| <b>SSgA DEVELOPED MARKETS PASSIVE</b>           | <b>7,098,814,495</b>       | <b>53.3</b>             | <b>-0.5</b>     | <b>7.3</b>        | <b>7.3</b>    | <b>5.3</b>    | <b>6.7</b>    | <b>3.0</b>     | <b>6.3</b>             | <b>10/1992</b>        |
| BENCHMARK DM                                    |                            |                         | -0.7            | 7.0               | 7.0           | 4.9           | 6.2           | 2.6            | 6.0                    | 10/1992               |
| Excess  |                            |                         | 0.3             | 0.3               | 0.3           | 0.4           | 0.4           | 0.4            | 0.3                    |                       |
| <b>DEVELOPED MARKETS TOTAL</b>                  | <b>10,091,941,311</b>      | <b>75.8</b>             | <b>-0.4</b>     | <b>7.8</b>        | <b>7.8</b>    | <b>5.3</b>    | <b>6.9</b>    | <b>3.4</b>     |                        |                       |
| BENCHMARK DM                                    |                            |                         | -0.7            | 7.0               | 7.0           | 4.9           | 6.2           | 2.6            |                        |                       |
| Excess  |                            |                         | 0.4             | 0.7               | 0.7           | 0.4           | 0.7           | 0.7            |                        |                       |



|   | <u>2017 Calendar Return</u> | <u>2016 Calendar Return</u> | <u>2015 Calendar Return</u> | <u>2014 Calendar Return</u> | <u>2013 Calendar Return</u> |
|---|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| <b>Total Developed Markets</b>                  |                             |                             |                             |                             |                             |
| <b>ACTIVE DEVELOPED MARKETS AGGREGATE</b>       | <b>28.4%</b>                | <b>-0.2%</b>                | <b>3.2%</b>                 | <b>-4.1%</b>                | <b>25.4%</b>                |
| BENCHMARK DM                                    | 24.2                        | 2.7                         | -3.0                        | -4.3                        | 21.0                        |
| Excess  | 4.2                         | -3.0                        | 6.2                         | 0.2                         | 4.4                         |
| <b>SEMI-PASSIVE DEVELOPED MARKETS AGGREGATE</b> | <b>23.3</b>                 | <b>-0.4</b>                 | <b>-0.3</b>                 | <b>-4.4</b>                 | <b>24.0</b>                 |
| BENCHMARK DM                                    | 24.2                        | 2.7                         | -3.0                        | -4.3                        | 21.0                        |
| Excess  | -0.9                        | -3.1                        | 2.7                         | -0.1                        | 3.0                         |
| <b>SSgA DEVELOPED MARKETS PASSIVE</b>           | <b>24.7%</b>                | <b>3.2</b>                  | <b>-2.6</b>                 | <b>-3.9</b>                 | <b>21.4</b>                 |
| BENCHMARK DM                                    | 24.2%                       | 2.7                         | -3.0                        | -4.3                        | 21.0                        |
| Excess  | 0.5%                        | 0.4                         | 0.5                         | 0.4                         | 0.4                         |
| <b>DEVELOPED MARKETS TOTAL</b>                  | <b>24.9%</b>                | <b>1.3</b>                  | <b>-0.3</b>                 | <b>-4.1</b>                 | <b>23.3</b>                 |
| BENCHMARK DM                                    | 24.2%                       | 2.7                         | -3.0                        | -4.3                        | 21.0                        |
| Excess  | 0.7%                        | -1.5                        | 2.8                         | 0.2                         | 2.2                         |



|                                | <u>Ending Market Value</u> | <u>Portfolio Weight</u> | <u>Last Qtr</u> | <u>Fiscal YTD</u> | <u>1 Year</u> | <u>3 Year</u> | <u>5 Year</u> | <u>10 Year</u> | <u>Since Inception</u> | <u>Inception Date</u> |
|--------------------------------|----------------------------|-------------------------|-----------------|-------------------|---------------|---------------|---------------|----------------|------------------------|-----------------------|
| <b>Active Emerging Markets</b> |                            |                         |                 |                   |               |               |               |                |                        |                       |
| <b>EARNEST PARTNERS</b>        | <b>\$294,013,073</b>       | <b>2.2%</b>             | <b>-10.6%</b>   | <b>3.3%</b>       | <b>3.3%</b>   |               |               |                | <b>9.2%</b>            | <b>04/2017</b>        |
| MSCI EMERGING MARKETS          |                            |                         | -8.0            | 8.2               | 8.2           |               |               |                | 11.8                   | 04/2017               |
| Excess                         |                            |                         | -2.7            | -4.9              | -4.9          |               |               |                | -2.7                   |                       |
| <b>MARTIN CURRIE</b>           | <b>337,146,705</b>         | <b>2.5</b>              | <b>-6.3</b>     | <b>14.5</b>       | <b>14.5</b>   |               |               |                | <b>19.3</b>            | <b>04/2017</b>        |
| BENCHMARK EM                   |                            |                         | -8.0            | 8.2               | 8.2           |               |               |                | 11.8                   | 04/2017               |
| Excess                         |                            |                         | 1.7             | 6.3               | 6.3           |               |               |                | 7.4                    |                       |
| <b>MACQUARIE</b>               | <b>314,583,393</b>         | <b>2.4</b>              | <b>-6.5</b>     | <b>8.1</b>        | <b>8.1</b>    |               |               |                | <b>12.5</b>            | <b>04/2017</b>        |
| BENCHMARK EM                   |                            |                         | -8.0            | 8.2               | 8.2           |               |               |                | 11.8                   | 04/2017               |
| Excess                         |                            |                         | 1.5             | -0.1              | -0.1          |               |               |                | 0.7                    |                       |
| <b>MORGAN STANLEY</b>          | <b>597,481,355</b>         | <b>4.5</b>              | <b>-10.3</b>    | <b>3.3</b>        | <b>3.3</b>    | <b>4.7%</b>   | <b>4.4%</b>   | <b>2.6%</b>    | <b>9.7</b>             | <b>01/2001</b>        |
| BENCHMARK EM                   |                            |                         | -8.0            | 8.2               | 8.2           | 5.6           | 5.0           | 2.3            | 9.5                    | 01/2001               |
| Excess                         |                            |                         | -2.4            | -4.9              | -4.9          | -0.9          | -0.6          | 0.3            | 0.2                    |                       |
| <b>NEUBERGER BERMAN</b>        | <b>318,332,098</b>         | <b>2.4</b>              | <b>-7.9</b>     | <b>10.0</b>       | <b>10.0</b>   |               |               |                | <b>13.8</b>            | <b>04/2017</b>        |
| BENCHMARK EM                   |                            |                         | -8.0            | 8.2               | 8.2           |               |               |                | 11.8                   | 04/2017               |
| Excess                         |                            |                         | 0.1             | 1.8               | 1.8           |               |               |                | 1.9                    |                       |
| <b>PZENA</b>                   | <b>289,632,118</b>         | <b>2.2</b>              | <b>-7.2</b>     | <b>2.1</b>        | <b>2.1</b>    |               |               |                | <b>6.3</b>             | <b>04/2017</b>        |
| BENCHMARK EM                   |                            |                         | -8.0            | 8.2               | 8.2           |               |               |                | 11.8                   | 04/2017               |
| Excess                         |                            |                         | 0.7             | -6.1              | -6.1          |               |               |                | -5.5                   |                       |
| <b>ROCK CREEK</b>              | <b>297,329,810</b>         | <b>2.2</b>              | <b>-8.2</b>     | <b>5.0</b>        | <b>5.0</b>    |               |               |                | <b>8.4</b>             | <b>04/2017</b>        |
| BENCHMARK EM                   |                            |                         | -8.0            | 8.2               | 8.2           |               |               |                | 11.8                   | 04/2017               |
| Excess                         |                            |                         | -0.3            | -3.2              | -3.2          |               |               |                | -3.4                   |                       |



|                                | <u>2017 Calendar Return</u> | <u>2016 Calendar Return</u> | <u>2015 Calendar Return</u> | <u>2014 Calendar Return</u> | <u>2013 Calendar Return</u> |
|--------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| <b>Active Emerging Markets</b> |                             |                             |                             |                             |                             |
| <b>EARNEST PARTNERS</b>        |                             |                             |                             |                             |                             |
| MSCI EMERGING MARKETS          |                             |                             |                             |                             |                             |
| Excess                         |                             |                             |                             |                             |                             |
| <b>MARTIN CURRIE</b>           |                             |                             |                             |                             |                             |
| BENCHMARK EM                   |                             |                             |                             |                             |                             |
| Excess                         |                             |                             |                             |                             |                             |
| <b>MACQUARIE</b>               |                             |                             |                             |                             |                             |
| BENCHMARK EM                   |                             |                             |                             |                             |                             |
| Excess                         |                             |                             |                             |                             |                             |
| <b>MORGAN STANLEY</b>          | <b>37.9%</b>                | <b>6.1%</b>                 | <b>-9.4%</b>                | <b>-2.5%</b>                | <b>0.5%</b>                 |
| BENCHMARK EM                   | 37.3                        | 11.2                        | -14.9                       | -2.2                        | -2.6                        |
| Excess                         | 0.6                         | -5.1                        | 5.5                         | -0.3                        | 3.1                         |
| <b>NEUBERGER BERMAN</b>        |                             |                             |                             |                             |                             |
| BENCHMARK EM                   |                             |                             |                             |                             |                             |
| Excess                         |                             |                             |                             |                             |                             |
| <b>PZENA</b>                   |                             |                             |                             |                             |                             |
| BENCHMARK EM                   |                             |                             |                             |                             |                             |
| Excess                         |                             |                             |                             |                             |                             |
| <b>ROCK CREEK</b>              |                             |                             |                             |                             |                             |
| BENCHMARK EM                   |                             |                             |                             |                             |                             |
| Excess                         |                             |                             |                             |                             |                             |



|  | <u>Ending Market Value</u> | <u>Portfolio Weight</u> | <u>Last Qtr</u> | <u>Fiscal YTD</u> | <u>1 Year</u> | <u>3 Year</u> | <u>5 Year</u> | <u>10 Year</u> | <u>Since Inception</u> | <u>Inception Date</u> |
|--|----------------------------|-------------------------|-----------------|-------------------|---------------|---------------|---------------|----------------|------------------------|-----------------------|
| <b>Total Emerging Markets</b>            |                            |                         |                 |                   |               |               |               |                |                        |                       |
| <b>ACTIVE EMERGING MARKETS AGGREGATE</b> | \$2,448,518,552            | 18.4%                   | -8.4%           | 6.2%              | 6.2%          | 4.3%          | 3.8%          | 1.6%           |                        |                       |
| BENCHMARK EM                             |                            |                         | -8.0            | 8.2               | 8.2           | 5.6           | 5.0           | 2.3            |                        |                       |
| Excess                                   |                            |                         | -0.4            | -2.0              | -2.0          | -1.3          | -1.2          | -0.7           |                        |                       |
| <b>SSGA EMERGING MARKETS PASSIVE</b>     | 770,405,248                | 5.8                     | -7.9            | 8.2               | 8.2           | 5.7           | 5.2           |                | 5.0                    | 01/2012               |
| BENCHMARK EM                             |                            |                         | -8.0            | 8.2               | 8.2           | 5.6           | 5.0           |                | 4.9                    | 01/2012               |
| Excess                                   |                            |                         | 0.1             | -0.0              | -0.0          | 0.1           | 0.1           |                | 0.1                    |                       |
| <b>EMERGING MARKETS TOTAL</b>            | <b>3,218,923,800</b>       | <b>24.2</b>             | <b>-8.3</b>     | <b>6.8</b>        | <b>6.8</b>    | <b>5.1</b>    | <b>4.4</b>    | <b>1.8</b>     |                        |                       |
| BENCHMARK EM                             |                            |                         | -8.0            | 8.2               | 8.2           | 5.6           | 5.0           | 2.3            |                        |                       |
| Excess                                   |                            |                         | -0.3            | -1.4              | -1.4          | -0.5          | -0.6          | -0.4           |                        |                       |





|  | <u>2017 Calendar Return</u> | <u>2016 Calendar Return</u> | <u>2015 Calendar Return</u> | <u>2014 Calendar Return</u> | <u>2013 Calendar Return</u> |
|--|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| <b>Total Emerging Markets</b>            |                             |                             |                             |                             |                             |
| <b>ACTIVE EMERGING MARKETS AGGREGATE</b> | <b>37.2%</b>                | <b>5.3%</b>                 | <b>-12.7%</b>               | <b>-4.1%</b>                | <b>0.6%</b>                 |
| BENCHMARK EM                             | 37.3                        | 11.2                        | -14.9                       | -2.2                        | -2.6                        |
| Excess                                   | -0.1                        | -5.9                        | 2.2                         | -2.0                        | 3.2                         |
| <b>SSGA EMERGING MARKETS PASSIVE</b>     |                             |                             |                             |                             |                             |
| <b>SSGA EMERGING MARKETS PASSIVE</b>     | <b>37.4%</b>                | <b>11.1</b>                 | <b>-14.6</b>                | <b>-2.1</b>                 | <b>-2.5</b>                 |
| BENCHMARK EM                             | 37.3%                       | 11.2                        | -14.9                       | -2.2                        | -2.6                        |
| Excess                                   | 0.1%                        | -0.1                        | 0.3                         | 0.0                         | 0.1                         |
| <b>EMERGING MARKETS TOTAL</b>            |                             |                             |                             |                             |                             |
| <b>EMERGING MARKETS TOTAL</b>            | <b>37.7%</b>                | <b>7.5</b>                  | <b>-13.1</b>                | <b>-3.8</b>                 | <b>0.2</b>                  |
| BENCHMARK EM                             | 37.3%                       | 11.2                        | -14.9                       | -2.2                        | -2.6                        |
| Excess                                   | 0.4%                        | -3.7                        | 1.9                         | -1.6                        | 2.9                         |

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# Fixed Income

## June 30, 2018



|  | <u>Ending Market Value</u> | <u>Portfolio Weight</u> | <u>Last Qtr</u> | <u>Fiscal YTD</u> | <u>1 Year</u> | <u>3 Year</u> | <u>5 Year</u> | <u>10 Year</u> | <u>Since Inception</u> | <u>Inception Date</u> |
|--|----------------------------|-------------------------|-----------------|-------------------|---------------|---------------|---------------|----------------|------------------------|-----------------------|
| <b>Total Fixed Income</b>                  |                            |                         |                 |                   |               |               |               |                |                        |                       |
| <b>ACTIVE FIXED INCOME AGGREGATE</b>       | <b>\$5,495,207,171</b>     | <b>49.7%</b>            | <b>-0.1%</b>    | <b>0.4%</b>       | <b>0.4%</b>   | <b>2.7%</b>   | <b>3.1%</b>   | <b>4.7%</b>    |                        |                       |
| BBG BARC Agg (Dly)                         |                            |                         | -0.2            | -0.4              | -0.4          | 1.7           | 2.3           | 3.7            |                        |                       |
| Excess                                     |                            |                         | 0.1             | 0.8               | 0.8           | 0.9           | 0.8           | 1.0            |                        |                       |
| <b>SEMI PASSIVE FIXED INCOME AGGREGATE</b> | <b>5,565,016,233</b>       | <b>50.3</b>             | <b>-0.1</b>     | <b>-0.2</b>       | <b>-0.2</b>   | <b>1.9</b>    | <b>2.5</b>    | <b>4.1</b>     |                        |                       |
| BBG BARC Agg (Dly)                         |                            |                         | -0.2            | -0.4              | -0.4          | 1.7           | 2.3           | 3.7            |                        |                       |
| Excess                                     |                            |                         | 0.1             | 0.2               | 0.2           | 0.2           | 0.2           | 0.4            |                        |                       |
| TRANSITION AGGREGATE<br>FIXED INCOME (1)   | 18,174                     | 0.0                     |                 |                   |               |               |               |                |                        |                       |
| <b>TOTAL FIXED INCOME (2)</b>              | <b>11,060,241,579</b>      | <b>100.0</b>            | <b>-0.1</b>     | <b>0.1</b>        | <b>0.1</b>    | <b>2.3</b>    | <b>2.8</b>    | <b>4.4</b>     | <b>7.5</b>             | <b>07/1984</b>        |
| Fixed Income Benchmark                     |                            |                         | -0.2            | -0.4              | -0.4          | 1.7           | 2.3           | 3.7            | 7.1                    | 07/1984               |
| Excess                                     |                            |                         | 0.1             | 0.5               | 0.5           | 0.5           | 0.5           | 0.7            | 0.4                    |                       |

(1) The Transition Aggregate Fixed Income includes fixed income securities that are being transition to a different manager.

(2) The current Fixed Income Benchmark is the Bloomberg Barclays U.S. Aggregate calculated daily: BBG BARC Agg (Dly). For historical benchmark details please refer to the addendum of this report.

Note: All aggregates include the performance of terminated managers. Inception refers to the date of retention by the SBI.



|  | <u>2017 Calendar Return</u> | <u>2016 Calendar Return</u> | <u>2015 Calendar Return</u> | <u>2014 Calendar Return</u> | <u>2013 Calendar Return</u> |
|--|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| <b>Total Fixed Income</b>                  |                             |                             |                             |                             |                             |
| <b>ACTIVE FIXED INCOME AGGREGATE</b>       | <b>4.7%</b>                 | <b>4.4%</b>                 | <b>0.6%</b>                 | <b>6.2%</b>                 | <b>-0.8%</b>                |
| BBG BARC Agg (Dly)                         | 3.5                         | 2.6                         | 0.5                         | 6.0                         | -2.0                        |
| Excess                                     | 1.2                         | 1.7                         | 0.0                         | 0.2                         | 1.2                         |
| <b>SEMI PASSIVE FIXED INCOME AGGREGATE</b> | <b>3.7</b>                  | <b>2.8</b>                  | <b>0.8</b>                  | <b>6.1</b>                  | <b>-1.8</b>                 |
| BBG BARC Agg (Dly)                         | 3.5                         | 2.6                         | 0.5                         | 6.0                         | -2.0                        |
| Excess                                     | 0.2                         | 0.2                         | 0.2                         | 0.1                         | 0.2                         |
| TRANSITION AGGREGATE<br>FIXED INCOME (1)   |                             |                             |                             |                             |                             |
| <b>TOTAL FIXED INCOME (2)</b>              | <b>4.2%</b>                 | <b>3.6</b>                  | <b>0.7</b>                  | <b>6.1</b>                  | <b>-1.3</b>                 |
| Fixed Income Benchmark                     | 3.5%                        | 2.6                         | 0.5                         | 6.0                         | -2.0                        |
| Excess                                     | 0.7%                        | 0.9                         | 0.1                         | 0.2                         | 0.7                         |

(1) The Transition Aggregate Fixed Income includes fixed income securities that are being transition to a different manager.

(2) The current Fixed Income Benchmark is the Bloomberg Barclays U.S. Aggregate calculated daily: BBG BARC Agg (Dly). For historical benchmark details please refer to the addendum of this report.

Note: All aggregates include the performance of terminated managers. Inception refers to the date of retention by the SBI.



|                                      | <u>Ending Market Value</u> | <u>Portfolio Weight</u> | <u>Last Qtr</u> | <u>Fiscal YTD</u> | <u>1 Year</u> | <u>3 Year</u> | <u>5 Year</u> | <u>10 Year</u> | <u>Since Inception</u> | <u>Inception Date</u> |
|--------------------------------------|----------------------------|-------------------------|-----------------|-------------------|---------------|---------------|---------------|----------------|------------------------|-----------------------|
| <b>Active Fixed Income Managers</b>  |                            |                         |                 |                   |               |               |               |                |                        |                       |
| <b>COLUMBIA</b>                      | <b>\$1,169,333,831</b>     | <b>10.6%</b>            | <b>0.2%</b>     | <b>0.7%</b>       | <b>0.7%</b>   | <b>2.8%</b>   | <b>3.1%</b>   | <b>4.5%</b>    | <b>5.3%</b>            | <b>07/1993</b>        |
| BBG BARC Agg (Dly)                   |                            |                         | -0.2            | -0.4              | -0.4          | 1.7           | 2.3           | 3.7            | 5.1                    | 07/1993               |
| Excess                               |                            |                         | 0.3             | 1.1               | 1.1           | 1.1           | 0.9           | 0.8            | 0.2                    |                       |
| <b>DODGE &amp; COX</b>               | <b>1,655,889,421</b>       | <b>15.0</b>             | <b>-0.2</b>     | <b>0.6</b>        | <b>0.6</b>    | <b>2.7</b>    | <b>3.2</b>    | <b>5.1</b>     | <b>5.9</b>             | <b>02/2000</b>        |
| BBG BARC Agg (Dly)                   |                            |                         | -0.2            | -0.4              | -0.4          | 1.7           | 2.3           | 3.7            | 4.9                    | 02/2000               |
| Excess                               |                            |                         | -0.1            | 1.0               | 1.0           | 0.9           | 1.0           | 1.4            | 1.0                    |                       |
| <b>PIMCO</b>                         | <b>1,075,716,024</b>       | <b>9.7</b>              | <b>0.1</b>      | <b>0.2</b>        | <b>0.2</b>    | <b>2.0</b>    | <b>2.5</b>    |                | <b>5.3</b>             | <b>10/2008</b>        |
| BBG BARC Agg (Dly)                   |                            |                         | -0.2            | -0.4              | -0.4          | 1.7           | 2.3           |                | 3.9                    | 10/2008               |
| Excess                               |                            |                         | 0.2             | 0.6               | 0.6           | 0.3           | 0.2           |                | 1.4                    |                       |
| <b>WESTERN</b>                       | <b>1,594,267,896</b>       | <b>14.4</b>             | <b>-0.3</b>     | <b>0.4</b>        | <b>0.4</b>    | <b>3.1</b>    | <b>3.5</b>    | <b>5.1</b>     | <b>8.3</b>             | <b>07/1984</b>        |
| BBG BARC Agg (Dly)                   |                            |                         | -0.2            | -0.4              | -0.4          | 1.7           | 2.3           | 3.7            | 7.2                    | 07/1984               |
| Excess                               |                            |                         | -0.1            | 0.8               | 0.8           | 1.4           | 1.2           | 1.4            | 1.1                    |                       |
| <b>ACTIVE FIXED INCOME AGGREGATE</b> | <b>5,495,207,171</b>       | <b>49.7</b>             | <b>-0.1</b>     | <b>0.4</b>        | <b>0.4</b>    | <b>2.7</b>    | <b>3.1</b>    | <b>4.7</b>     |                        |                       |
| BBG BARC Agg (Dly)                   |                            |                         | -0.2            | -0.4              | -0.4          | 1.7           | 2.3           | 3.7            |                        |                       |
| Excess                               |                            |                         | 0.1             | 0.8               | 0.8           | 0.9           | 0.8           | 1.0            |                        |                       |



|                                      | <u>2017 Calendar Return</u> | <u>2016 Calendar Return</u> | <u>2015 Calendar Return</u> | <u>2014 Calendar Return</u> | <u>2013 Calendar Return</u> |
|--------------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| <b>Active Fixed Income Managers</b>  |                             |                             |                             |                             |                             |
| <b>COLUMBIA</b>                      | <b>4.8%</b>                 | <b>5.2%</b>                 | <b>0.2%</b>                 | <b>5.8%</b>                 | <b>-1.0%</b>                |
| BBG BARC Agg (Dly)                   | 3.5                         | 2.6                         | 0.5                         | 6.0                         | -2.0                        |
| Excess                               | 1.2                         | 2.6                         | -0.4                        | -0.2                        | 1.0                         |
| <b>DODGE &amp; COX</b>               |                             | <b>4.8</b>                  | <b>0.3</b>                  | <b>6.0</b>                  | <b>0.9</b>                  |
| BBG BARC Agg (Dly)                   | 3.5                         | 2.6                         | 0.5                         | 6.0                         | -2.0                        |
| Excess                               |                             | 2.2                         | -0.3                        | 0.0                         | 3.0                         |
| <b>PIMCO</b>                         | <b>4.4</b>                  | <b>2.8</b>                  | <b>1.0</b>                  | <b>5.5</b>                  | <b>-1.3</b>                 |
| BBG BARC Agg (Dly)                   | 3.5                         | 2.6                         | 0.5                         | 6.0                         | -2.0                        |
| Excess                               | 0.8                         | 0.2                         | 0.4                         | -0.4                        | 0.7                         |
| <b>WESTERN</b>                       | <b>5.6</b>                  | <b>4.9</b>                  | <b>0.7</b>                  | <b>7.0</b>                  | <b>-1.4</b>                 |
| BBG BARC Agg (Dly)                   | 3.5                         | 2.6                         | 0.5                         | 6.0                         | -2.0                        |
| Excess                               | 2.1                         | 2.2                         | 0.1                         | 1.0                         | 0.7                         |
| <b>ACTIVE FIXED INCOME AGGREGATE</b> | <b>4.7%</b>                 | <b>4.4</b>                  | <b>0.6</b>                  | <b>6.2</b>                  | <b>-0.8</b>                 |
| BBG BARC Agg (Dly)                   | 3.5%                        | 2.6                         | 0.5                         | 6.0                         | -2.0                        |
| Excess                               | 1.2%                        | 1.7                         | 0.0                         | 0.2                         | 1.2                         |



|   | <u>Ending Market Value</u> | <u>Portfolio Weight</u> | <u>Last Qtr</u> | <u>Fiscal YTD</u> | <u>1 Year</u> | <u>3 Year</u> | <u>5 Year</u> | <u>10 Year</u> | <u>Since Inception</u> | <u>Inception Date</u> |
|---|----------------------------|-------------------------|-----------------|-------------------|---------------|---------------|---------------|----------------|------------------------|-----------------------|
| <b>Semi Passive Fixed Income Managers</b> |                            |                         |                 |                   |               |               |               |                |                        |                       |
| <b>BLACKROCK</b>                          | <b>\$1,659,035,471</b>     | <b>15.0%</b>            | <b>-0.1%</b>    | <b>-0.4%</b>      | <b>-0.4%</b>  | <b>1.8%</b>   | <b>2.4%</b>   | <b>3.7%</b>    | <b>5.1%</b>            | <b>04/1996</b>        |
| BBG BARC Agg (Dly)                        |                            |                         | -0.2            | -0.4              | -0.4          | 1.7           | 2.3           | 3.7            | 5.1                    | 04/1996               |
| Excess                                    |                            |                         | 0.0             | 0.0               | 0.0           | 0.1           | 0.2           | -0.0           | 0.1                    |                       |
| <b>GOLDMAN SACHS</b>                      | <b>2,084,495,180</b>       | <b>18.8</b>             | <b>0.0</b>      | <b>0.0</b>        | <b>0.0</b>    | <b>2.0</b>    | <b>2.6</b>    | <b>4.2</b>     | <b>5.5</b>             | <b>07/1993</b>        |
| BBG BARC Agg (Dly)                        |                            |                         | -0.2            | -0.4              | -0.4          | 1.7           | 2.3           | 3.7            | 5.1                    | 07/1993               |
| Excess                                    |                            |                         | 0.2             | 0.4               | 0.4           | 0.3           | 0.3           | 0.5            | 0.3                    |                       |
| <b>NEUBERGER</b>                          | <b>1,821,485,583</b>       | <b>16.5</b>             | <b>-0.1</b>     | <b>-0.4</b>       | <b>-0.4</b>   | <b>1.8</b>    | <b>2.4</b>    | <b>4.3</b>     | <b>6.3</b>             | <b>07/1988</b>        |
| BBG BARC Agg (Dly)                        |                            |                         | -0.2            | -0.4              | -0.4          | 1.7           | 2.3           | 3.7            | 6.1                    | 07/1988               |
| Excess                                    |                            |                         | 0.0             | 0.0               | 0.0           | 0.1           | 0.1           | 0.6            | 0.2                    |                       |
| <b>SEMI PASSIVE FIXED INCOME</b>          | <b>5,565,016,233</b>       | <b>50.3</b>             | <b>-0.1</b>     | <b>-0.2</b>       | <b>-0.2</b>   | <b>1.9</b>    | <b>2.5</b>    | <b>4.1</b>     |                        |                       |
| BBG BARC Agg (Dly)                        |                            |                         | -0.2            | -0.4              | -0.4          | 1.7           | 2.3           | 3.7            |                        |                       |
| Excess                                    |                            |                         | 0.1             | 0.2               | 0.2           | 0.2           | 0.2           | 0.4            |                        |                       |





|   | <u>2017 Calendar Return</u> | <u>2016 Calendar Return</u> | <u>2015 Calendar Return</u> | <u>2014 Calendar Return</u> | <u>2013 Calendar Return</u> |
|---|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| <b>Semi Passive Fixed Income Managers</b> |                             |                             |                             |                             |                             |
| <b>BLACKROCK</b>                          | <b>3.7%</b>                 | <b>2.8%</b>                 | <b>0.9%</b>                 | <b>6.0%</b>                 | <b>-1.8%</b>                |
| BBG BARC Agg (Dly)                        | 3.5                         | 2.6                         | 0.5                         | 6.0                         | -2.0                        |
| Excess                                    | 0.1                         | 0.1                         | 0.3                         | 0.0                         | 0.2                         |
| <b>GOLDMAN SACHS</b>                      | <b>3.9</b>                  | <b>3.0</b>                  | <b>0.8</b>                  | <b>6.1</b>                  | <b>-1.7</b>                 |
| BBG BARC Agg (Dly)                        | 3.5                         | 2.6                         | 0.5                         | 6.0                         | -2.0                        |
| Excess                                    | 0.4                         | 0.3                         | 0.2                         | 0.1                         | 0.3                         |
| <b>NEUBERGER</b>                          | <b>3.6</b>                  | <b>2.7</b>                  | <b>0.7</b>                  | <b>6.1</b>                  | <b>-2.0</b>                 |
| BBG BARC Agg (Dly)                        | 3.5                         | 2.6                         | 0.5                         | 6.0                         | -2.0                        |
| Excess                                    | 0.0                         | 0.1                         | 0.2                         | 0.2                         | 0.1                         |
| <b>SEMI PASSIVE FIXED INCOME</b>          | <b>3.7%</b>                 | <b>2.8</b>                  | <b>0.8</b>                  | <b>6.1</b>                  | <b>-1.8</b>                 |
| BBG BARC Agg (Dly)                        | 3.5%                        | 2.6                         | 0.5                         | 6.0                         | -2.0                        |
| Excess                                    | 0.2%                        | 0.2                         | 0.2                         | 0.1                         | 0.2                         |

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# Treasuries

## June 30, 2018



|                               | <u>Ending Market Value</u> | <u>Portfolio Weight</u> | <u>Last Qtr</u> | <u>Fiscal YTD</u> | <u>1 Year</u> | <u>3 Year</u> | <u>5 Year</u> | <u>10 Year</u> | <u>Since Inception</u> | <u>Inception Date</u> |
|-------------------------------|----------------------------|-------------------------|-----------------|-------------------|---------------|---------------|---------------|----------------|------------------------|-----------------------|
| <b>Treasuries Managers</b>    |                            |                         |                 |                   |               |               |               |                |                        |                       |
| <b>BLACKROCK</b>              | <b>\$1,961,037,073</b>     | <b>33.4%</b>            | <b>0.1%</b>     |                   |               |               |               |                | <b>0.2%</b>            | <b>02/2018</b>        |
| BBG BARC 5Y + Us Tsy Idx      |                            |                         | 0.1             |                   |               |               |               |                | 0.3                    | 02/2018               |
| Excess                        |                            |                         | 0.0             |                   |               |               |               |                | -0.0                   |                       |
| <b>GOLDMAN SACHS</b>          | <b>1,948,915,608</b>       | <b>33.1</b>             | <b>0.1</b>      |                   |               |               |               |                | <b>0.3</b>             | <b>02/2018</b>        |
| BBG BARC 5Y + Us Tsy Idx      |                            |                         | 0.1             |                   |               |               |               |                | 0.3                    | 02/2018               |
| Excess                        |                            |                         | 0.1             |                   |               |               |               |                | 0.0                    |                       |
| <b>NEUBERGER</b>              | <b>1,970,070,483</b>       | <b>33.5</b>             | <b>0.1</b>      |                   |               |               |               |                | <b>0.2</b>             | <b>02/2018</b>        |
| BBG BARC 5Y + Us Tsy Idx      |                            |                         | 0.1             |                   |               |               |               |                | 0.3                    | 02/2018               |
| Excess                        |                            |                         | 0.0             |                   |               |               |               |                | -0.1                   |                       |
| TREASURIES TRANSITION ACCOUNT | 31,526                     | 0.0                     |                 |                   |               |               |               |                |                        | 03/2018               |
| <b>TOTAL TREASURIES</b>       | <b>5,880,054,690</b>       | <b>100.0</b>            | <b>0.2</b>      |                   |               |               |               |                | <b>0.3%</b>            | <b>02/2018</b>        |
| BBG BARC 5Y + Us Tsy Idx      |                            |                         | 0.1             |                   |               |               |               |                | 0.3%                   | 02/2018               |
| Excess                        |                            |                         | 0.2             |                   |               |               |               |                | -0.0%                  |                       |



2017 Calendar Return

2016 Calendar Return

2015 Calendar Return

2014 Calendar Return

2013 Calendar Return

**Treasuries Managers**

**BLACKROCK**

BBG BARC 5Y + Us Tsy Idx

Excess

**GOLDMAN SACHS**

BBG BARC 5Y + Us Tsy Idx

Excess

**NEUBERGER**

BBG BARC 5Y + Us Tsy Idx

Excess

**TOTAL TREASURIES**

BBG BARC 5Y + Us Tsy Idx

Excess

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# Private Markets

## June 30, 2018



## Combined Funds Asset Class Performance Summary

### Private Markets

|                 | <u>Last Qtr</u> | <u>FYTD</u> | <u>1 Year</u> | <u>3 Year</u> | <u>5 Year</u> | <u>10 Year</u> | <u>20 Year</u> | <u>25 year</u> | <u>30 year</u> |
|-----------------|-----------------|-------------|---------------|---------------|---------------|----------------|----------------|----------------|----------------|
| Private Markets | 2.4%            | 14.8%       | 14.8%         | 11.3%         | 12.0%         | 9.2%           | 12.1%          | 13.4%          | 12.2%          |
| Private Equity  | 2.5%            | 19.7%       | 19.7%         | 15.1%         | 15.5%         | 11.7%          | 12.7%          | 15.3%          |                |
| Private Credit  | 4.3             | 12.0        | 12.0          | 14.2          | 14.4          | 11.2           | 13.0           |                |                |
| Resources       | 0.7             | 4.3         | 4.3           | -0.3          | 0.9           | 4.9            | 13.8           | 14.7           |                |
| Real Estate     | 2.7             | 12.1        | 12.1          | 9.4           | 13.1          | 4.8            | 8.7            | 9.1            |                |

### Private Markets

The time-weighted rates of return for the Private Markets portfolio are shown here. Private Markets included Private Equity, Private Credit, Resources, and Real Estate. Some of the existing investments are relatively immature and returns may not be indicative of future results.

### Private Equity Investments

The objectives of the Private Equity portfolio, which may include leveraged buyouts, growth equity, venture capital and special situations, are to achieve attractive returns and to provide overall portfolio diversification to the total plan.

### Private Credit Investments

The objectives of the Private Credit portfolio, which may include mezzanine debt, direct lending, and other forms of non-investment grade fixed income instruments, are to achieve a high total return over a full market cycle and to provide some degree of downside protection and typically provide current income in the form of a coupon. In certain situations, investments in the Private Credit portfolio also provide an equity component of return in the form of warrants or re-organized equity.

### Resource Investments

The objectives of the Resources portfolio, which may include energy, infrastructure, and other hard assets, are to provide protection against the risks associated with inflation and to provide overall portfolio diversification to the total plan.

### Real Estate Investments

The objectives of the Real Estate portfolio, which may include core and non-core real estate investments, are to achieve attractive returns, preserve capital, provide protection against risks associated with inflation, and provide overall portfolio diversification to the total plan.

The SBI also monitors Private Markets performance using money-weighted return metrics such as Internal Rate of Return and Multiple of Invested Capital. For money-weighted return metrics please refer to the Combined Funds Performance Report.



Minnesota State Board of Investment  
- Alternative Investments -  
As of June 30, 2018

| Investment                                       | Total<br>Commitment | Total<br>Contributions | Market<br>Value | Distributions | Unfunded<br>Commitment | IRR<br>% | MOIC* | Period<br>Years |
|--|---------------------|------------------------|-----------------|---------------|------------------------|----------|-------|-----------------|
| <b>I. PRIVATE EQUITY</b>                         |                     |                        |                 |               |                        |          |       |                 |
| <b>Adams Street Partners</b>                     |                     |                        |                 |               |                        |          |       |                 |
| <i>Adams Street Global Secondary Fund 5</i>      | 100,000,000         | 76,529,750             | 63,209,755      | 26,434,531    | 23,470,250             | 6.34     | 1.17  | <b>6.04</b>     |
| <i>Adams Street Global Secondary Fund 6</i>      | 100,000,000         | 0                      | 120,748         | 0             | 100,000,000            | 0.00     | 0.00  | <b>1.25</b>     |
| <b>Advent International</b>                      |                     |                        |                 |               |                        |          |       |                 |
| <i>Advent International GPE VI</i>               | 50,000,000          | 52,993,313             | 23,954,720      | 84,135,574    | 0                      | 17.14    | 2.04  | <b>10.25</b>    |
| <i>Advent International GPE VII</i>              | 90,000,000          | 84,690,641             | 96,295,749      | 50,580,083    | 5,400,000              | 18.00    | 1.73  | <b>5.79</b>     |
| <i>Advent International GPE VIII</i>             | 100,000,000         | 49,150,000             | 51,185,154      | 0             | 50,850,000             | 4.07     | 1.04  | <b>2.40</b>     |
| <b>Affinity Ventures</b>                         |                     |                        |                 |               |                        |          |       |                 |
| <i>Affinity Ventures IV</i>                      | 4,000,000           | 4,000,000              | 649,643         | 1,541,970     | 0                      | -11.75   | 0.55  | <b>14.01</b>    |
| <i>Affinity Ventures V</i>                       | 5,000,000           | 5,000,000              | 2,310,985       | 1,706,245     | 0                      | -4.33    | 0.80  | <b>10.00</b>    |
| <b>APAX Partners</b>                             |                     |                        |                 |               |                        |          |       |                 |
| <i>Apax VIII - USD</i>                           | 200,000,000         | 207,707,702            | 224,508,143     | 65,764,103    | 28,571,096             | 12.70    | 1.40  | <b>5.32</b>     |
| <i>Apax IX - USD</i>                             | 150,000,000         | 66,417,205             | 69,448,213      | 1,422,626     | 85,005,421             | 9.44     | 1.07  | <b>2.11</b>     |
| <b>Asia Alternatives</b>                         |                     |                        |                 |               |                        |          |       |                 |
| <i>Asia Alternatives Capital Partners V</i>      | 99,000,000          | 4,144,162              | 3,001,830       | 75            | 94,861,948             | -33.39   | 0.72  | <b>1.00</b>     |
| <b>Banc Fund</b>                                 |                     |                        |                 |               |                        |          |       |                 |
| <i>Banc Fund VII</i>                             | 45,000,000          | 45,000,000             | 10,393,834      | 56,459,725    | 0                      | 3.73     | 1.49  | <b>13.25</b>    |
| <i>Banc Fund VIII</i>                            | 98,250,000          | 98,250,000             | 114,008,722     | 105,125,973   | 0                      | 14.95    | 2.23  | <b>10.19</b>    |
| <i>Banc Fund IX</i>                              | 107,205,932         | 107,205,932            | 128,704,366     | 8,912,229     | 0                      | 13.48    | 1.28  | <b>4.06</b>     |
| <i>Banc Fund X</i>                               | 150,000,000         | 3,937,091              | 3,937,091       | 0             | 146,062,909            | 0.00     | 1.00  | <b>0.16</b>     |
| <b>Blackstone Capital Partners</b>               |                     |                        |                 |               |                        |          |       |                 |
| <i>Blackstone Capital Partners IV</i>            | 70,000,000          | 84,375,218             | 6,703,721       | 193,288,642   | 1,916,968              | 37.03    | 2.37  | <b>15.98</b>    |
| <i>Blackstone Capital Partners V</i>             | 140,000,000         | 152,105,097            | 11,938,575      | 232,252,262   | 7,057,008              | 8.02     | 1.61  | <b>12.41</b>    |
| <i>Blackstone Capital Partners VI</i>            | 100,000,000         | 101,597,473            | 99,297,123      | 54,670,776    | 14,603,148             | 13.27    | 1.52  | <b>9.94</b>     |
| <i>Blackstone Capital Partners VII</i>           | 130,000,000         | 34,709,169             | 35,219,945      | 2,064,217     | 100,876,780            | 7.89     | 1.07  | <b>3.00</b>     |
| <b>Blackstone Strategic Partners (CSFB/ DLJ)</b> |                     |                        |                 |               |                        |          |       |                 |
| <i>Strategic Partners III VC</i>                 | 25,000,000          | 24,960,287             | 4,749,040       | 29,717,061    | 1,093,582              | 6.31     | 1.38  | <b>13.09</b>    |
| <i>Strategic Partners III-B</i>                  | 100,000,000         | 79,397,519             | 11,730,307      | 108,761,866   | 15,001,769             | 6.63     | 1.52  | <b>13.09</b>    |
| <i>Strategic Partners IV VC</i>                  | 40,500,000          | 40,736,722             | 11,762,657      | 49,906,788    | 2,725,533              | 9.32     | 1.51  | <b>10.27</b>    |

**Minnesota State Board of Investment**  
**- Alternative Investments -**  
**As of June 30, 2018**

| Investment                                     | Total<br>Commitment | Total<br>Contributions | Market<br>Value | Distributions | Unfunded<br>Commitment | IRR<br>% | MOIC* | Period<br>Years |
|--|---------------------|------------------------|-----------------|---------------|------------------------|----------|-------|-----------------|
| <i>Strategic Partners IV-B</i>                 | 100,000,000         | 98,811,961             | 16,140,268      | 138,175,704   | 17,990,668             | 12.49    | 1.56  | <b>10.04</b>    |
| <i>Strategic Partners V</i>                    | 100,000,000         | 82,986,695             | 28,296,584      | 105,612,041   | 39,074,454             | 19.91    | 1.61  | <b>6.87</b>     |
| <i>Strategic Partners VI</i>                   | 150,000,000         | 89,407,483             | 74,247,801      | 62,614,071    | 66,058,931             | 21.25    | 1.53  | <b>4.21</b>     |
| <i>Strategic Partners VII</i>                  | 150,000,000         | 73,965,318             | 85,054,565      | 6,304,121     | 82,901,524             | 41.13    | 1.24  | <b>1.52</b>     |
| <b>Bridgepoint</b>                             |                     |                        |                 |               |                        |          |       |                 |
| <i>Bridgepoint Europe VI</i>                   | 175,132,566         | 0                      | 0               | 0             | 175,132,566            | 0.00     | 0.00  | <b>0.28</b>     |
| <b>Brookfield Asset Management</b>             |                     |                        |                 |               |                        |          |       |                 |
| <i>Brookfield Capital Partners Fund IV</i>     | 100,000,000         | 73,214,965             | 99,973,679      | 60,275,581    | 39,852,369             | 72.53    | 2.19  | <b>2.80</b>     |
| <b>Cardinal Partners</b>                       |                     |                        |                 |               |                        |          |       |                 |
| <i>DSV Partners IV</i>                         | 10,000,000          | 10,000,000             | 31,015          | 39,196,082    | 0                      | 10.61    | 3.92  | <b>33.52</b>    |
| <b>Carlyle Group</b>                           |                     |                        |                 |               |                        |          |       |                 |
| <i>Carlyle Partners VII</i>                    | 150,000,000         | 0                      | 0               | 0             | 150,000,000            | 0.00     | 0.00  | <b>0.54</b>     |
| <b>Chicago Growth Partners (William Blair)</b> |                     |                        |                 |               |                        |          |       |                 |
| <i>William Blair Capital Partners VII</i>      | 50,000,000          | 48,150,000             | 966,033         | 69,201,191    | 1,650,000              | 8.60     | 1.46  | <b>17.32</b>    |
| <i>Chicago Growth Partners I</i>               | 50,000,000          | 52,441,998             | 3,538,485       | 54,532,745    | 300,000                | 2.32     | 1.11  | <b>12.94</b>    |
| <i>Chicago Growth Partners II</i>              | 60,000,000          | 58,347,626             | 4,714,742       | 120,959,703   | 1,652,374              | 19.90    | 2.15  | <b>10.31</b>    |
| <b>Court Square Capital Partners</b>           |                     |                        |                 |               |                        |          |       |                 |
| <i>Court Square Capital Partners</i>           | 100,000,000         | 80,927,616             | 360,386         | 182,160,766   | 185,289                | 28.92    | 2.26  | <b>16.56</b>    |
| <i>Court Square Capital Partners II</i>        | 175,000,000         | 167,834,915            | 44,105,252      | 269,770,708   | 17,601,260             | 13.28    | 1.87  | <b>11.82</b>    |
| <i>Court Square Capital Partners III</i>       | 175,000,000         | 132,474,390            | 99,723,389      | 68,388,660    | 53,307,461             | 12.53    | 1.27  | <b>6.08</b>     |
| <b>Crescendo</b>                               |                     |                        |                 |               |                        |          |       |                 |
| <i>Crescendo IV</i>                            | 101,500,000         | 103,101,226            | 10,680,230      | 43,048,440    | 0                      | -5.53    | 0.52  | <b>18.32</b>    |
| <b>CVC Capital Partners</b>                    |                     |                        |                 |               |                        |          |       |                 |
| <i>CVC European Equity Partners V</i>          | 133,983,803         | 153,750,518            | 42,442,468      | 222,905,205   | 1,667,541              | 15.31    | 1.73  | <b>10.27</b>    |
| <i>CVC Capital Partners VI</i>                 | 258,655,489         | 228,896,999            | 222,339,356     | 41,707,268    | 33,576,626             | 8.85     | 1.15  | <b>4.98</b>     |
| <b>Elevation Partners</b>                      |                     |                        |                 |               |                        |          |       |                 |
| <i>Elevation Partners</i>                      | 75,000,000          | 73,237,580             | 151,344         | 113,492,106   | 799,634                | 11.82    | 1.55  | <b>13.13</b>    |
| <b>Fox Paine &amp; Company</b>                 |                     |                        |                 |               |                        |          |       |                 |
| <i>Fox Paine Capital Fund II</i>               | 50,000,000          | 46,541,161             | 1,943           | 90,994,335    | 0                      | 18.88    | 1.96  | <b>18.01</b>    |
| <b>GHJM Marathon Fund</b>                      |                     |                        |                 |               |                        |          |       |                 |
| <i>TrailHead Fund</i>                          | 20,000,000          | 16,070,803             | 29,355,785      | 2,406,955     | 3,935,813              | 17.18    | 1.98  | <b>6.35</b>     |
| <b>Glouston Capital Partners**</b>             |                     |                        |                 |               |                        |          |       |                 |

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|--|---------------------|------------------------|-----------------|---------------|------------------------|----------|-------|-----------------|
| <i>Glouston Private Equity Opportunities Fund IV</i> | 5,337,098           | 4,327,981              | 1,644,870       | 3,065,487     | 1,090,000              | 4.27     | 1.09  | <b>3.50</b>     |
| <b>GS Capital Partners</b>                           |                     |                        |                 |               |                        |          |       |                 |
| <i>GS Capital Partners 2000</i>                      | 50,000,000          | 52,377,410             | 1,018           | 115,308,929   | 0                      | 23.49    | 2.20  | <b>17.84</b>    |
| <i>GS Capital Partners V</i>                         | 100,000,000         | 74,319,006             | 640,320         | 191,435,136   | 1,041,099              | 18.25    | 2.58  | <b>13.25</b>    |
| <i>GS Capital Partners VI</i>                        | 100,000,000         | 109,162,551            | 15,810,317      | 126,580,321   | 3,226,857              | 7.33     | 1.30  | <b>11.42</b>    |
| <i>GS Vintage VII</i>                                | 100,000,000         | 49,293,687             | 44,661,536      | 10,597,125    | 51,032,916             | 33.38    | 1.12  | <b>2.01</b>     |
| <i>West Street Capital Partners</i>                  | 150,000,000         | 33,750,000             | 30,148,200      | 0             | 116,250,000            | -12.20   | 0.89  | <b>1.53</b>     |
| <b>GTCR</b>  |                     |                        |                 |               |                        |          |       |                 |
| <i>GTCR IX</i>                                       | 75,000,000          | 71,414,933             | 7,803,673       | 119,144,001   | 3,585,067              | 13.57    | 1.78  | <b>12.01</b>    |
| <i>GTCR X</i>  | 100,000,000         | 103,577,386            | 31,373,531      | 174,605,060   | 6,751,396              | 21.72    | 1.99  | <b>7.56</b>     |
| <i>GTCR Fund XI</i>                                  | 110,000,000         | 93,774,367             | 86,097,590      | 45,474,063    | 16,741,556             | 20.06    | 1.40  | <b>4.62</b>     |
| <b>HarbourVest**</b>                                 |                     |                        |                 |               |                        |          |       |                 |
| <i>Dover Street VII</i>                              | 2,198,112           | 2,071,558              | 538,661         | 1,429,588     | 132,416                | -2.77    | 0.95  | <b>3.50</b>     |
| <i>HarbourVest Intl PE Partners V</i>                | 3,527,413           | 3,343,761              | 1,045,589       | 3,158,205     | 186,808                | 13.05    | 1.26  | <b>3.50</b>     |
| <i>Harbourvest Intl PE Partners VI</i>               | 4,243,695           | 3,917,536              | 3,793,620       | 1,808,914     | 326,914                | 15.98    | 1.43  | <b>3.50</b>     |
| <i>HarbourVest Partners VIII Buyout</i>              | 4,506,711           | 4,298,488              | 2,011,834       | 3,645,793     | 234,000                | 14.60    | 1.32  | <b>3.50</b>     |
| <i>HarbourVest Partners VIII Venture</i>             | 7,190,898           | 7,079,986              | 4,314,029       | 4,325,427     | 140,000                | 8.33     | 1.22  | <b>3.50</b>     |
| <b>Hellman &amp; Friedman</b>                        |                     |                        |                 |               |                        |          |       |                 |
| <i>Hellman &amp; Friedman Capital Partners V</i>     | 160,000,000         | 146,165,961            | 2,770,068       | 387,466,707   | 8,070,303              | 27.90    | 2.67  | <b>13.59</b>    |
| <i>Hellman &amp; Friedman Capital Partners VI</i>    | 175,000,000         | 171,037,755            | 13,730,940      | 307,008,677   | 5,084,864              | 13.11    | 1.88  | <b>11.26</b>    |
| <i>Hellman &amp; Friedman Capital Partners VII</i>   | 50,000,000          | 49,658,251             | 64,844,075      | 47,996,954    | 2,444,104              | 24.05    | 2.27  | <b>9.20</b>     |
| <b>IK Investment Partners</b>                        |                     |                        |                 |               |                        |          |       |                 |
| <i>IK Fund VII</i>                                   | 180,542,990         | 174,772,091            | 162,925,340     | 67,809,109    | 8,334,068              | 9.54     | 1.32  | <b>4.80</b>     |
| <i>IK Fund VIII</i>                                  | 174,011,411         | 67,753,771             | 69,650,757      | 2,213,957     | 108,403,543            | 5.70     | 1.06  | <b>1.95</b>     |
| <b>Kohlberg Kravis Roberts</b>                       |                     |                        |                 |               |                        |          |       |                 |
| <i>KKR Millennium Fund</i>                           | 200,000,000         | 205,167,570            | 6,047,399       | 418,702,397   | 0                      | 16.36    | 2.07  | <b>15.57</b>    |
| <i>KKR 2006 Fund</i>                                 | 200,000,000         | 218,993,927            | 55,424,394      | 302,036,488   | 3,360,223              | 8.46     | 1.63  | <b>11.76</b>    |
| <i>KKR Americas Fund XII</i>                         | 150,000,000         | 21,752,873             | 21,786,798      | 0             | 128,805,235            | 0.32     | 1.00  | <b>2.33</b>     |
| <i>KKR Asian Fund III</i>                            | 100,000,000         | 7,021,357              | 5,374,842       | 0             | 92,978,643             | -23.60   | 0.77  | <b>1.25</b>     |
| <b>Leonard Green &amp; Partners</b>                  |                     |                        |                 |               |                        |          |       |                 |
| <i>Green Equity Investors VI</i>                     | 200,000,000         | 214,505,390            | 189,789,935     | 124,831,654   | 21,248,883             | 14.39    | 1.47  | <b>6.30</b>     |
| <b>Lexington Capital Partners</b>                    |                     |                        |                 |               |                        |          |       |                 |

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|--|---------------------|------------------------|-----------------|---------------|------------------------|----------|-------|-----------------|
| <i>Lexington Capital Partners VI-B</i>       | 100,000,000         | 98,374,022             | 12,320,747      | 132,739,841   | 1,634,703              | 7.97     | 1.47  | <b>12.52</b>    |
| <i>Lexington Capital Partners VII</i>        | 200,000,000         | 170,805,743            | 66,866,254      | 201,733,861   | 38,808,437             | 15.25    | 1.57  | <b>9.47</b>     |
| <i>Lexington Capital Partners VIII</i>       | 150,000,000         | 86,529,088             | 85,708,857      | 34,790,171    | 74,156,120             | 27.92    | 1.39  | <b>4.33</b>     |
| <i>Lexington Co-Investment Partners IV</i>   | 200,000,000         | 55,721,101             | 55,521,134      | 2,810,160     | 147,089,059            | 7.47     | 1.05  | <b>1.91</b>     |
| <i>Lexington Middle Market Investors IV</i>  | 100,000,000         | 0                      | 0               | 1,458,011     | 100,000,000            | 0.00     | 0.00  | <b>1.52</b>     |
| <b>Madison Dearborn Capital Partners</b>     |                     |                        |                 |               |                        |          |       |                 |
| <i>Madison Dearborn Capital Partners VII</i> | 100,000,000         | 39,470,210             | 41,359,654      | 1,105,589     | 61,607,581             | 5.83     | 1.08  | <b>2.53</b>     |
| <b>Neuberger Berman</b>                      |                     |                        |                 |               |                        |          |       |                 |
| <i>Dyal Capital Partners III</i>             | 175,000,000         | 135,874,180            | 79,460,945      | 78,006,913    | 115,468,788            | 26.52    | 1.16  | <b>3.20</b>     |
| <i>Dyal Capital Partners IV</i>              | 250,000,000         | 12,500,000             | 12,500,000      | 0             | 237,500,000            | 0.00     | 1.00  | <b>0.23</b>     |
| <b>Nordic Capital</b>                        |                     |                        |                 |               |                        |          |       |                 |
| <i>Nordic Capital Fund VIII</i>              | 181,859,787         | 184,858,192            | 185,645,281     | 58,635,734    | 11,473,248             | 13.41    | 1.32  | <b>4.80</b>     |
| <b>North Sky Capital**</b>                   |                     |                        |                 |               |                        |          |       |                 |
| <i>North Sky Capital LBO Fund III</i>        | 1,070,259           | 720,259                | 399,340         | 605,324       | 350,000                | 15.77    | 1.39  | <b>3.50</b>     |
| <i>North Sky Capital Venture Fund III</i>    | 1,384,080           | 1,277,830              | 377,611         | 1,170,992     | 106,250                | 10.07    | 1.21  | <b>3.50</b>     |
| <b>Oak Hill Capital Management, Inc.</b>     |                     |                        |                 |               |                        |          |       |                 |
| <i>Oak Hill Capital Partners IV</i>          | 150,000,000         | 58,545,326             | 50,379,828      | 13,130,886    | 104,531,216            | 35.99    | 1.08  | <b>1.56</b>     |
| <b>Paine &amp; Partners</b>                  |                     |                        |                 |               |                        |          |       |                 |
| <i>Paine &amp; Partners Capital Fund IV</i>  | 75,000,000          | 50,629,069             | 54,715,875      | 1,074,740     | 25,444,085             | 5.70     | 1.10  | <b>3.55</b>     |
| <b>Permira</b>                               |                     |                        |                 |               |                        |          |       |                 |
| <i>Permira V</i>                             | 178,282,056         | 168,414,797            | 174,126,521     | 58,994,423    | 28,433,702             | 11.53    | 1.38  | <b>4.50</b>     |
| <i>Permira VI</i>                            | 139,168,453         | 54,544,397             | 57,260,087      | 0             | 84,624,056             | 7.58     | 1.05  | <b>1.93</b>     |
| <b>Public Pension Capital Management</b>     |                     |                        |                 |               |                        |          |       |                 |
| <i>Public Pension Capital</i>                | 100,000,000         | 60,910,633             | 72,112,452      | 4,346,396     | 45,928,858             | 15.28    | 1.26  | <b>4.13</b>     |
| <b>RWI Ventures</b>                          |                     |                        |                 |               |                        |          |       |                 |
| <i>RWI Ventures I</i>                        | 7,603,265           | 7,603,265              | 482,970         | 6,094,262     | 0                      | -4.19    | 0.87  | <b>12.01</b>    |
| <b>Silver Lake Partners</b>                  |                     |                        |                 |               |                        |          |       |                 |
| <i>Silver Lake Partners II</i>               | 100,000,000         | 90,186,767             | 7,680,700       | 163,423,495   | 11,771,953             | 11.00    | 1.90  | <b>14.01</b>    |
| <i>Silver Lake Partners III</i>              | 100,000,000         | 91,667,586             | 50,653,505      | 152,928,327   | 10,559,311             | 19.09    | 2.22  | <b>11.26</b>    |
| <i>Silver Lake Partners IV</i>               | 100,000,000         | 101,177,382            | 118,028,178     | 33,436,237    | 13,000,047             | 23.60    | 1.50  | <b>5.76</b>     |
| <i>Silver Lake Partners V</i>                | 135,000,000         | 9,936,126              | 9,641,301       | 0             | 125,063,874            | -3.13    | 0.97  | <b>1.25</b>     |
| <b>Split Rock Partners</b>                   |                     |                        |                 |               |                        |          |       |                 |

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| <i>Split Rock Partners</i>                     | 50,000,000          | 47,890,906             | 6,469,807       | 56,816,177    | 2,109,094              | 3.47     | 1.32  | <b>13.17</b>    |
| <i>Split Rock Partners II</i>                  | 60,000,000          | 59,165,000             | 37,154,205      | 44,774,545    | 835,000                | 7.55     | 1.38  | <b>10.18</b>    |
| <b>Summit Partners</b>                         |                     |                        |                 |               |                        |          |       |                 |
| <i>Summit Partners Growth Equity Fund VIII</i> | 100,000,000         | 111,565,327            | 73,865,680      | 128,251,857   | 23,799,945             | 24.11    | 1.81  | <b>7.16</b>     |
| <i>Summit Partners Growth Equity Fund IX</i>   | 100,000,000         | 39,100,000             | 36,060,976      | 9,973,626     | 70,873,626             | 44.91    | 1.18  | <b>2.84</b>     |
| <b>Thoma Bravo</b>                             |                     |                        |                 |               |                        |          |       |                 |
| <i>Thoma Bravo Fund XII</i>                    | 75,000,000          | 49,660,554             | 50,278,144      | 2,298,018     | 27,708,699             | 5.09     | 1.06  | <b>1.81</b>     |
| <i>Thoma Bravo Fund XIII</i>                   | 150,000,000         | 0                      | 0               | 0             | 150,000,000            | 0.00     | 0.00  | <b>0.25</b>     |
| <b>Thoma Cressey</b>                           |                     |                        |                 |               |                        |          |       |                 |
| <i>Thoma Cressey Fund VII</i>                  | 50,000,000          | 50,000,000             | 843,884         | 106,625,069   | 0                      | 23.59    | 2.15  | <b>17.86</b>    |
| <i>Thoma Cressey Fund VIII</i>                 | 70,000,000          | 69,230,000             | 1,533,689       | 200,733,201   | 770,000                | 18.26    | 2.92  | <b>12.17</b>    |
| <b>Thomas H. Lee Partners</b>                  |                     |                        |                 |               |                        |          |       |                 |
| <i>Thomas H. Lee Equity Fund VII</i>           | 100,000,000         | 74,162,918             | 78,564,208      | 16,193,687    | 34,178,832             | 23.90    | 1.28  | <b>2.81</b>     |
| <i>Thomas H. Lee Equity Fund VIII</i>          | 150,000,000         | 0                      | 0               | 0             | 150,000,000            | 0.00     | 0.00  | <b>0.25</b>     |
| <b>Thomas, McNerney &amp; Partners</b>         |                     |                        |                 |               |                        |          |       |                 |
| <i>Thomas, McNerney &amp; Partners I</i>       | 30,000,000          | 30,000,000             | 3,032,158       | 15,087,143    | 0                      | -8.35    | 0.60  | <b>15.66</b>    |
| <i>Thomas, McNerney &amp; Partners II</i>      | 50,000,000          | 48,125,000             | 9,349,089       | 97,314,704    | 1,875,000              | 16.26    | 2.22  | <b>12.01</b>    |
| <b>TPG Capital</b>                             |                     |                        |                 |               |                        |          |       |                 |
| <i>TPG Partners VII</i>                        | 100,000,000         | 69,636,389             | 73,674,666      | 6,837,318     | 36,442,872             | 14.67    | 1.16  | <b>2.81</b>     |
| <b>Vestar Capital Partners</b>                 |                     |                        |                 |               |                        |          |       |                 |
| <i>Vestar Capital Partners IV</i>              | 55,000,000          | 55,652,024             | 743,605         | 102,249,550   | 57,313                 | 14.66    | 1.85  | <b>18.55</b>    |
| <i>Vestar Capital Partners V</i>               | 75,000,000          | 76,281,245             | 16,639,277      | 83,018,887    | 0                      | 3.91     | 1.31  | <b>12.54</b>    |
| <i>Vestar Capital Partners VI</i>              | 100,000,000         | 100,609,153            | 82,078,467      | 114,308,447   | 960,325                | 34.09    | 1.95  | <b>6.77</b>     |
| <i>Vestar Capital Partners VII</i>             | 150,000,000         | 982,609                | 982,609         | 0             | 149,017,391            | 0.00     | 1.00  | <b>0.54</b>     |
| <b>Warburg Pincus</b>                          |                     |                        |                 |               |                        |          |       |                 |
| <i>Warburg Pincus Equity Partners</i>          | 100,000,000         | 100,000,000            | 296,524         | 163,542,253   | 0                      | 10.03    | 1.64  | <b>20.02</b>    |
| <i>Warburg Pincus Private Equity VIII</i>      | 100,000,000         | 100,380,464            | 9,310,837       | 220,991,851   | 0                      | 14.80    | 2.29  | <b>16.22</b>    |
| <i>Warburg Pincus Private Equity IX</i>        | 100,000,000         | 100,000,000            | 9,080,687       | 165,914,136   | 0                      | 9.86     | 1.75  | <b>12.94</b>    |
| <i>Warburg Pincus Private Equity X</i>         | 150,000,000         | 150,000,000            | 68,943,894      | 164,660,202   | 0                      | 8.21     | 1.56  | <b>10.69</b>    |
| <i>Warburg Pincus Private Equity XI</i>        | 200,000,000         | 200,299,952            | 184,399,135     | 114,838,086   | 0                      | 13.72    | 1.49  | <b>5.53</b>     |
| <i>Warburg Pincus Private Equity XII</i>       | 131,000,000         | 69,757,500             | 76,110,264      | 1,925,700     | 61,242,500             | 9.63     | 1.12  | <b>2.61</b>     |
| <i>Warburg Pincus China</i>                    | 45,000,000          | 28,215,000             | 28,384,955      | 1,935,000     | 18,720,000             | 13.90    | 1.07  | <b>1.55</b>     |

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|--|-----------------------|------------------------|----------------------|----------------------|------------------------|--------------|-------|-----------------|
| <i>Warburg Pincus Financial Sector</i>           | 90,000,000            | 14,260,808             | 9,104,714            | 4,590,000            | 80,280,000             | -5.54        | 0.96  | <b>0.54</b>     |
| <b>Wellspring Capital Partners</b>               |                       |                        |                      |                      |                        |              |       |                 |
| <i>Wellspring Capital Partners VI</i>            | 125,000,000           | 6,372,571              | 4,480,963            | 0                    | 118,627,429            | -30.07       | 0.70  | <b>1.80</b>     |
| <b>Welsh, Carson, Anderson &amp; Stowe</b>       |                       |                        |                      |                      |                        |              |       |                 |
| <i>Welsh, Carson, Anderson &amp; Stowe X</i>     | 100,000,000           | 98,578,466             | 147,896              | 167,690,637          | 2,000,000              | 8.15         | 1.70  | <b>12.55</b>    |
| <i>Welsh, Carson, Anderson &amp; Stowe XI</i>    | 100,000,000           | 100,000,000            | 51,850,027           | 111,084,910          | 0                      | 12.68        | 1.63  | <b>9.95</b>     |
| <i>Welsh, Carson, Anderson &amp; Stowe XII</i>   | 150,000,000           | 90,421,217             | 99,825,280           | 17,723,566           | 59,578,783             | 17.57        | 1.30  | <b>3.53</b>     |
| <b>Windjammer Capital Investors</b>              |                       |                        |                      |                      |                        |              |       |                 |
| <i>Windjammer Mezzanine &amp; Equity Fund II</i> | 66,708,861            | 55,215,684             | 63,870               | 84,876,800           | 10,139,363             | 8.94         | 1.54  | <b>18.26</b>    |
| <i>Windjammer Senior Equity Fund III</i>         | 75,000,000            | 62,684,411             | 259,538              | 154,618,016          | 13,380,380             | 19.54        | 2.47  | <b>12.50</b>    |
| <i>Windjammer Senior Equity Fund IV</i>          | 100,000,000           | 78,741,414             | 87,191,590           | 12,600,533           | 29,180,469             | 8.07         | 1.27  | <b>6.35</b>     |
| <i>Windjammer Senior Equity Fund V</i>           | 100,000,000           | 0                      | 0                    | 0                    | 100,000,000            | 0.00         | 0.00  | <b>0.62</b>     |
| <i>Private Equity Total</i>                      | <b>12,231,862,879</b> | <b>8,419,340,717</b>   | <b>4,793,444,858</b> | <b>8,541,093,699</b> | <b>4,321,980,125</b>   | <b>12.46</b> | 1.57  |                 |
| <br><b>II. PRIVATE CREDIT</b>                    |                       |                        |                      |                      |                        |              |       |                 |
| <b>Audax Group</b>                               |                       |                        |                      |                      |                        |              |       |                 |
| <i>Audax Mezzanine Fund III</i>                  | 100,000,000           | 93,494,475             | 31,052,296           | 87,453,849           | 8,142,866              | 9.10         | 1.27  | <b>8.24</b>     |
| <i>Audax Mezzanine Fund IV</i>                   | 100,000,000           | 25,760,944             | 21,024,739           | 7,075,921            | 76,103,754             | 12.04        | 1.09  | <b>3.23</b>     |
| <b>BlackRock</b>                                 |                       |                        |                      |                      |                        |              |       |                 |
| <i>BlackRock Middle Market Senior Fund</i>       | 250,000,000           | 0                      | 0                    | 0                    | 250,000,000            | 0.00         | 0.00  | <b>0.21</b>     |
| <b>Crescent Capital Group</b>                    |                       |                        |                      |                      |                        |              |       |                 |
| <i>TCW/Crescent Mezzanine Partners III</i>       | 75,000,000            | 79,161,593             | 2,453,737            | 156,868,939          | 29,733,852             | 35.87        | 2.01  | <b>17.26</b>    |
| <b>GS Mezzanine Partners</b>                     |                       |                        |                      |                      |                        |              |       |                 |
| <i>GS Mezzanine Partners 2006</i>                | 100,000,000           | 113,422,293            | 1,302,951            | 134,136,541          | 9,858,563              | 4.99         | 1.19  | <b>12.24</b>    |
| <i>GS Mezzanine Partners V</i>                   | 150,000,000           | 147,682,304            | 2,207,742            | 177,988,948          | 37,594,230             | 8.96         | 1.22  | <b>10.69</b>    |
| <b>Gold Hill Venture Lending</b>                 |                       |                        |                      |                      |                        |              |       |                 |
| <i>Gold Hill Venture Lending</i>                 | 40,000,000            | 40,000,000             | 1,064,964            | 64,391,012           | 0                      | 10.70        | 1.64  | <b>13.76</b>    |
| <i>Gold Hill 2008</i>                            | 25,852,584            | 25,852,584             | 13,311,387           | 33,841,601           | 0                      | 14.01        | 1.82  | <b>10.00</b>    |
| <b>Kohlberg Kravis Roberts</b>                   |                       |                        |                      |                      |                        |              |       |                 |

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|--|----------------------|------------------------|--------------------|----------------------|------------------------|--------------|-------|-----------------|
| <i>KKR Lending Partners II</i>           | 75,000,000           | 85,387,328             | 47,479,271         | 55,470,003           | 8,802,924              | 12.97        | 1.21  | <b>3.33</b>     |
| <i>KKR Lending Partners III</i>          | 192,000,000          | 38,955,000             | 42,740,647         | 0                    | 153,045,000            | 18.29        | 1.10  | <b>1.23</b>     |
| <b>LBC Credit Partners</b>               |                      |                        |                    |                      |                        |              |       |                 |
| <i>LBC Credit Partners IV</i>            | 100,000,000          | 47,494,427             | 47,542,770         | 5,210,291            | 54,422,909             | 12.98        | 1.11  | <b>2.17</b>     |
| <b>Merit Capital Partners</b>            |                      |                        |                    |                      |                        |              |       |                 |
| <i>Merit Mezzanine Fund IV</i>           | 75,000,000           | 70,178,571             | 18,731,525         | 109,445,558          | 4,821,429              | 10.73        | 1.83  | <b>13.55</b>    |
| <i>Merit Mezzanine Fund V</i>            | 75,000,000           | 70,420,408             | 42,955,053         | 56,493,628           | 4,579,592              | 9.44         | 1.41  | <b>8.54</b>     |
| <i>Merit Mezzanine Fund VI</i>           | 100,000,000          | 32,302,603             | 36,101,158         | 0                    | 67,630,597             | 9.61         | 1.12  | <b>2.27</b>     |
| <b>Portfolio Advisors</b>                |                      |                        |                    |                      |                        |              |       |                 |
| <i>DLJ Investment Partners II</i>        | 27,375,168           | 24,490,887             | 86,563             | 34,829,566           | 0                      | 10.37        | 1.43  | <b>18.51</b>    |
| <i>DLJ Investment Partners III</i>       | 100,000,000          | 82,719,050             | 555,169            | 96,478,980           | 3,158,038              | 6.83         | 1.17  | <b>12.03</b>    |
| <b>Prudential Capital Partners</b>       |                      |                        |                    |                      |                        |              |       |                 |
| <i>Prudential Capital Partners II</i>    | 100,000,000          | 96,836,869             | 6,173,073          | 135,809,660          | 11,247,372             | 8.94         | 1.47  | <b>13.01</b>    |
| <i>Prudential Capital Partners III</i>   | 100,000,000          | 99,465,073             | 17,062,152         | 149,067,741          | 15,524,686             | 13.66        | 1.67  | <b>9.21</b>     |
| <i>Prudential Capital Partners IV</i>    | 100,000,000          | 102,385,264            | 71,828,269         | 56,066,122           | 6,590,872              | 10.26        | 1.25  | <b>6.45</b>     |
| <i>Prudential Capital Partners V</i>     | 150,000,000          | 52,925,587             | 56,829,965         | 3,985,966            | 98,603,003             | 25.51        | 1.15  | <b>1.87</b>     |
| <b>Summit Partners</b>                   |                      |                        |                    |                      |                        |              |       |                 |
| <i>Summit Subordinated Debt Fund III</i> | 45,000,000           | 44,088,494             | 6,806,976          | 58,922,343           | 2,250,000              | 9.37         | 1.49  | <b>14.38</b>    |
| <i>Summit Subordinated Debt Fund IV</i>  | 50,000,000           | 55,837,807             | 14,821,823         | 60,501,330           | 19,926,329             | 10.18        | 1.35  | <b>10.26</b>    |
| <b>TCW Asset Management</b>              |                      |                        |                    |                      |                        |              |       |                 |
| <i>TCW Direct Lending</i>                | 100,000,000          | 83,599,652             | 58,791,868         | 38,514,287           | 25,329,409             | 9.63         | 1.16  | <b>3.78</b>     |
| <i>Private Credit Total</i>              | <b>2,230,227,752</b> | <b>1,512,461,214</b>   | <b>540,924,098</b> | <b>1,522,552,286</b> | <b>887,365,424</b>     | <b>12.13</b> | 1.36  |                 |

**III. REAL ASSETS**

**BlackRock**

*BlackRock Global Renewable Power Fund II*      98,500,000      58,906,799      57,244,584      537,604      41,185,768      -3.40      0.98      **2.60**

**EIG Global Energy Partners**

*EIG Energy Fund XIV*      100,000,000      113,177,137      11,418,649      93,219,713      2,761,129      -2.83      0.92      **11.21**

*EIG Energy Fund XV*      150,000,000      157,463,062      88,475,166      101,488,148      22,871,323      5.49      1.21      **8.07**

*EIG Energy Fund XVI*      200,000,000      167,135,268      147,170,360      53,304,577      68,797,014      9.47      1.20      **4.80**

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|---|---------------------|------------------------|-----------------|---------------|------------------------|----------|-------|-----------------|
| <b>EnCap Energy</b>                             |                     |                        |                 |               |                        |          |       |                 |
| <i>EnCap Energy Capital Fund VII</i>            | 100,000,000         | 105,344,451            | 6,945,888       | 133,001,117   | 0                      | 14.69    | 1.33  | <b>11.01</b>    |
| <i>EnCap Energy Capital Fund VIII</i>           | 100,000,000         | 94,422,340             | 31,447,771      | 52,671,359    | 9,383,470              | -3.55    | 0.89  | <b>7.75</b>     |
| <i>EnCap Energy Capital Fund IX</i>             | 100,000,000         | 107,160,285            | 73,460,856      | 68,018,567    | 9,251,971              | 14.09    | 1.32  | <b>5.56</b>     |
| <i>EnCap Energy Capital Fund X</i>              | 100,000,000         | 77,732,954             | 71,374,919      | 16,769,138    | 30,053,789             | 11.16    | 1.13  | <b>3.32</b>     |
| <b>EnerVest Energy</b>                          |                     |                        |                 |               |                        |          |       |                 |
| <i>EnerVest Energy Institutional Fund XIV</i>   | 100,000,000         | 92,903,263             | 90,246,917      | 10,462,396    | 8,851,531              | 4.33     | 1.08  | <b>3.06</b>     |
| <b>Energy Capital Partners</b>                  |                     |                        |                 |               |                        |          |       |                 |
| <i>Energy Capital Partners II</i>               | 100,000,000         | 85,152,089             | 30,085,441      | 102,587,105   | 29,749,110             | 12.25    | 1.56  | <b>7.95</b>     |
| <i>Energy Capital Partners III</i>              | 200,000,000         | 188,345,465            | 195,776,809     | 22,707,874    | 30,657,688             | 10.06    | 1.16  | <b>4.53</b>     |
| <i>Energy Capital Partners IV</i>               | 105,808,339         | 27,036,117             | 25,782,452      | 72,619        | 78,772,222             | -4.55    | 0.96  | <b>0.50</b>     |
| <b>Energy &amp; Minerals Group</b>              |                     |                        |                 |               |                        |          |       |                 |
| <i>NGP Midstream &amp; Resources</i>            | 100,000,000         | 102,829,196            | 57,922,975      | 134,013,054   | 230,871                | 14.54    | 1.87  | <b>11.26</b>    |
| <i>The Energy &amp; Minerals Group Fund II</i>  | 100,000,000         | 102,893,225            | 110,875,231     | 70,328,585    | 3,006,959              | 15.38    | 1.76  | <b>6.77</b>     |
| <i>The Energy &amp; Minerals Group Fund III</i> | 200,000,000         | 190,260,729            | 161,731,207     | 11,572,646    | 11,751,224             | -2.92    | 0.91  | <b>4.32</b>     |
| <i>The Energy &amp; Minerals Group Fund IV</i>  | 150,000,000         | 93,528,930             | 115,464,752     | 15,776,674    | 70,278,465             | 18.25    | 1.40  | <b>2.67</b>     |
| <b>First Reserve</b>                            |                     |                        |                 |               |                        |          |       |                 |
| <i>First Reserve Fund X</i>                     | 100,000,000         | 100,000,000            | 347,478         | 182,429,002   | 0                      | 31.05    | 1.83  | <b>13.67</b>    |
| <i>First Reserve Fund XI</i>                    | 150,000,000         | 150,292,121            | 8,107,918       | 94,066,313    | 0                      | -8.40    | 0.68  | <b>11.53</b>    |
| <i>First Reserve Fund XII</i>                   | 150,000,000         | 163,010,444            | 33,419,563      | 80,719,259    | 2,606,600              | -8.16    | 0.70  | <b>9.67</b>     |
| <i>First Reserve Fund XIII</i>                  | 200,000,000         | 104,496,244            | 100,247,017     | 22,177,437    | 97,742,373             | 10.62    | 1.17  | <b>4.66</b>     |
| <b>Kohlberg, Kravis, Roberts &amp; Co.</b>      |                     |                        |                 |               |                        |          |       |                 |
| <i>KKR Global Infrastructure Investors III</i>  | 149,850,000         | 0                      | 0               | 0             | 149,850,000            | 0.00     | 0.00  | <b>0.26</b>     |
| <b>Merit Energy Partners</b>                    |                     |                        |                 |               |                        |          |       |                 |
| <i>Merit Energy Partners B</i>                  | 24,000,000          | 24,000,000             | 7,998,384       | 184,828,016   | 0                      | 24.30    | 8.03  | <b>21.45</b>    |
| <i>Merit Energy Partners C</i>                  | 50,000,000          | 50,000,000             | 20,315,178      | 501,469,067   | 0                      | 31.19    | 10.44 | <b>19.68</b>    |
| <i>Merit Energy Partners D</i>                  | 88,000,000          | 70,938,303             | 32,631,552      | 314,767,281   | 0                      | 23.73    | 4.90  | <b>17.11</b>    |
| <i>Merit Energy Partners E</i>                  | 100,000,000         | 39,983,197             | 17,378,306      | 75,513,608    | 0                      | 16.30    | 2.32  | <b>13.75</b>    |
| <i>Merit Energy Partners F</i>                  | 100,000,000         | 59,522,861             | 19,798,913      | 27,510,575    | 0                      | -3.75    | 0.79  | <b>12.28</b>    |
| <i>Merit Energy Partners H</i>                  | 100,000,000         | 100,000,000            | 73,186,972      | 24,238,423    | 0                      | -0.66    | 0.97  | <b>7.41</b>     |
| <i>Merit Energy Partners I</i>                  | 169,721,518         | 146,099,999            | 186,471,373     | 24,839,059    | 23,621,519             | 21.44    | 1.45  | <b>3.70</b>     |

NGP



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|--|----------------------|------------------------|----------------------|----------------------|------------------------|--------------|-------|-----------------|
| <i>Natural Gas Partners IX</i>                 | 150,000,000          | 173,372,658            | 1,120,611            | 244,359,789          | 1,153,855              | 11.86        | 1.42  | <b>10.69</b>    |
| <i>NGP Natural Resources X</i>                 | 150,000,000          | 141,804,796            | 73,389,549           | 94,628,121           | 8,195,204              | 5.57         | 1.18  | <b>6.73</b>     |
| <i>Natural Gas Capital Resources XI</i>        | 150,000,000          | 129,441,690            | 146,545,366          | 19,584,340           | 26,753,646             | 20.24        | 1.28  | <b>3.56</b>     |
| <i>NGP Natural Resources XII</i>               | 149,500,000          | 30,917,697             | 29,089,734           | 0                    | 118,638,901            | -7.98        | 0.94  | <b>0.92</b>     |
| <b>Sheridan</b>                                |                      |                        |                      |                      |                        |              |       |                 |
| <i>Sheridan Production Partners I</i>          | 100,000,000          | 116,552,260            | 68,552,017           | 82,750,000           | 0                      | 5.84         | 1.30  | <b>11.26</b>    |
| <i>Sheridan Production Partners II</i>         | 100,000,000          | 103,500,000            | 49,114,957           | 7,000,000            | 3,500,000              | -11.97       | 0.54  | <b>7.75</b>     |
| <i>Sheridan Production Partners III</i>        | 100,000,000          | 34,353,005             | 36,013,994           | 14,700,000           | 65,650,000             | 24.72        | 1.48  | <b>3.56</b>     |
| <b>Real Assets Total</b>                       | <b>4,285,379,857</b> | <b>3,502,576,586</b>   | <b>2,179,152,859</b> | <b>2,882,111,465</b> | <b>915,314,632</b>     | <b>15.55</b> | 1.44  |                 |
| <br><b>IV. REAL ESTATE</b>                     |                      |                        |                      |                      |                        |              |       |                 |
| <b>Angelo, Gordon &amp; Co.</b>                |                      |                        |                      |                      |                        |              |       |                 |
| <i>AG Realty Fund IX</i>                       | 100,000,000          | 71,772,308             | 74,925,706           | 8,000,000            | 32,150,000             | 10.12        | 1.16  | <b>3.56</b>     |
| <i>AG Asia Realty Fund III</i>                 | 50,000,000           | 38,694,396             | 39,665,588           | 5,000,000            | 15,196,250             | 15.21        | 1.15  | <b>1.75</b>     |
| <i>AG Europe Realty Fund II</i>                | 75,000,000           | 13,312,500             | 12,765,476           | 28,384               | 61,687,500             | -7.77        | 0.96  | <b>1.03</b>     |
| <b>Blackstone Real Estate Partners</b>         |                      |                        |                      |                      |                        |              |       |                 |
| <i>Blackstone Real Estate Partners V</i>       | 100,000,000          | 104,213,007            | 17,458,796           | 189,842,220          | 4,174,052              | 10.89        | 1.99  | <b>12.18</b>    |
| <i>Blackstone Real Estate Partners VI</i>      | 100,000,000          | 109,427,250            | 12,323,720           | 205,580,301          | 4,907,906              | 13.11        | 1.99  | <b>11.26</b>    |
| <i>Blackstone Real Estate Partners VII</i>     | 100,000,000          | 105,806,706            | 80,860,229           | 101,943,147          | 15,126,809             | 17.76        | 1.73  | <b>6.59</b>     |
| <i>Blackstone Real Estate Partners VIII</i>    | 150,000,000          | 100,468,371            | 88,710,288           | 34,968,826           | 79,860,956             | 14.89        | 1.23  | <b>3.26</b>     |
| <i>Blackstone Real Estate Partners Asia II</i> | 75,000,000           | 2,778,946              | 2,720,680            | 0                    | 72,221,054             | -2.21        | 0.98  | <b>0.77</b>     |
| <b>Blackstone Strategic Partners (CSFB)</b>    |                      |                        |                      |                      |                        |              |       |                 |
| <i>Strategic Partners III RE</i>               | 25,000,000           | 25,973,891             | 2,703,932            | 12,799,240           | 9,006                  | -6.46        | 0.60  | <b>13.01</b>    |
| <i>Strategic Partners IV RE</i>                | 50,000,000           | 51,324,079             | 8,085,261            | 43,218,017           | 1,216,289              | -0.01        | 1.00  | <b>10.04</b>    |
| <b>Carlyle Group</b>                           |                      |                        |                      |                      |                        |              |       |                 |
| <i>Carlyle Realty Partners VIII, L.P.</i>      | 150,000,000          | 1,392,693              | 0                    | 0                    | 148,616,174            | 0.00         | 0.00  | <b>1.15</b>     |
| <b>Colony Capital</b>                          |                      |                        |                      |                      |                        |              |       |                 |
| <i>Colony Investors III</i>                    | 100,000,000          | 99,660,860             | 4,694,100            | 172,642,105          | 0                      | 14.53        | 1.78  | <b>20.51</b>    |
| <b>Landmark Partners</b>                       |                      |                        |                      |                      |                        |              |       |                 |
| <i>Landmark Real Estate Partners VIII</i>      | 149,500,000          | 17,052,809             | 18,695,237           | 7,178,770            | 132,734,021            | 55.70        | 1.52  | <b>1.54</b>     |

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| <b>Lubert Adler</b>                           |                      |                        |                    |                      |                        |             |       |                 |
| <i>Lubert-Adler Real Estate Fund VII</i>      | 74,147,868           | 32,364,976             | 30,768,101         | 1,250,230            | 42,635,024             | -2.25       | 0.99  | <b>1.73</b>     |
| <b>Rockpoint</b>                              |                      |                        |                    |                      |                        |             |       |                 |
| <i>Rockpoint Real Estate Fund V</i>           | 100,000,000          | 61,006,680             | 58,187,692         | 9,022,211            | 52,351,419             | 9.10        | 1.10  | <b>3.47</b>     |
| <b>Rockwood</b>                               |                      |                        |                    |                      |                        |             |       |                 |
| <i>Rockwood Capital RE Partners X</i>         | 100,000,000          | 42,538,664             | 41,896,945         | 1,500,000            | 57,384,396             | 1.89        | 1.02  | <b>2.96</b>     |
| <b>Silverpeak Real Estate Partners</b>        |                      |                        |                    |                      |                        |             |       |                 |
| <i>Silverpeak Legacy Pension Partners II</i>  | 75,000,000           | 72,924,170             | 3,086,139          | 89,530,830           | 7,640,900              | 4.25        | 1.27  | <b>12.92</b>    |
| <i>Silverpeak Legacy Pension Partners III</i> | 150,000,000          | 70,331,227             | 15,655,581         | 9,753,200            | 79,673,323             | -11.91      | 0.36  | <b>10.17</b>    |
| <b>T.A. Associates Realty</b>                 |                      |                        |                    |                      |                        |             |       |                 |
| <i>Realty Associates Fund VIII</i>            | 100,000,000          | 100,000,000            | 16,788,659         | 81,790,937           | 0                      | -0.17       | 0.99  | <b>12.01</b>    |
| <i>Realty Associates Fund IX</i>              | 100,000,000          | 100,000,000            | 610,962            | 159,608,332          | 0                      | 10.43       | 1.60  | <b>9.85</b>     |
| <i>Realty Associates Fund X</i>               | 100,000,000          | 100,000,000            | 63,344,429         | 85,194,501           | 0                      | 12.17       | 1.49  | <b>6.33</b>     |
| <i>Realty Associates Fund XI</i>              | 100,000,000          | 100,000,000            | 103,644,800        | 2,135,499            | 0                      | 5.61        | 1.06  | <b>3.00</b>     |
| <b>Real Estate Total</b>                      | <b>2,123,647,868</b> | <b>1,421,043,533</b>   | <b>697,592,321</b> | <b>1,220,986,750</b> | <b>807,585,079</b>     | <b>7.97</b> | 1.35  |                 |
| <br><b>V. DISTRESSED/ OPPORTUNISTIC</b>       |                      |                        |                    |                      |                        |             |       |                 |
| <b>Avenue Capital Partners</b>                |                      |                        |                    |                      |                        |             |       |                 |
| <i>Avenue Energy Opportunities Fund</i>       | 100,000,000          | 100,977,328            | 121,718,100        | 934,495              | 0                      | 7.74        | 1.21  | <b>4.00</b>     |
| <i>Avenue Energy Opportunities Fund II</i>    | 100,000,000          | 65,000,000             | 63,354,395         | 0                    | 35,000,000             | -5.11       | 0.97  | <b>1.16</b>     |
| <b>BlackRock**</b>                            |                      |                        |                    |                      |                        |             |       |                 |
| <i>BlackRock Tempus Fund</i>                  | 1,774,870            | 1,774,870              | 639,937            | 1,384,701            | 0                      | 9.48        | 1.14  | <b>3.05</b>     |
| <b>Carlyle Group</b>                          |                      |                        |                    |                      |                        |             |       |                 |
| <i>Carlyle Strategic Partners IV</i>          | 100,000,000          | 17,449,606             | 14,707,631         | 4,674,546            | 87,183,049             | 11.99       | 1.11  | <b>2.25</b>     |
| <b>Carval Investors</b>                       |                      |                        |                    |                      |                        |             |       |                 |
| <i>CVI Global Value Fund</i>                  | 200,000,000          | 190,000,000            | 28,085,522         | 291,562,042          | 10,000,000             | 9.55        | 1.68  | <b>11.47</b>    |
| <i>CVI Credit Value Fund I</i>                | 100,000,000          | 95,000,000             | 28,089,785         | 183,039,526          | 5,000,000              | 18.73       | 2.22  | <b>7.75</b>     |
| <i>CVI Credit Value Fund A II</i>             | 150,000,000          | 142,500,000            | 69,596,282         | 136,990,569          | 7,500,000              | 9.30        | 1.45  | <b>5.67</b>     |
| <i>CVI Credit Value Fund A III</i>            | 150,000,000          | 135,000,000            | 165,765,825        | 0                    | 15,000,000             | 12.35       | 1.23  | <b>3.08</b>     |
| <i>CVI Credit Value Fund IV</i>               | 150,000,000          | 15,203,333             | 15,340,875         | 60                   | 135,000,000            | 0.92        | 1.01  | <b>0.74</b>     |

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|---|-----------------------|------------------------|----------------------|-----------------------|------------------------|--------------|-------|-----------------|
| <b>Merced Capital</b>                       |                       |                        |                      |                       |                        |              |       |                 |
| <i>Merced Partners II</i>                   | 75,000,000            | 63,768,881             | 287,532              | 130,393,875           | 0                      | 23.97        | 2.05  | <b>11.25</b>    |
| <i>Merced Partners III</i>                  | 100,000,000           | 100,000,000            | 45,157,314           | 88,997,107            | 0                      | 6.34         | 1.34  | <b>8.15</b>     |
| <i>Merced Partners IV</i>                   | 125,000,000           | 124,968,390            | 97,894,524           | 59,372,049            | 0                      | 7.04         | 1.26  | <b>4.97</b>     |
| <i>Merced Partners V</i>                    | 53,737,500            | 53,915,358             | 59,874,376           | 0                     | 0                      | 12.49        | 1.11  | <b>1.00</b>     |
| <b>MHR Institutional Partners</b>           |                       |                        |                      |                       |                        |              |       |                 |
| <i>MHR Institutional Partners IV</i>        | 75,000,000            | 30,559,392             | 26,240,384           | 2,014,108             | 46,396,136             | -4.97        | 0.92  | <b>4.03</b>     |
| <b>Oaktree Capital Management</b>           |                       |                        |                      |                       |                        |              |       |                 |
| <i>Oaktree Principal Fund VI</i>            | 100,000,000           | 62,524,537             | 61,427,694           | 13,606,490            | 49,951,405             | 18.66        | 1.20  | <b>3.50</b>     |
| <i>Oaktree Opportunities Fund X</i>         | 50,000,000            | 35,000,000             | 37,312,470           | 5,619,660             | 20,000,000             | 17.56        | 1.23  | <b>3.38</b>     |
| <i>Oaktree Opportunities Fund Xb</i>        | 100,000,000           | 2,500,000              | 2,500,000            | 0                     | 97,500,000             | 0.00         | 1.00  | <b>3.38</b>     |
| <i>Oaktree Special Situations Fund II</i>   | 100,000,000           | 0                      | 0                    | 0                     | 100,000,000            | 0.00         | 0.00  | <b>0.18</b>     |
| <b>Pimco Bravo**</b>                        |                       |                        |                      |                       |                        |              |       |                 |
| <i>Pimco Bravo Fund OnShore Feeder I</i>    | 3,958,027             | 3,958,027              | 248,943              | 3,937,010             | 2,306,448              | 5.39         | 1.06  | <b>3.50</b>     |
| <i>Pimco Bravo Fund OnShore Feeder II</i>   | 5,243,670             | 4,667,339              | 4,225,781            | 1,678,740             | 2,257,050              | 6.82         | 1.27  | <b>3.50</b>     |
| <b>TSSP</b>                                 |                       |                        |                      |                       |                        |              |       |                 |
| <i>TSSP Adjacent Opportunities Partners</i> | 50,000,000            | 0                      | 0                    | 0                     | 50,000,000             | 0.00         | 0.00  | <b>0.24</b>     |
| <b>Varde Fund</b>                           |                       |                        |                      |                       |                        |              |       |                 |
| <i>Varde Fund IX</i>                        | 100,000,000           | 100,000,000            | 3,453,284            | 212,664,809           | 0                      | 15.02        | 2.16  | <b>10.02</b>    |
| <i>Varde Fund X</i>                         | 150,000,000           | 150,000,000            | 71,122,243           | 227,280,360           | 0                      | 12.65        | 1.99  | <b>8.20</b>     |
| <i>Varde Fund XI</i>                        | 200,000,000           | 200,000,000            | 214,741,263          | 63,860,162            | 0                      | 7.89         | 1.39  | <b>4.98</b>     |
| <b>Wayzata</b>                              |                       |                        |                      |                       |                        |              |       |                 |
| <i>Wayzata Opportunities Fund</i>           | 100,000,000           | 93,180,000             | 519,166              | 156,425,778           | 18,920,000             | 8.42         | 1.68  | <b>12.53</b>    |
| <i>Wayzata Opportunities Fund II</i>        | 150,000,000           | 174,750,000            | 8,850,819            | 319,228,413           | 30,000,000             | 16.47        | 1.88  | <b>10.69</b>    |
| <i>Wayzata Opportunities Fund III</i>       | 150,000,000           | 68,415,000             | 36,021,421           | 32,728,171            | 15,000,000             | 0.18         | 1.00  | <b>6.04</b>     |
| <i>Distressed/Opportunistic Total</i>       | <b>2,739,714,067</b>  | <b>2,031,112,061</b>   | <b>1,177,175,565</b> | <b>1,936,392,670</b>  | <b>727,014,089</b>     |              | 1.53  |                 |
| <i>Private Markets Total</i>                | <b>23,610,832,423</b> | <b>16,886,534,110</b>  | <b>9,388,289,701</b> | <b>16,103,136,870</b> | <b>7,659,259,349</b>   | <b>12.37</b> | 1.50  |                 |

**Minnesota State Board of Investment**  
**- Alternative Investments -**  
**As of June 30, 2018**

| Investment | Total<br>Commitment | Total<br>Contributions | Market<br>Value | Distributions | Unfunded<br>Commitment | IRR<br>% | MOIC* | Period<br>Years |
|------------|---------------------|------------------------|-----------------|---------------|------------------------|----------|-------|-----------------|
|------------|---------------------|------------------------|-----------------|---------------|------------------------|----------|-------|-----------------|

| <i>Private Markets Portfolio Status</i> | Investment Manager Count | Investments Count |
|---|--------------------------|-------------------|
| PRIVATE EQUITY                          | 50                       | 120               |
| PRIVATE CREDIT                          | 12                       | 23                |
| REAL ASSETS                             | 11                       | 35                |
| REAL ESTATE                             | 11                       | 22                |
| DISTRESSED/ OPPORTUNISTIC               | 11                       | 27                |
| Total                                   | 95                       | 227               |

**Notes**

None of the data presented herein has been reviewed or approved by either the general partner or investment manager. The performance and valuation data presented herein is not a guarantee or prediction of future results. Ultimately, the actual performance and value of any investment is not known until final liquidation. Because there is no industry-standardized method for valuation or reporting comparisons of performance and valuation data among different investments is difficult.

Data presented in this report is made public pursuant to Minn. Stat. Chs. 13 and 13D, and Minn. Stat. § 11A.24, subd. 6(c). Additional information on private markets investments may be classified as non-public and not subject to disclosure.

\* MOIC: Multiple of Invested Capital

\*\*Partnership interests transferred to the MSBI during 1Q2015. All data presented as of the transfer date.



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# Participant Directed Investment Program

## June 30, 2018

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## Quarterly Report

# Participant Directed Investment Program

The Participant Directed Investment Program (PDIP) provides investment vehicles for a variety of retirement or other tax-advantaged savings plans. The objective of the Plan is to be competitive in the marketplace by providing quality investment options with low fees to its participants. Investment goals among the PDIP's many participants are varied.

- The Supplemental Investment Fund (SIF) is a program which provides individuals the opportunity to invest in many of the same investment pools as the Combined Funds. Participation in the SIF is accomplished through the purchase or sale of shares in each Fund. The SIF is structured much like a family of mutual funds. Participants may allocate their investments among one or more accounts that are appropriate for their needs within statutory requirements and rules established by the participating organizations. It provides some or all of the investment options for the Unclassified Employees Retirement Plan, Minnesota Deferred Compensation Plan, Public Employees Defined Contribution Plan, Hennepin County Supplemental Retirement Plan, and Health Care Savings Plan. All Funds in the SIF program, except the Stable Value Fund, are available to local volunteer fire relief associations who invest their assets with the SBI. The Volunteer Firefighter Account is available only for those local firefighter entities that participate in the Statewide Volunteer Firefighter Plan. Local entities that participate in this Plan must have all their assets invested in the Volunteer Firefighter Account.
- The Minnesota Deferred Compensation Plan offers plan participants three sets of investment options. The first is a set of actively and passively managed options that includes four mutual funds, a Money Market Fund, a Stable Value Fund and five passively managed mutual funds. The second is a set of target date funds called Minnesota Target Retirement Funds. The third is a self-directed brokerage account window which offers thousands of mutual funds. The SBI has no direct management responsibilities for funds within the self-directed brokerage account window. The Minnesota Deferred Compensation Plan uses two of the SIF investment options, the Stable Value Fund and the Money Market Fund, for its participants.
- The Minnesota College Savings Plan is an education savings plan designed to help families set aside funds for future college costs. It is established under the provisions of the Internal Revenue Code Section 529, which authorized these types of savings plans to help families meet the costs of qualified colleges nationwide. The SBI is responsible for the investments and the Minnesota Office of Higher Education (OHE) is responsible for the overall administration of the Plan. The SBI and OHE have contracted jointly with TIAA-CREF Tuition Financing, Inc. to provide administrative, marketing, communication, recordkeeping and investment management services.
- The Minnesota Achieve a Better Life Experience Plan (ABLE) is a savings plan designed to help individuals save for qualified disability expenses without losing eligibility for certain assistance programs. The plan is administered by the Department of Human Services (DHS). The SBI and DHS have jointly contracted with Ascensus to provide recordkeeping, administrative, and investment management services for the plan.

The investment returns shown in this report are calculated using a time-weighted rate of return formula. These returns are net of investment management fees and transaction costs. They do not, however, reflect administrative expenses that may be deducted by the retirement systems or other agencies to defray administrative costs.



## Supplemental Investment Fund Summary

The Minnesota Supplemental Investment Fund (SIF) is a multi-purpose investment program that offers a range of investment options to state and local public employees. The SIF provides some or all of the investment options to the Unclassified Employees Retirement Plan, Minnesota Deferred Compensation Plan, Public Employees Defined Contribution Plan, Hennepin County Supplemental Retirement Plan, Health Care Savings Plan, local police and firefighter retirement plans and the Statewide Volunteer Firefighter plan.

A wide diversity of investment goals exists among the Fund's participants. In order to meet those needs, the Fund has been structured much like a "family of mutual funds." Participants may allocate their investments among one or more accounts that are appropriate for their needs, within the statutory requirements and rules established by the participating organizations. Participation in the Fund is accomplished through the purchase or sale of shares in each account. All returns are net of investment management fees.

### Investment Option Descriptions

- Balanced Fund - a balanced portfolio utilizing both common stocks and bonds.
- U.S. Stock Actively Managed Fund - an actively managed, U.S. common stock portfolio.
- U.S. Stock Index Fund - a passively managed, common stock portfolio designed to broadly track the performance of the U.S. stock market.
- Broad International Stock Fund - a portfolio of non-U.S. stocks that incorporates both active and passive management.
- Bond Fund - an actively managed, bond portfolio.
- Money Market Fund - a portfolio utilizing short-term, liquid debt securities.
- Stable Value Fund - a portfolio of stable value instruments, including security backed contracts and insurance company and bank investment contracts.
- Volunteer Firefighter Account - a balanced portfolio only used by the Statewide Volunteer Firefighter Plan.

|                                    | <u>Ending Market Value</u> | <u>Last Qtr</u> | <u>1 Year</u> | <u>3 Year</u> | <u>5 Year</u> | <u>10 Year</u> | <u>Option Since</u> |
|------------------------------------|----------------------------|-----------------|---------------|---------------|---------------|----------------|---------------------|
| BALANCED FUND                      | \$443,928,458              | 2.3%            | 8.9%          | 7.8%          | 9.0%          | 8.1%           | 01/1980             |
| U.S. ACTIVELY MANAGED FUND         | 259,911,942                | 5.2             | 18.2          | 12.1          | 13.9          | 10.5           | 07/1986             |
| U.S. STOCK INDEX FUND              | 614,526,590                | 3.9             | 14.8          | 11.6          | 13.3          | 10.3           | 07/1986             |
| BROAD INTERNATIONAL STOCK FUND     | 195,969,302                | -2.4            | 7.5           | 5.3           | 6.4           | 3.1            | 09/1994             |
| BOND FUND                          | 171,064,922                | 0.0             | 0.1           | 2.3           | 2.8           | 4.4            | 07/1986             |
| MONEY MARKET FUND                  | 404,023,579                | 0.5             | 1.5           | 0.9           | 0.6           | 0.5            | 07/1986             |
| STABLE VALUE FUND                  | 1,553,732,886              | 0.6             | 2.2           | 2.1           | 2.0           | 2.9            | 11/1994             |
| VOLUNTEER FIREFIGHTER ACCOUNT      | 88,331,359                 | 1.0             | 6.3           | 6.0           | 6.9           |                | 01/2010             |
| TOTAL SUPPLEMENTAL INVESTMENT FUND | 3,731,489,041              |                 |               |               |               |                |                     |

Note:

The Market Values for the Money Market Fund, the Stable Value Fund, and the Total Supplemental Investment Fund also include assets held through the Deferred Compensation Plan.





Supplemental Investment Fund Performance

**Balanced Fund**

The primary investment objective of the Balanced Fund is to gain exposure to publicly traded U.S. equities, bond and cash in a diversified investment portfolio. The Fund seeks to maximize long-term real rates of return, while limiting short-run portfolio return volatility. The Balanced Fund is invested in a balanced portfolio of common stocks and bonds. Common stocks provide the potential for significant capital appreciation, while bonds act as a deflation hedge and provide portfolio diversification. The benchmark is a blend of 60% Russell 3000/35% Barclays Aggregate Bond Index/5% T-Bills Composite.

|                             | <u>Ending Market Value</u> | <u>Last Qtr</u> | <u>1 Year</u> | <u>3 Year</u> | <u>5 Year</u> | <u>10 Year</u> |
|-----------------------------|----------------------------|-----------------|---------------|---------------|---------------|----------------|
| <b>BALANCED FUND</b>        | <b>\$443,928,458</b>       | <b>2.3%</b>     | <b>8.9%</b>   | <b>7.8%</b>   | <b>9.0%</b>   | <b>8.1%</b>    |
| SIF BALANCED FUND BENCHMARK |                            | 2.3             | 8.7           | 7.6           | 8.8           | 7.5            |
| Excess                      |                            | 0.1             | 0.2           | 0.2           | 0.2           | 0.6            |

**U.S. Actively Managed Fund**

The U.S. Stock Actively Managed Fund's investment objective is to generate above-average returns from capital appreciation on common stocks. The U.S. Stock Actively Managed Fund is invested primarily in the common stocks of U.S. companies. The managers in the account also hold varying levels of cash.

|                                   | <u>Ending Market Value</u> | <u>Last Qtr</u> | <u>1 Year</u> | <u>3 Year</u> | <u>5 Year</u> | <u>10 Year</u> |
|-----------------------------------|----------------------------|-----------------|---------------|---------------|---------------|----------------|
| <b>U.S. ACTIVELY MANAGED FUND</b> | <b>259,911,942</b>         | <b>5.2</b>      | <b>18.2</b>   | <b>12.1</b>   | <b>13.9</b>   | <b>10.5</b>    |
| Russell 3000                      |                            | 3.9             | 14.8          | 11.6          | 13.3          | 10.2           |
| Excess                            |                            | 1.3             | 3.4           | 0.5           | 0.6           | 0.2            |



## Supplemental Investment Fund Performance

### U.S. Stock Index Fund

The investment objective of the U.S. Stock Index Fund is to generate returns that track those of the U.S. stock market as a whole. The Fund is designed to track the performance of the Russell 3000 Index, a broad-based equity market indicator. The Fund is invested 100% in common stock.

|                              | <u>Ending Market Value</u> | <u>Last Qtr</u> | <u>1 Year</u> | <u>3 Year</u> | <u>5 Year</u> | <u>10 Year</u> |
|------------------------------|----------------------------|-----------------|---------------|---------------|---------------|----------------|
| <b>U.S. STOCK INDEX FUND</b> | <b>\$614,526,590</b>       | <b>3.9%</b>     | <b>14.8%</b>  | <b>11.6%</b>  | <b>13.3%</b>  | <b>10.3%</b>   |
| Russell 3000                 |                            | 3.9             | 14.8          | 11.6          | 13.3          | 10.2           |
| Excess                       |                            | -0.0            | -0.0          | 0.0           | 0.0           | 0.0            |

### Broad International Stock Fund

The investment objective of the Broad International Stock Fund is to earn a high rate of return by investing in the stock of companies outside the U.S. Portions of the Fund are passively managed and semi-passively managed. These portions of the Fund are designed to track and modestly outperform, respectively, the return of developed markets included in the MSCI World ex USA Index. A portion of the Fund is "actively managed" by several international managers and emerging markets specialists who buy and sell stocks in an attempt to maximize market value. The International Equity Benchmark is currently the MSCI ACWI ex USA (net).

|                                       | <u>Ending Market Value</u> | <u>Last Qtr</u> | <u>1 Year</u> | <u>3 Year</u> | <u>5 Year</u> | <u>10 Year</u> |
|---------------------------------------|----------------------------|-----------------|---------------|---------------|---------------|----------------|
| <b>BROAD INTERNATIONAL STOCK FUND</b> | <b>195,969,302</b>         | <b>-2.4</b>     | <b>7.5</b>    | <b>5.3</b>    | <b>6.4</b>    | <b>3.1</b>     |
| International Equity Benchmark        |                            | -2.6            | 7.3           | 5.1           | 6.0           | 2.5            |
| Excess                                |                            | 0.2             | 0.2           | 0.2           | 0.4           | 0.5            |



## Supplemental Investment Fund Performance

### Bond Fund

The investment objective of the Bond Fund is to exceed the return of the broad domestic bond market by investing in fixed income securities. The Bond Fund invests primarily in high-quality, government and corporate bonds that have intermediate to long-term maturities, usually 3 to 20 years. The Bond Fund benchmark is the Bloomberg Barclays U.S. Aggregate.

|                  | <u>Ending Market Value</u> | <u>Last Qtr</u> | <u>1 Year</u> | <u>3 Year</u> | <u>5 Year</u> | <u>10 Year</u> |
|------------------|----------------------------|-----------------|---------------|---------------|---------------|----------------|
| <b>BOND FUND</b> | <b>\$171,064,922</b>       | <b>0.0%</b>     | <b>0.1%</b>   | <b>2.3%</b>   | <b>2.8%</b>   | <b>4.4%</b>    |
| BBG BARC US Agg  |                            | -0.2            | -0.4          | 1.7           | 2.3           | 3.7            |
| Excess           |                            | 0.2             | 0.5           | 0.5           | 0.5           | 0.7            |

### Money Market Fund

The investment objective of the Money Market Fund is to protect principal by investing in short-term, liquid U.S. Government securities. The Fund is invested entirely in high-quality, short-term U.S. Treasury and Agency securities. The average maturity of the portfolios is less than 90 days. Please note that the Market Value for the Money Market Fund reflects assets held through the Deferred Compensation Plan as well.

|                          | <u>Ending Market Value</u> | <u>Last Qtr</u> | <u>1 Year</u> | <u>3 Year</u> | <u>5 Year</u> | <u>10 Year</u> |
|--------------------------|----------------------------|-----------------|---------------|---------------|---------------|----------------|
| <b>MONEY MARKET FUND</b> | <b>404,023,579</b>         | <b>0.5</b>      | <b>1.5</b>    | <b>0.9</b>    | <b>0.6</b>    | <b>0.5</b>     |
| 90 DAY T-BILL            |                            | 0.5             | 1.4           | 0.7           | 0.4           | 0.4            |
| Excess                   |                            | 0.0             | 0.2           | 0.2           | 0.2           | 0.2            |



## Supplemental Investment Fund Performance

### Stable Value Fund

The investment objectives of the Stable Value Fund are to protect investors from loss of their original investment and to provide competitive interest rates using somewhat longer-term investments than typically found in a money market fund. The Fund is invested in a well-diversified portfolio of high-quality fixed income securities with strong credit ratings. The Fund also invests in contracts issued by highly rated insurance companies and banks which are structured to provide principal protection for the Fund's diversified bond portfolios, regardless of daily market changes. The Stable Value Fund Benchmark is the 3-year Constant Maturity Treasury Bill +45 basis points. Please note that the Market Value for the Stable Value Fund reflects assets held through the Deferred Compensation Plan as well.

|                                  | <u>Ending Market Value</u> | <u>Last Qtr</u> | <u>1 Year</u> | <u>3 Year</u> | <u>5 Year</u> | <u>10 Year</u> |
|----------------------------------|----------------------------|-----------------|---------------|---------------|---------------|----------------|
| <b>STABLE VALUE FUND</b>         | <b>\$1,553,732,886</b>     | <b>0.6%</b>     | <b>2.2%</b>   | <b>2.1%</b>   | <b>2.0%</b>   | <b>2.9%</b>    |
| Fixed Interest Blended Benchmark |                            | 0.8             | 2.4           | 1.8           | 1.6           | 1.5            |
| Excess                           |                            | -0.2            | -0.1          | 0.2           | 0.4           | 1.4            |

### Volunteer Firefighter Account

The Volunteer Firefighter Account is different than other SIF program options. It is available only to the local entities that participate in the Statewide Volunteer Firefighter Plan (administered by PERA) and have all of their assets invested in the Volunteer Firefighter Account. There are other volunteer firefighter plans that are not eligible to be consolidated that may invest their assets through other SIF program options. The investment objective of the Volunteer Firefighter Account is to maximize long-term returns while limiting short-term portfolio return volatility. The account is invested in a balanced portfolio of domestic equity, international equity, fixed income and cash. The benchmark for this account is 35% Russell 3000, 15% MSCI ACWI ex USA (net), 45% Bloomberg Barclays U.S. Aggregate, 5% 3 Month T-Bills.

|                                      | <u>Ending Market Value</u> | <u>Last Qtr</u> | <u>1 Year</u> | <u>3 Year</u> | <u>5 Year</u> | <u>10 Year</u> |
|--------------------------------------|----------------------------|-----------------|---------------|---------------|---------------|----------------|
| <b>VOLUNTEER FIREFIGHTER ACCOUNT</b> | <b>88,331,359</b>          | <b>1.0</b>      | <b>6.3</b>    | <b>6.0</b>    | <b>6.9</b>    |                |
| SIF Volunteer Firefighter Account BM |                            | 0.9             | 6.1           | 5.7           | 6.7           |                |
| Excess                               |                            | 0.1             | 0.2           | 0.3           | 0.3           |                |



## Deferred Compensation Plan Summary

The Deferred Compensation Plan provides public employees with a tax-sheltered retirement savings plan that is supplemental to their primary retirement plan. (In most cases, the primary plan is a defined benefit plan administered by TRA, PERA, or MSRS.)

Participants choose from 4 actively managed stock and bond funds, 5 passively managed stock and bond funds and a set of 10 target date retirement fund options.

Deferred Compensation Plan participants may also invest in the money market option and stable value option in the Supplemental Investment Fund program. All provide for the daily pricing needs of the plan administrator. In addition, participants may also choose from hundreds of funds available through a mutual fund brokerage window. The current plan structure became effective July 1, 2011.

|  | <u>Ending Market Value</u> | <u>Last Qtr</u> | <u>1 Year</u> | <u>3 Year</u> | <u>5 Year</u> | <u>10 Year</u> | <u>Option Since</u> |
|--|----------------------------|-----------------|---------------|---------------|---------------|----------------|---------------------|
| VANGUARD INSTITUTIONAL INDEX PLUS        | \$1,258,796,587            | 3.4%            | 14.4%         | 11.9%         | 13.4%         | 10.2%          | 07/1999             |
| VANGUARD DIVIDEND GROWTH                 | 612,686,535                | 3.0             | 10.6          |               |               |                | 10/2016             |
| VANGUARD MID CAP INDEX                   | 546,657,223                | 2.6             | 12.1          | 9.2           | 12.3          | 10.1           | 01/2004             |
| T. ROWE PRICE SMALL-CAP STOCK            | 732,333,810                | 6.7             | 18.3          | 11.9          | 13.3          | 13.5           | 04/2000             |
| FIDELITY DIVERSIFIED INTERNATIONAL       | 309,065,535                | -0.9            | 6.0           | 4.0           | 7.2           | 3.0            | 07/1999             |
| VANGUARD TOTAL INTERNATIONAL STOCK INDEX | 200,927,707                | -3.2            | 7.1           | 5.4           | 6.5           |                | 07/2011             |
| VANGUARD BALANCED INDEX                  | 785,660,076                | 2.3             | 8.6           | 7.7           | 8.9           | 8.0            | 12/2003             |
| DODGE & COX INCOME                       | 240,234,256                | -0.3            | 0.4           | 2.6           | 3.1           | 4.9            | 07/1999             |
| VANGUARD TOTAL BOND MARKET INDEX         | 209,005,746                | -0.2            | -0.5          | 1.7           | 2.2           | 3.7            | 12/2003             |
| 2020 FUND                                | 120,196,906                | 0.8             | 4.7           | 4.4           | 5.3           |                | 07/2011             |
| 2025 FUND                                | 123,882,517                | 0.9             | 6.1           | 5.5           | 6.7           |                | 07/2011             |
| 2030 FUND                                | 86,164,748                 | 0.9             | 7.7           | 6.6           | 7.8           |                | 07/2011             |
| 2035 FUND                                | 68,040,876                 | 0.9             | 8.5           | 7.1           | 8.3           |                | 07/2011             |
| 2040 FUND                                | 49,679,459                 | 1.0             | 9.4           | 7.5           | 8.8           |                | 07/2011             |
| 2045 FUND                                | 41,873,729                 | 1.1             | 10.1          | 7.9           | 9.2           |                | 07/2011             |
| 2050 FUND                                | 31,752,795                 | 1.2             | 10.7          | 8.2           | 9.5           |                | 07/2011             |
| 2055 FUND                                | 16,731,761                 | 1.2             | 10.7          | 8.2           | 9.5           |                | 07/2011             |
| 2060 FUND                                | 15,645,346                 | 1.2             | 10.7          | 8.2           | 9.5           |                | 07/2011             |
| INCOME FUND                              | 87,987,494                 | 0.8             | 4.0           | 3.8           | 4.1           |                | 07/2011             |
| TD Ameritrade SDB                        | 74,241,306                 |                 |               |               |               |                | 08/2017             |
| TD Ameritrade SDB Roth                   | 676,188                    |                 |               |               |               |                | 08/2017             |
| Total Deferred Compensation Plan         | 5,612,240,602              |                 |               |               |               |                |                     |



## Deferred Compensation Plan Options

### LARGE CAP EQUITY

#### **Vanguard Index Institutional Plus (passive)**

A passive domestic stock portfolio that tracks the S&P 500.

#### **Vanguard Dividend Growth (active) (1)**

A fund of large cap stocks which is expected to outperform the Nasdaq US Dividend Achievers Select Index, over time.

### MID CAP EQUITY

#### **Vanguard Mid Cap Index (passive) (2)**

A fund that passively invests in companies with medium market capitalizations that tracks the CRSP US Mid-Cap Index.

### SMALL CAP EQUITY

#### **T Rowe Price Small Cap (active)**

A fund that invests primarily in companies with small market capitalizations and is expected to outperform the Russell 2000 Index.

### INTERNATIONAL EQUITY

#### **Fidelity Diversified International (active)**

A fund that invests primarily in stocks of companies located outside of the United States and is expected to outperform the MSCI index of Europe, Australasia and the Far East (EAFE), over time.

#### **Vanguard Total International Stock Index (passive) (3)**

A fund that seeks to track the investment performance of the FTSE Global All Cap ex US Index, an index designed to measure equity market performance in developed and emerging markets, excluding the United States.

**Ending Market Value** **Last Qtr** **1 Year** **3 Year** **5 Year** **Option Since**

#### **Large Cap US Equity**

|  |                        |             |              |              |              |                |
|--|------------------------|-------------|--------------|--------------|--------------|----------------|
| <b>VANGUARD INSTITUTIONAL INDEX PLUS</b> | <b>\$1,258,796,587</b> | <b>3.4%</b> | <b>14.4%</b> | <b>11.9%</b> | <b>13.4%</b> | <b>07/1999</b> |
| S&P 500                                  |                        | 3.4         | 14.4         | 11.9         | 13.4         | 07/1999        |
| Excess                                   |                        | -0.0        | -0.0         | -0.0         | -0.0         |                |

|                                     |                    |            |             |  |  |                |
|-------------------------------------|--------------------|------------|-------------|--|--|----------------|
| <b>VANGUARD DIVIDEND GROWTH</b>     | <b>612,686,535</b> | <b>3.0</b> | <b>10.6</b> |  |  | <b>10/2016</b> |
| NASDAQ US Dividend Achievers Select |                    | 1.1        | 11.9        |  |  | 10/2016        |
| Excess                              |                    | 1.9        | -1.3        |  |  |                |

#### **Mid Cap US Equity**

|                               |                    |            |             |            |             |                |
|-------------------------------|--------------------|------------|-------------|------------|-------------|----------------|
| <b>VANGUARD MID CAP INDEX</b> | <b>546,657,223</b> | <b>2.6</b> | <b>12.1</b> | <b>9.2</b> | <b>12.3</b> | <b>01/2004</b> |
| CRSP US Mid Cap Index         |                    | 2.6        | 12.1        | 9.2        | 12.4        | 01/2004        |
| Excess                        |                    | -0.0       | -0.0        | -0.0       | -0.0        |                |

#### **Small Cap US Equity**

|                                      |                    |            |             |             |             |                |
|--------------------------------------|--------------------|------------|-------------|-------------|-------------|----------------|
| <b>T. ROWE PRICE SMALL-CAP STOCK</b> | <b>732,333,810</b> | <b>6.7</b> | <b>18.3</b> | <b>11.9</b> | <b>13.3</b> | <b>04/2000</b> |
| Russell 2000                         |                    | 7.8        | 17.6        | 11.0        | 12.5        | 04/2000        |
| Excess                               |                    | -1.1       | 0.7         | 1.0         | 0.8         |                |

#### **International Equity**

|   |                    |             |            |            |            |                |
|---|--------------------|-------------|------------|------------|------------|----------------|
| <b>FIDELITY DIVERSIFIED INTERNATIONAL</b> | <b>309,065,535</b> | <b>-0.9</b> | <b>6.0</b> | <b>4.0</b> | <b>7.2</b> | <b>07/1999</b> |
| MSCI EAFE FREE (NET)                      |                    | -1.2        | 6.8        | 4.9        | 6.4        | 07/1999        |
| Excess                                    |                    | 0.3         | -0.8       | -0.9       | 0.7        |                |

|   |                    |             |            |            |            |                |
|---|--------------------|-------------|------------|------------|------------|----------------|
| <b>VANGUARD TOTAL INTERNATIONAL STOCK INDEX</b> | <b>200,927,707</b> | <b>-3.2</b> | <b>7.1</b> | <b>5.4</b> | <b>6.5</b> | <b>07/2011</b> |
| FTSE Global All Cap ex US Index Net             |                    | -2.7        | 7.4        | 5.3        | 6.4        | 07/2011        |
| Excess  |                    | -0.5        | -0.3       | 0.1        | 0.1        |                |



## Deferred Compensation Options

### BALANCED

#### **Vanguard Balanced Index (passive) (4)**

A fund that passively invests in a mix of domestic stocks and bonds. The fund is expected to track a weighted benchmark of 60% CRSP US Total Market Index/40% BB Barclays U.S. Aggregate.

### FIXED INCOME

#### **Dodge & Cox Income Fund (active)**

A fund that invests primarily in investment grade securities in the U.S. bond market which is expected to outperform the BB Barclays U.S. Aggregate, over time.

#### **Vanguard Total Bond Market Index (passive)**

A fund that passively invests in a broad, market weighted bond index that is expected to track the BB Barclays U.S. Aggregate.

#### **SIF Money Market Fund (5)**

A fund that invests in short-term debt instruments which is expected to outperform the return on 90-Day U.S. Treasury Bills.

### STABLE VALUE

#### **SIF Stable Value Fund (5)**

A portfolio composed of stable value instruments which are primarily investment contracts and security backed contracts. The fund is expected to outperform the return of the 3 year Constant Maturity Treasury +45 basis points, over time.

(1) Vanguard Dividend Growth replaced the Janus Twenty Fund in the third quarter of 2016.

(2) Prior to 02/01/2013 the benchmark was the MSCI US Mid-Cap 450 Index

(3) Prior to 06/01/2013 the benchmark was MSCI ACWI ex USA IMI.

(4) Prior to 01/01/2013 the benchmark was 60% MSCI US Broad Market Index and 40% Bloomberg Barclays U.S. Aggregate.

(5) SIF Money Market and SIF Fixed Interest are Supplemental Investment Fund options which are also offered under the Deferred Compensation Plan.

**Ending Market Value** **Last Qtr** **1 Year** **3 Year** **5 Year** **Option Since**

#### **Balanced Funds**

|                                  | Ending Market Value  | Last Qtr    | 1 Year      | 3 Year      | 5 Year      | Option Since   |
|----------------------------------|----------------------|-------------|-------------|-------------|-------------|----------------|
| <b>VANGUARD BALANCED INDEX</b>   | <b>\$785,660,076</b> | <b>2.3%</b> | <b>8.6%</b> | <b>7.7%</b> | <b>8.9%</b> | <b>12/2003</b> |
| Vanguard Balanced Fund Benchmark |                      | 2.3         | 8.6         | 7.7         | 8.9         | 12/2003        |
| Excess                           |                      | 0.0         | -0.0        | 0.0         | -0.0        |                |

#### **Fixed Income**

|                               | Ending Market Value | Last Qtr    | 1 Year     | 3 Year     | 5 Year     | Option Since   |
|-------------------------------|---------------------|-------------|------------|------------|------------|----------------|
| <b>DODGE &amp; COX INCOME</b> | <b>240,234,256</b>  | <b>-0.3</b> | <b>0.4</b> | <b>2.6</b> | <b>3.1</b> | <b>07/1999</b> |
| BBG BARC Agg Bd               |                     | -0.2        | -0.4       | 1.7        | 2.3        | 07/1999        |
| Excess                        |                     | -0.2        | 0.8        | 0.9        | 0.8        |                |

|   | Ending Market Value | Last Qtr    | 1 Year      | 3 Year     | 5 Year     | Option Since   |
|---|---------------------|-------------|-------------|------------|------------|----------------|
| <b>VANGUARD TOTAL BOND MARKET INDEX</b> | <b>209,005,746</b>  | <b>-0.2</b> | <b>-0.5</b> | <b>1.7</b> | <b>2.2</b> | <b>12/2003</b> |
| BBG BARC Agg Bd                         |                     | -0.2        | -0.4        | 1.7        | 2.3        | 12/2003        |
| Excess                                  |                     | -0.0        | -0.1        | -0.0       | -0.1       |                |

|                          | Ending Market Value | Last Qtr   | 1 Year     | 3 Year     | 5 Year     | Option Since   |
|--------------------------|---------------------|------------|------------|------------|------------|----------------|
| <b>MONEY MARKET FUND</b> | <b>404,023,579</b>  | <b>0.5</b> | <b>1.5</b> | <b>0.9</b> | <b>0.6</b> | <b>07/1986</b> |
| 90 DAY T-BILL            |                     | 0.5        | 1.4        | 0.7        | 0.4        | 07/1986        |
| Excess                   |                     | 0.0        | 0.2        | 0.2        | 0.2        |                |

#### **Stable Value**

|                                  | Ending Market Value  | Last Qtr   | 1 Year     | 3 Year     | 5 Year     | Option Since   |
|----------------------------------|----------------------|------------|------------|------------|------------|----------------|
| <b>STABLE VALUE FUND</b>         | <b>1,553,732,886</b> | <b>0.6</b> | <b>2.2</b> | <b>2.1</b> | <b>2.0</b> | <b>11/1994</b> |
| Fixed Interest Blended Benchmark |                      | 0.8        | 2.4        | 1.8        | 1.6        | 11/1994        |
| Excess                           |                      | -0.2       | -0.1       | 0.2        | 0.4        |                |



## Deferred Compensation Options

### MN TARGET RETIREMENT ACCOUNTS

Target retirement funds offer a mix of investments that are adjusted over time to reduce risk and become more conservative as the target retirement date approaches. A participant only needs to make one investment decision by investing their assets in the fund that is closest to their anticipated retirement date.

### Target Date Retirement Funds

|                     | <u>Ending Market Value</u> | <u>Last Qtr</u> | <u>1 Year</u> | <u>3 Year</u> | <u>5 Year</u> | <u>Option Since</u> |                       | <u>Ending Market Value</u> | <u>Last Qtr</u> | <u>1 Year</u> | <u>3 Year</u> | <u>5 Year</u> | <u>Option Since</u> |
|---------------------|----------------------------|-----------------|---------------|---------------|---------------|---------------------|-----------------------|----------------------------|-----------------|---------------|---------------|---------------|---------------------|
| <b>SSgA</b>         |                            |                 |               |               |               |                     |                       |                            |                 |               |               |               |                     |
| <b>2020 FUND</b>    | <b>\$120,196,906</b>       | <b>0.8%</b>     | <b>4.7%</b>   | <b>4.4%</b>   | <b>5.3%</b>   | <b>07/2011</b>      | <b>2045 FUND</b>      | <b>\$41,873,729</b>        | <b>1.1%</b>     | <b>10.1%</b>  | <b>7.9%</b>   | <b>9.2%</b>   | <b>07/2011</b>      |
| 2020 FUND BENCHMARK |                            | 0.9             | 4.7           | 4.4           | 5.4           | 07/2011             | 2045 FUND BENCHMARK   |                            | 1.2             | 10.1          | 7.9           | 9.3           | 07/2011             |
| Excess              |                            | -0.0            | -0.0          | -0.0          | -0.0          |                     | Excess                |                            | -0.1            | -0.0          | -0.0          | -0.0          |                     |
| <b>2025 FUND</b>    | <b>123,882,517</b>         | <b>0.9</b>      | <b>6.1</b>    | <b>5.5</b>    | <b>6.7</b>    | <b>07/2011</b>      | <b>2050 FUND</b>      | <b>31,752,795</b>          | <b>1.2</b>      | <b>10.7</b>   | <b>8.2</b>    | <b>9.5</b>    | <b>07/2011</b>      |
| 2025 FUND BENCHMARK |                            | 0.9             | 6.2           | 5.5           | 6.7           | 07/2011             | 2050 FUND BENCHMARK   |                            | 1.3             | 10.7          | 8.2           | 9.5           | 07/2011             |
| Excess              |                            | -0.0            | -0.0          | -0.0          | -0.0          |                     | Excess                |                            | -0.1            | -0.0          | -0.0          | -0.0          |                     |
| <b>2030 FUND</b>    | <b>86,164,748</b>          | <b>0.9</b>      | <b>7.7</b>    | <b>6.6</b>    | <b>7.8</b>    | <b>07/2011</b>      | <b>2055 FUND</b>      | <b>16,731,761</b>          | <b>1.2</b>      | <b>10.7</b>   | <b>8.2</b>    | <b>9.5</b>    | <b>07/2011</b>      |
| 2030 FUND BENCHMARK |                            | 1.0             | 7.7           | 6.6           | 7.8           | 07/2011             | 2055 FUND BENCHMARK   |                            | 1.3             | 10.7          | 8.2           | 9.5           | 07/2011             |
| Excess              |                            | -0.1            | -0.0          | -0.0          | -0.1          |                     | Excess                |                            | -0.1            | -0.0          | -0.0          | -0.0          |                     |
| <b>2035 FUND</b>    | <b>68,040,876</b>          | <b>0.9</b>      | <b>8.5</b>    | <b>7.1</b>    | <b>8.3</b>    | <b>07/2011</b>      | <b>2060 FUND</b>      | <b>15,645,346</b>          | <b>1.2</b>      | <b>10.7</b>   | <b>8.2</b>    | <b>9.5</b>    | <b>07/2011</b>      |
| 2035 FUND BENCHMARK |                            | 1.0             | 8.6           | 7.1           | 8.4           | 07/2011             | 2060 FUND BENCHMARK   |                            | 1.3             | 10.7          | 8.2           | 9.5           | 07/2011             |
| Excess              |                            | -0.1            | -0.0          | -0.0          | -0.0          |                     | Excess                |                            | -0.1            | -0.0          | -0.0          | -0.0          |                     |
| <b>2040 FUND</b>    | <b>49,679,459</b>          | <b>1.0</b>      | <b>9.4</b>    | <b>7.5</b>    | <b>8.8</b>    | <b>07/2011</b>      | <b>INCOME FUND</b>    | <b>87,987,494</b>          | <b>0.8</b>      | <b>4.0</b>    | <b>3.8</b>    | <b>4.1</b>    | <b>07/2011</b>      |
| 2040 FUND BENCHMARK |                            | 1.1             | 9.4           | 7.5           | 8.9           | 07/2011             | INCOME FUND BENCHMARK |                            | 0.8             | 4.0           | 3.8           | 4.2           | 07/2011             |
| Excess              |                            | -0.1            | -0.0          | -0.0          | -0.0          |                     | Excess                |                            | -0.0            | -0.0          | -0.0          | -0.1          |                     |

Note: Each SSgA Fund benchmark is the aggregate of the returns of the Fund's underlying index funds weighted by the Fund's asset allocation





## MN College Savings Plan Options

The Minnesota College Savings Plan is an education savings plan designed to help families set aside funds for future college costs. The SBI is responsible for the investments and the Minnesota Office of Higher Education (OHE) is responsible for the overall administration of the Plan.

The SBI and OHE contract jointly with TIAA to provide administrative, marketing, communication, recordkeeping and investment management services. Please see the next page for the performance as reported by TIAA.

### **AGE-BASED MANAGED ALLOCATIONS**

The Age-Based Managed Allocation Option seeks to align the investment objective and level of risk, which will become more conservative as the beneficiary ages and moves closer to entering an eligible educational institution.

### **RISK BASED ALLOCATIONS**

The Risk Based Allocation Option offers three separate allocation investment options - Aggressive, Moderate and Conservative, each of which has a fixed risk level that does not change as the Beneficiary ages.

### **ASSET CLASS BASED ALLOCATIONS**

**U.S. LARGE CAP EQUITY INDEX** - A passive domestic stock portfolio that tracks the S&P 500.

**INTERNATIONAL EQUITY INDEX** - A fund that passively invests in a mix of developed and emerging market equities. The fund is expected to track a weighted benchmark of 80% MSCI ACWI World ex USA and 20% MSCI Emerging Markets Free Index.

**U.S. AND INTERNATIONAL EQUITY INDEX** - A fund that invests in a mix of equities, both U.S. and international, across all capitalization ranges and real estate-related securities. The fund is expected to track a weighted benchmark of 60% Russell 3000, 24% International, 6% Emerging Markets, and 10% Real Estate Securities Fund.

**PRINCIPAL PLUS INTEREST OPTION** - A passive fund where contributions are invested in a Funding Agreement issued by TIAA-CREF Life. The funding agreement provides for a return of principal plus a guaranteed rate of interest which is made by the insurance company to the policyholder, not the account owners. The account is expected to outperform the return of the 3-month T-Bill.

**EQUITY AND INTEREST ACCUMULATION** - A fund that passively invests half of the portfolio in U.S. equities across all capitalization ranges and the other half in the same Funding Agreement issued by TIAA-CREF Life as described above. The fund is expected to track a weighted benchmark of 50% Russell 3000 and 50% 3-month T-Bill.

**100% FIXED INCOME** - A fund that passively invests in fixed income holdings that tracks the Bloomberg Barclays U.S. Aggregate and two active funds that invest in inflation-linked bonds and high yield securities. The fund is expected to track a weighted benchmark of 70% BB Barclays Aggregate, 20% inflation-linked bond, and 10% high yield.

**MONEY MARKET** - An active fund that invests in high-quality, short-term money market instruments of both domestic and foreign issuers that tracks the iMoneyNet Average All Taxable benchmark.

**MINNESOTA COLLEGE SAVINGS PLAN**  
**Performance Statistics for the Period Ending: June 30, 2018**

| Fund Name  | Ending Market | 3 Months       | 1 Year           | Annualized     |                  |                | Inception Date |            |
|--|---------------|----------------|------------------|----------------|------------------|----------------|----------------|------------|
|  |               |                |                  | 3 Years        | 5 Years          | 10 Years       |                |            |
| Managed Ages 0-4<br>BB: Managed Ages 0-4   | \$30,705,133  | 1.78%<br>1.92% | 9.40%<br>9.25%   | 7.96%<br>8.03% |                  | 7.31%<br>7.37% | 8/12/2014      |            |
| Managed Ages 5-8<br>BB: Managed Ages 5-8   | \$69,359,487  | 1.59%<br>1.69% | 8.02%<br>8.10%   | 7.17%<br>7.29% |                  | 6.57%<br>6.69% | 8/12/2014      |            |
| Managed Ages 9-10<br>BB: Managed Ages 9-10                                       | \$66,903,408  | 1.38%<br>1.46% | 6.85%<br>6.95%   | 6.44%<br>6.55% |                  | 5.87%<br>6.00% | 8/12/2014      |            |
| Managed Ages 11-12<br>BB: Managed Ages 11-12                                     | \$99,445,689  | 1.25%<br>1.25% | 5.92%<br>5.87%   | 5.69%<br>5.73% |                  | 5.17%<br>5.25% | 8/12/2014      |            |
| Managed Ages 13-14<br>BB: Managed Ages 13-14                                     | \$133,817,428 | 0.94%<br>1.03% | 4.78%<br>4.80%   | 4.86%<br>4.91% |                  | 4.42%<br>4.48% | 8/12/2014      |            |
| Managed Age 15<br>BB: Managed Age 15   | \$81,393,680  | 0.79%<br>0.86% | 3.97%<br>3.84%   | 4.08%<br>3.95% |                  | 3.69%<br>3.59% | 8/12/2014      |            |
| Managed Age 16<br>BB: Managed Age 16   | \$80,663,981  | 0.80%<br>0.78% | 3.56%<br>3.39%   | 3.63%<br>3.44% |                  | 3.29%<br>3.11% | 8/12/2014      |            |
| Managed Age 17<br>BB: Managed Age 17   | \$74,964,455  | 0.63%<br>0.70% | 3.14%<br>2.95%   | 3.21%<br>2.92% |                  | 2.91%<br>2.63% | 8/12/2014      |            |
| Managed Ages 18 & Over<br>BB: Managed Ages 18 & Over                             | \$203,399,639 | 0.73%<br>0.62% | 2.80%<br>2.50%   | 2.78%<br>2.40% |                  | 2.53%<br>2.14% | 8/12/2014      |            |
| U.S. and International Equity Option<br>BB: U.S. and International Equity Option | \$305,801,947 | 2.16%<br>2.39% | 11.42%<br>11.56% | 9.34%<br>9.48% | 10.62%<br>10.83% | 7.70%<br>8.18% | 7.04%<br>7.93% | 10/ 1/2001 |

**MINNESOTA COLLEGE SAVINGS PLAN**

**Performance Statistics for the Period Ending: June 30, 2018**

| Fund Name                                   | Ending Market | 3 Months | 1 Year | Annualized |         |          |                 | Inception Date |
|---|---------------|----------|--------|------------|---------|----------|-----------------|----------------|
|   |               |          |        | 3 Years    | 5 Years | 10 Years | Since Inception |                |
| Moderate Allocation Option                  | \$66,565,982  | 1.46%    | 6.95%  | 6.42%      | 7.24%   | 6.19%    | 5.20%           | 8/ 2/2007      |
| BB: Moderate Allocation Option              |               | 1.46%    | 6.95%  | 6.55%      | 7.45%   | 6.64%    | 5.76%           |                |
| 100% Fixed-Income Option                    | \$13,842,973  | 0.14%    | -0.14% | 1.68%      | 1.92%   | 3.06%    | 3.36%           | 8/16/2007      |
| BB: 100% Fixed-Income Option                |               | 0.08%    | 0.20%  | 1.99%      | 2.30%   | 3.65%    | 4.02%           |                |
| International Equity Index Option           | \$4,877,827   | -3.23%   | 6.54%  | 4.87%      | 5.99%   |          | 5.14%           | 6/18/2013      |
| BB: International Equity Index Option       |               | -2.61%   | 7.16%  | 5.13%      | 6.23%   |          | 5.46%           |                |
| Money Market Option                         | \$11,106,395  | 0.39%    | 1.07%  | 0.45%      | 0.27%   | 0.18%    | 0.37%           | 11/ 1/2007     |
| BB: Money Market Option                     |               | 0.33%    | 0.89%  | 0.39%      | 0.24%   | 0.22%    | 0.39%           |                |
| Principal Plus Interest Option              | \$116,999,934 | 0.40%    | 1.67%  | 1.49%      | 1.38%   | 1.91%    | 2.54%           | 10/10/2001     |
| Citigroup 3-Month U.S. Treasury Bill        |               | 0.44%    | 1.33%  | 0.64%      | 0.39%   | 0.31%    | 1.27%           |                |
| Aggressive Allocation Option                | \$21,571,102  | 1.63%    | 9.42%  | 7.91%      |         |          | 7.27%           | 8/12/2014      |
| BB: Aggressive Allocation Option            |               | 1.92%    | 9.25%  | 8.03%      |         |          | 7.37%           |                |
| Conservative Allocation Option              | \$10,192,694  | 1.91%    | 5.67%  | 4.14%      |         |          | 3.64%           | 8/18/2014      |
| BB: Conservative Allocation Option          |               | 1.86%    | 5.53%  | 4.09%      |         |          | 3.61%           |                |
| Equity and Interest Accumulation Option     | \$2,831,249   | 2.21%    | 8.03%  | 6.42%      |         |          | 5.96%           | 8/18/2014      |
| BB: Equity and Interest Accumulation Option |               | 2.16%    | 7.94%  | 6.12%      |         |          | 5.64%           |                |
| U.S. Large Cap Equity Option                | \$25,360,479  | 3.42%    | 14.12% | 11.67%     |         |          | 11.22%          | 8/12/2014      |
| BB: U.S. Large Cap Equity Option            |               | 3.43%    | 14.37% | 11.93%     |         |          | 11.46%          |                |
| Matching Grant                              | \$2,448,785   | 0.40%    | 1.67%  | 1.49%      | 1.38%   | 1.91%    | 2.56%           | 3/22/2002      |
| Citigroup 3-Month U.S. Treasury Bill        |               | 0.44%    | 1.33%  | 0.64%      | 0.39%   | 0.31%    | 1.25%           |                |

# MINNESOTABLE *plan*

A member of The National ABLÉ Alliance

Performance as of  
06/30/18

Total Market Value: \$ **2,830,591**

| <u>Fund Name</u>                              | <u>Market Value</u> | <u>% of Plan</u> | <u>1 Month</u> | <u>3 Months</u> | <u>YTD</u>    | <u>1 Year</u> | <u>3 Year</u> | <u>5 Year</u> | <u>10 Year</u> | <u>Inception</u> | <u>Inception Date</u> |
|---|---------------------|------------------|----------------|-----------------|---------------|---------------|---------------|---------------|----------------|------------------|-----------------------|
| Aggressive Option                             | \$ 287,725          | 10.16%           | 0.34           | 2.58            | 1.70          | 10.75         |               |               |                | 12.24            | 12/15/16              |
| ABLE Aggressive Custom Benchmark              |                     |                  | 0.39           | 2.88            | 1.82          | 11.21         |               |               |                |                  |                       |
| <b>Variance</b>                               |                     |                  | <b>(0.05)</b>  | <b>(0.30)</b>   | <b>(0.12)</b> | <b>(0.46)</b> |               |               |                |                  |                       |
| Moderately Aggressive Option                  | \$ 232,790          | 8.22%            | 0.26           | 2.11            | 1.31          | 8.89          |               |               |                | 10.34            | 12/15/16              |
| ABLE Moderately Aggressive Custom Benchmark   |                     |                  | 0.34           | 2.43            | 1.48          | 9.40          |               |               |                |                  |                       |
| <b>Variance</b>                               |                     |                  | <b>(0.08)</b>  | <b>(0.32)</b>   | <b>(0.17)</b> | <b>(0.51)</b> |               |               |                |                  |                       |
| Growth Option                                 | \$ 401,752          | 14.19%           | 0.27           | 1.80            | 1.07          | 7.28          |               |               |                | 8.49             | 12/15/16              |
| ABLE Growth Custom Benchmark                  |                     |                  | 0.28           | 1.98            | 1.15          | 7.61          |               |               |                |                  |                       |
| <b>Variance</b>                               |                     |                  | <b>(0.01)</b>  | <b>(0.18)</b>   | <b>(0.08)</b> | <b>(0.33)</b> |               |               |                |                  |                       |
| Moderate Option                               | \$ 324,414          | 11.46%           | 0.18           | 1.28            | 0.64          | 5.44          |               |               |                | 6.68             | 12/15/16              |
| ABLE Moderate Custom Benchmark                |                     |                  | 0.23           | 1.53            | 0.81          | 5.84          |               |               |                |                  |                       |
| <b>Variance</b>                               |                     |                  | <b>(0.05)</b>  | <b>(0.25)</b>   | <b>(0.17)</b> | <b>(0.40)</b> |               |               |                |                  |                       |
| Moderately Conservative Option                | \$ 284,191          | 10.04%           | 0.19           | 1.03            | 0.66          | 3.97          |               |               |                | 4.80             | 12/15/16              |
| ABLE Moderately Conservative Custom Benchmark |                     |                  | 0.19           | 1.15            | 0.72          | 4.27          |               |               |                |                  |                       |
| <b>Variance</b>                               |                     |                  | <b>(0.00)</b>  | <b>(0.12)</b>   | <b>(0.06)</b> | <b>(0.30)</b> |               |               |                |                  |                       |
| Conservative Option                           | \$ 520,395          | 18.38%           | 0.10           | 0.49            | 0.49          | 1.87          |               |               |                | 2.25             | 12/15/16              |
| ABLE Conservative Custom Benchmark            |                     |                  | 0.15           | 0.64            | 0.62          | 2.20          |               |               |                |                  |                       |
| <b>Variance</b>                               |                     |                  | <b>(0.05)</b>  | <b>(0.15)</b>   | <b>(0.13)</b> | <b>(0.33)</b> |               |               |                |                  |                       |
| Checking Option                               | \$ 779,323          | 27.53%           |                |                 |               |               |               |               |                |                  | 03/30/17              |

## MINNESOTA ACHIEVE A BETTER LIFE EXPERIENCE

The Minnesota Achieve a Better Life Experience Plan (ABLE) is a savings plan designed to help individuals save for qualified disability expenses without losing eligibility for certain assistance programs. The plan is administered by the Department of Human Services (DHS).

The SBI and DHS have jointly contracted with Ascensus to provide recordkeeping, administrative, and investment management services for the plan.

## RISK BASED ALLOCATIONS

The plan offers seven different allocation investment options: Aggressive, Moderately Aggressive, Growth, Moderate, Moderately Conservative, Conservative, and Checking. Each allocation is based on a fixed risk level.



# Non-Retirement

## June 30, 2018



## Quarterly Report

# Non-Retirement Funds

The SBI manages funds for trusts and programs created by the Minnesota State Constitution and Legislature.

- The Permanent School Fund is a trust established for the benefit of Minnesota public schools.
- The Environmental Trust Fund is a trust established for the protection and enhancement of Minnesota's environment. It is funded with a portion of the proceeds from the state's lottery.
- The Minnesota Workers Compensation Assigned Risk Plan provides worker compensation insurance for companies unable to obtain coverage through private carriers.
- The Closed Landfill Investment Fund is a trust created by the Legislature to invest money to pay for the long-term costs of maintaining the integrity of landfills in Minnesota once they are closed.
- Other Post-Employment Benefits Accounts (OPEB) are the assets set aside by local units of government for the payment of retiree benefits trusted by the Public Employees Retirement Association.
- Miscellaneous Trust Accounts are other small funds managed by the SBI for a variety of purposes.

All equity, fixed income, and cash assets for these accounts are managed externally by investment management firms retained by the SBI.

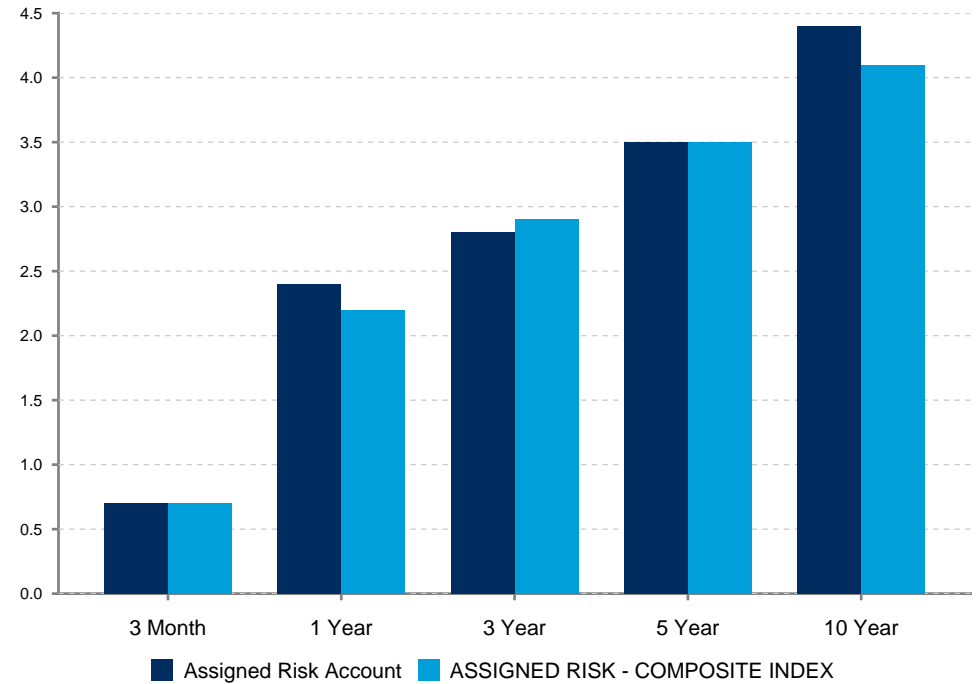


Non-Retirement

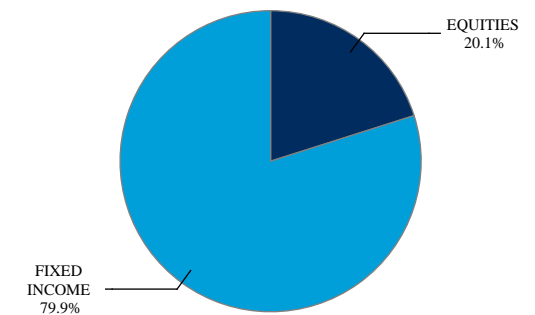
**Assigned Risk Plan**

The Assigned Risk plan has two investment objectives: to minimize the mismatch between assets and liabilities and to provide sufficient liquidity for the payment of ongoing claims and operating expenses.

The Assigned Risk Plan is invested in a portfolio of common stocks and bonds. The equity segment is passively managed to track the performance of the S&P 500. The fixed income benchmark is the Bloomberg Barclays Intermediate Government Index. The total fund benchmark is a combination of the fixed income and equity benchmarks, weighted according to the total fund asset allocation targets of 80% equities and 20% fixed income. The actual asset mix will fluctuate and is shown in the graph below.



|                                 | Ending Market Value | Last Qtr | 1 Year | 3 Year | 5 Year | 10 Year |
|---------------------------------|---------------------|----------|--------|--------|--------|---------|
| Assigned Risk Account           | \$318,972,368       | 0.7%     | 2.4%   | 2.8%   | 3.5%   | 4.4%    |
| EQUITIES                        | 64,102,762          | 3.4      | 14.3   | 10.6   | 12.6   | 9.5     |
| FIXED INCOME                    | 254,869,605         | 0.1      | -0.6   | 0.8    | 1.1    | 2.9     |
| ASSIGNED RISK - COMPOSITE INDEX |                     | 0.7      | 2.2    | 2.9    | 3.5    | 4.1     |
| Excess                          |                     | 0.0      | 0.2    | -0.1   | -0.0   | 0.3     |
| S&P 500                         |                     | 3.4      | 14.4   | 11.9   | 13.4   | 10.2    |
| BBG BARC US Gov: Int            |                     | 0.1      | -0.7   | 0.6    | 1.0    | 2.4     |



Note: Since 12/1/2017 the Assigned Risk equity segment has been managed by Mellon. From 1/17/2017-11/30/2017 it was managed internally by SBI staff. Prior to 1/17/2017 the equity segment was managed by SSgA (formerly GE Investment Mgmt.). RBC manages the fixed income segment of the Fund.



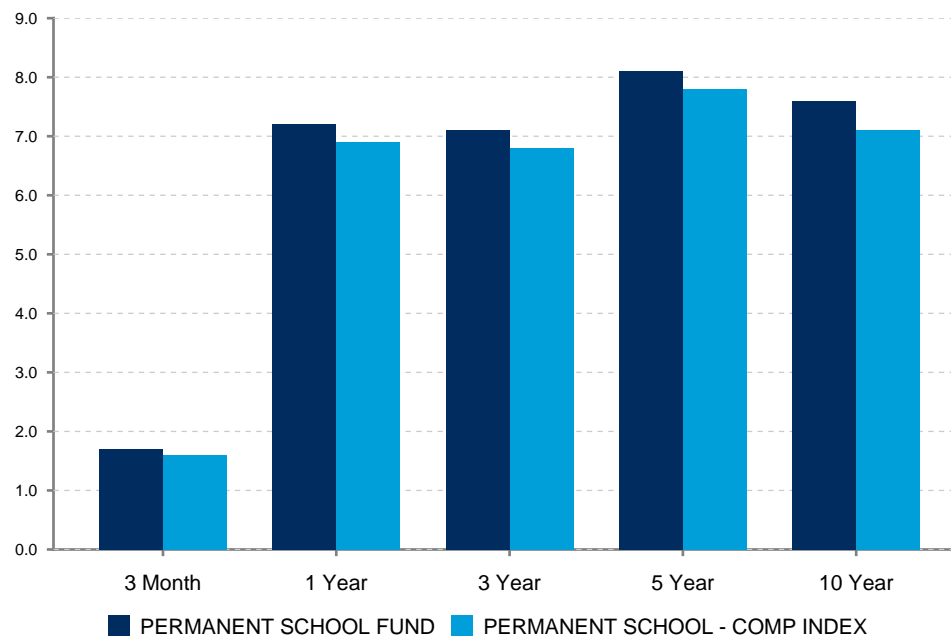
Non-Retirement

**Permanent School Fund**

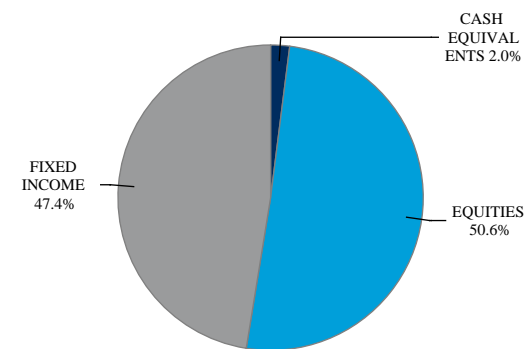
The investment objective of the Permanent School Fund is to produce a growing level of spendable income, within the constraints of maintaining adequate portfolio quality and liquidity. The income from the portfolio is transferred to the school endowment fund and distributed to Minnesota's public schools.

The Permanent School Fund is invested in a balanced portfolio of common stocks and bonds. Common stocks provide the potential for significant capital appreciation, while bonds provide portfolio diversification and a more stable stream of current income.

The stock segment is passively managed to track the performance of the S&P 500. The bond segment is actively managed to add incremental value through sector, security and yield curve decisions. The fixed income benchmark is the Bloomberg Barclays U.S. Aggregate. The total fund benchmark is a combination of the fixed income and equity benchmarks, weighted according to the total fund asset allocation targets of 2% cash, 50% equity, and 48% fixed income. The actual asset mix will fluctuate and is shown in the graph below.



|                               | <u>Ending Market Value</u> | <u>Last Qtr</u> | <u>1 Year</u> | <u>3 Year</u> | <u>5 Year</u> | <u>10 Year</u> |
|-------------------------------|----------------------------|-----------------|---------------|---------------|---------------|----------------|
| PERMANENT SCHOOL FUND         | \$1,391,419,583            | 1.7%            | 7.2%          | 7.1%          | 8.1%          | 7.6%           |
| CASH EQUIVALENTS              | 28,090,120                 | 0.5             | 1.4           | 0.7           | 0.5           | 0.5            |
| EQUITIES                      | 703,260,687                | 3.4             | 14.3          | 11.9          | 13.4          | 10.2           |
| FIXED INCOME                  | 660,068,776                | -0.1            | -0.3          | 2.0           | 2.7           | 4.4            |
| PERMANENT SCHOOL - COMP INDEX |                            | 1.6             | 6.9           | 6.8           | 7.8           | 7.1            |
| Excess                        |                            | 0.0             | 0.3           | 0.2           | 0.2           | 0.5            |
| S&P 500                       |                            | 3.4             | 14.4          | 11.9          | 13.4          | 10.2           |
| BBG BARC US Agg               |                            | -0.2            | -0.4          | 1.7           | 2.3           | 3.7            |



Note: Since 12/1/2017 the equity segment has been managed by Mellon and the fixed income segment by Prudential. Prior to 12/1/2017 both segments were managed internally by SBI staff. Prior to 7/1/97 the Fund allocation was 100% fixed income.





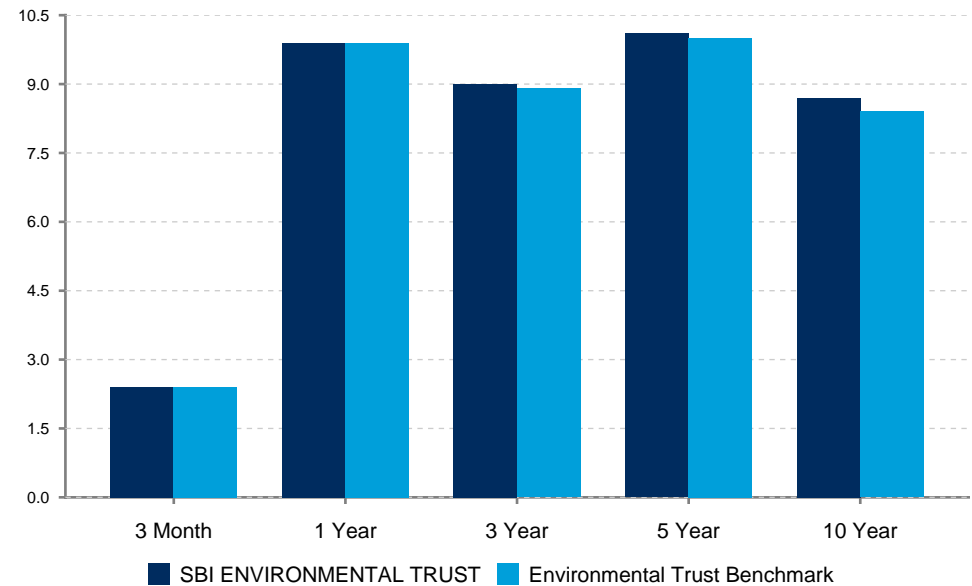
Non-Retirement

**Environmental Trust Fund**

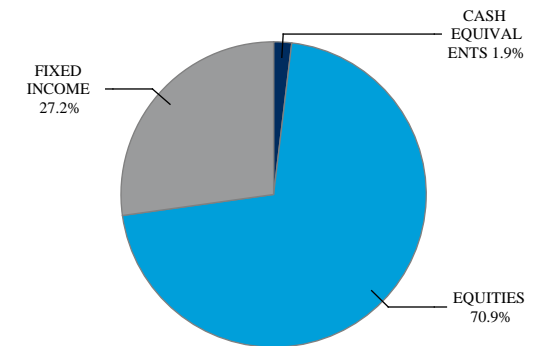
The objective of the Environmental Trust Fund is to increase the market value of the Fund over time in order to increase the annual amount made available for spending within the constraints of maintaining adequate portfolio quality and liquidity.

The Environmental Trust Fund is invested in a balanced portfolio of common stocks and bonds. Common stocks provide the potential for significant capital appreciation, while bonds act as a deflation hedge and provide portfolio diversification.

The bond segment is actively managed to add incremental value through sector, security and yield curve decisions. The stock segment is passively managed to track the performance of the S&P 500. The fixed income benchmark is the Bloomberg Barclays U.S. Aggregate. The total fund benchmark is a combination of the fixed income and equity benchmarks, weighted according to the total fund asset allocation targets of 2% cash, 70% equities, and 28% fixed income. The actual asset mix will fluctuate and is shown in the graph below.



|                               | <u>Ending Market Value</u> | <u>Last Qtr</u> | <u>1 Year</u> | <u>3 Year</u> | <u>5 Year</u> | <u>10 Year</u> |
|-------------------------------|----------------------------|-----------------|---------------|---------------|---------------|----------------|
| SBI ENVIRONMENTAL TRUST       | \$1,116,133,914            | 2.4%            | 9.9%          | 9.0%          | 10.1%         | 8.7%           |
| CASH EQUIVALENTS              | 21,255,030                 | 0.5             | 1.4           | 0.7           | 0.5           | 0.5            |
| EQUITIES                      | 791,622,694                | 3.4             | 14.3          | 11.9          | 13.4          | 10.2           |
| FIXED INCOME                  | 303,256,190                | -0.1            | -0.3          | 2.0           | 2.7           | 4.3            |
| Environmental Trust Benchmark |                            | 2.4             | 9.9           | 8.9           | 10.0          | 8.4            |
| Excess                        |                            | 0.0             | -0.0          | 0.1           | 0.1           | 0.3            |
| S&P 500                       |                            | 3.4             | 14.4          | 11.9          | 13.4          | 10.2           |
| BBG BARC US Agg               |                            | -0.2            | -0.4          | 1.7           | 2.3           | 3.7            |



Note: Since 12/1/2017 the equity segment has been managed by Mellon and the fixed income segment by Prudential. Prior to 12/1/2017 both segments were managed internally by SBI staff. From 7/1/94 to 7/1/99, the Fund's target allocation and benchmark was 50% fixed income and 50% stock. Prior to 7/1/94 the Fund was invested entirely in short-term instruments as part of the Invested Treasurer's Cash pool.

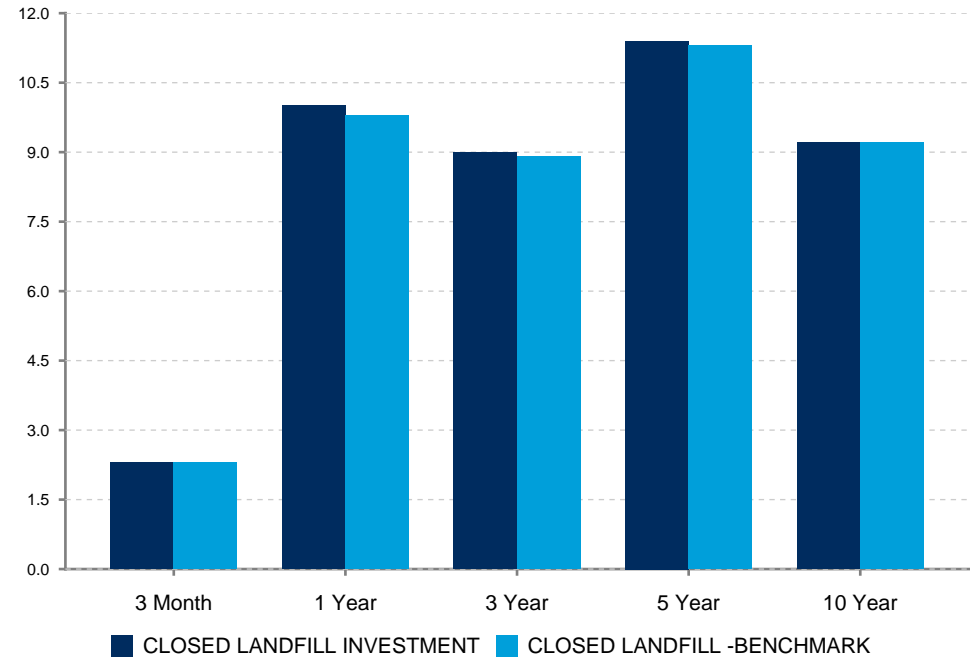


Non-Retirement

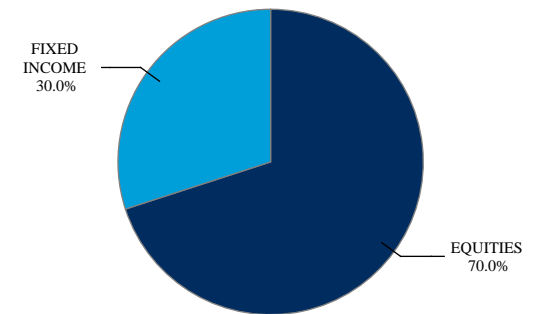
**Closed Landfill Investment Fund**

The investment objective of the Closed Landfill Investment Fund is to increase the market value of the Fund and to reduce volatility to meet future expenditures. By statute, the assets of the Fund are unavailable for expenditure until after the fiscal year 2020 to pay for long-term costs of maintaining the integrity of landfills in Minnesota once they are closed. In FY 2011, \$48 million was transferred out of the general fund leaving a balance of \$1 million in the account. Legislation was enacted in 2013 to replenish the principal and earnings back into the fund and in FY 2014 a repayment was made in the amount of \$64.2 million. In 2015, legislation was passed which repealed any further repayments.

The bond segment is actively managed to add incremental value through sector, security and yield curve decisions. The stock segment is managed to passively track the performance of the S&P 500. The fixed income benchmark is the Bloomberg Barclays U.S. Aggregate. The total fund benchmark is a combination of the fixed income and equity benchmarks, weighted according to the total fund asset allocation targets of 70% equities and 30% fixed income. The actual asset mix will fluctuate and is shown in the graph below.



|                            | <u>Ending Market Value</u> | <u>Last Qtr</u> | <u>1 Year</u> | <u>3 Year</u> | <u>5 Year</u> | <u>10 Year</u> |
|----------------------------|----------------------------|-----------------|---------------|---------------|---------------|----------------|
| CLOSED LANDFILL INVESTMENT | \$88,564,796               | 2.3%            | 10.0%         | 9.0%          | 11.4%         | 9.2%           |
| EQUITIES                   | 62,019,332                 | 3.4             | 14.3          | 11.9          | 13.4          | 10.2           |
| FIXED INCOME               | 26,545,464                 | -0.1            | -0.3          | 2.0           |               |                |
| CLOSED LANDFILL -BENCHMARK |                            | 2.3             | 9.8           | 8.9           | 11.3          | 9.2            |
| Excess                     |                            | 0.0             | 0.1           | 0.1           | 0.1           | 0.1            |
| S&P 500                    |                            | 3.4             | 14.4          | 11.9          | 13.4          | 10.2           |
| BBG BARC US Agg            |                            | -0.2            | -0.4          | 1.7           | 2.3           | 3.7            |



Note: Since 12/1/2017 the equity segment has been managed by Mellon and the fixed income segment by Prudential. Prior to 12/1/2017 both segments were managed internally by SBI staff. Prior to 9/10/14 the Fund's target allocation and benchmark was 100% domestic equity.



|                                    | <u>Ending Market Value</u> | <u>Last Qtr</u> | <u>Fiscal YTD</u> | <u>1 Year</u> | <u>3 Year</u> | <u>5 Year</u> | <u>10 Year</u> | <u>Since Inception</u> | <u>Inception Date</u> |
|------------------------------------|----------------------------|-----------------|-------------------|---------------|---------------|---------------|----------------|------------------------|-----------------------|
| <b>MELLON</b>                      | <b>2,201,265,745</b>       | <b>3.4</b>      |                   |               |               |               |                |                        | <b>12/2017</b>        |
| S&P 500 INDEX (DAILY)              |                            | 3.4             |                   |               |               |               |                |                        | 12/2017               |
| Excess                             |                            | -0.0            |                   |               |               |               |                |                        |                       |
| <b>SBI INTERNAL EQUITY INDEX</b>   | <b>274</b>                 |                 |                   |               |               |               |                |                        |                       |
| <b>NON RETIREMENT EQUITY INDEX</b> | <b>2,201,266,019</b>       | <b>3.4</b>      | <b>14.3</b>       | <b>14.3</b>   | <b>11.9</b>   | <b>13.4</b>   | <b>10.2</b>    | <b>9.7</b>             | <b>07/1993</b>        |
| S&P 500 INDEX (DAILY)              |                            | 3.4             | 14.4              | 14.4          | 11.9          | 13.4          | 10.2           | 9.6                    | 07/1993               |
| Excess                             |                            | -0.0            | -0.0              | -0.0          | 0.0           | -0.0          | 0.0            | 0.1                    |                       |
| <b>PRUDENTIAL</b>                  | <b>1,148,360,681</b>       | <b>-0.1</b>     |                   |               |               |               |                |                        | <b>12/2017</b>        |
| BBG BARC Agg (Dly)                 |                            | -0.2            |                   |               |               |               |                |                        | 12/2017               |
| Excess                             |                            | 0.1             |                   |               |               |               |                |                        |                       |
| <b>NON RETIREMENT FIXED INCOME</b> | <b>1,148,360,681</b>       | <b>-0.1</b>     | <b>-0.4</b>       | <b>-0.4</b>   | <b>2.0</b>    | <b>2.7</b>    | <b>4.3</b>     | <b>5.9</b>             | <b>07/1994</b>        |
| BBG BARC Agg (Dly)                 |                            | -0.2            | -0.4              | -0.4          | 1.7           | 2.3           | 3.7            | 5.4                    | 07/1994               |
| Excess                             |                            | 0.1             | 0.0               | 0.0           | 0.3           | 0.4           | 0.6            | 0.5                    |                       |
| <b>RBC</b>                         | <b>254,869,642</b>         | <b>0.1</b>      | <b>-0.6</b>       | <b>-0.6</b>   | <b>0.8</b>    | <b>1.1</b>    | <b>2.9</b>     | <b>4.8</b>             | <b>07/1991</b>        |
| RBC Custom Benchmark               |                            | 0.1             | -0.7              | -0.7          | 0.6           | 1.0           | 2.5            | 4.9                    | 07/1991               |
| Excess                             |                            | 0.0             | 0.2               | 0.2           | 0.1           | 0.1           | 0.4            | -0.1                   |                       |

Note:

RBC is the manager for the fixed income portion of the assigned risk account. RBC changed its name from Voyager Asset Management on 1/1/2010. The current benchmark is the Bloomberg Barclays Intermediate Government Index. Prior to 7/1/11 the Voyager Custom Index was 10% 90 day T-Bill, 25% Merrill 1-3 Government, 15% Merrill 3-5 Government, 25% Merrill 5-10 Government, 25% Merrill Mortgage Master.

Prior to 12/1/17 the Non Retirement Equity Index and Non Retirement Fixed Income accounts were managed internally by SBI staff.

In addition to the Non-Retirement Funds listed on the previous pages, the Non Retirement Equity Index and the Non Retirement Fixed Income accounts also include the assets of various smaller Miscellaneous Trust Accounts and Other Post Employment Benefits.

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# State Cash

## June 30, 2018



## State Cash Accounts

### Invested Treasurer's Cash

The Invested Treasurer's Cash Pool (ITC) represents the balances in more than 400 separate accounts that flow through the Minnesota State Treasury. These accounts vary greatly in size. The ITC contains the cash balances of certain State agencies and non-dedicated cash in the State Treasury.

The investment objectives of the ITC, in order of priority, are as follows:

- Safety of Principal. To preserve capital.
- Liquidity. To meet cash needs without the forced sale of securities at a loss.
- Competitive Rate of Return. To provide a level of current income consistent with the goal of preserving capital.

The SBI seeks to provide safety of principal by investing all cash accounts in high quality, liquid, short term investments. These include U.S. Treasury and Agency issues, repurchase agreements, bankers acceptances, commercial paper, and certificates of deposit.

Beginning in January 2003, the Treasurer's Cash Pool is measured against the iMoneyNet, All Taxable Money Fund Report Average.

|  | <u>Ending Market Value</u> | <u>Last Qtr</u> | <u>1 Year</u> | <u>3 Year</u> | <u>5 Year</u> | <u>10 Year</u> |
|--|----------------------------|-----------------|---------------|---------------|---------------|----------------|
| Treasurer's Cash                         | 13,123,520,630             | 0.5             | 1.4           | 1.0           | 0.8           | 1.0            |
| iMoneyNet Money Fund Average-All Taxable |                            | 0.4             | 1.0           | 0.4           | 0.3           | 0.2            |

### Other State Cash Accounts

Due to differing investment objectives, strategies, and time horizons, some State agencies' accounts are invested separately. These agencies direct the investments or provide the SBI with investment guidelines and the SBI executes on their behalf. Consequently, returns are shown for informational purposes only and there are no benchmarks for these accounts.

|                             | <u>Ending Market Value</u> | <u>Last Qtr</u> | <u>1 Year</u> | <u>3 Year</u> | <u>5 Year</u> | <u>10 Year</u> |
|-----------------------------|----------------------------|-----------------|---------------|---------------|---------------|----------------|
| Debt Service                | 139,680,004                | 0.6             | 0.7           | 2.0           | 2.1           |                |
| Housing Finance             | 77,117,941                 | 0.8             | 1.6           | 1.3           | 1.5           |                |
| Public Facilities Authority | 60,825,356                 | 0.2             | 1.2           | 1.9           | 2.2           |                |



## Addendum

### Benchmark Definitions

#### **Active Domestic Equity Benchmark:**

A weighted composite each of the individual active domestic equity managers' benchmarks. Effective 3/1/2017 the calculation uses the average weight of the manager relative to the total group of active managers during the month. Prior to 3/1/2017 the beginning of the month weight relative to the total group was used.

#### **Benchmark DM:**

Since 6/1/08 the developed markets managers' benchmark, "Benchmark DM," is the Standard (large + mid) MSCI World ex USA (net). From 10/1/07 through 5/31/08 the benchmark was the Provisional Standard MSCI World ex USA (net). From 10/1/03 to 9/30/07 the benchmark was the MSCI World ex USA (net). Prior to that date, it was the MSCI EAFE Free (net), including from 10/1/01 to 5/31/02 when it was the Provisional MSCI EAFE Free (net).

#### **Benchmark EM:**

Since 6/1/08 the emerging markets managers' benchmark, "Benchmark EM," is the Standard (large + mid) MSCI Emerging Markets Free (net). From 10/1/07 through 5/31/08 the benchmark was the Provisional Standard MSCI Emerging Markets Free (net). From 1/1/01 to 9/30/07 the benchmark was the MSCI Emerging Markets Free (net). Prior to that date, it was the MSCI Emerging Markets Free (gross), including from 10/1/01 to 5/31/02 when it was the Provisional MSCI Emerging Markets Free (net).

#### **Combined Funds Composite Index:**

The Composite Index performance is calculated by multiplying the beginning of month Composite weights by the monthly returns of the asset class benchmarks. Effective 1/1/2017, the Combined Funds Composite weight is set as the Strategic Asset Allocation Policy Target with the uninvested portion of Private Markets allocated to Public Equity. Asset class weights for Public Equity and Private Markets are reset at the start of each month. From 7/1/2016-12/31/2016 the composite weights were set to match actual allocation as the portfolio was brought into line with the new Strategic Asset Allocation Policy Target. Prior to 7/1/2016 the uninvested portion of the Private Markets was invested in Fixed Income and the Composite Index was adjusted accordingly. When the Strategic Asset Allocation Policy Target changes, so does the Composite Index.

#### **Domestic Equity Benchmark:**

Russell 3000 effective 10/1/2003. From 7/1/1999 to 9/30/2003, it was the Wilshire 5000 Investable Index. From 11/1/1993 to 6/30/1999, the target was the Wilshire 5000 as reported with no adjustments. Prior to 11/1/1993, the Wilshire 5000 was adjusted to reflect SBI mandated restrictions, which included liquor and tobacco, American Home Products and South Africa.

#### **Fixed Income Benchmark:**

In 2016, the Barclays Agg was rebranded Bloomberg Barclays Agg to reflect an ownership change. Prior to 9/18/2008 this index was called the Lehman Brothers Aggregate Bond Index. From 7/1/84-6/30/94 the asset class benchmark was the Salomon Brothers Broad Investment Grade Index.



## Addendum

### Benchmark Definitions (continued)

#### **Fixed Interest Blended Benchmark:**

On 6/1/2002, the benchmark was set as the 3 Year Constant Maturity Treasury Yield + 45 bps. Prior to this change it was the 3 Year Constant Maturity Treasury Yield + 30 bps.

#### **International Equity Benchmark:**

Since 6/1/08 the International Equity asset class target is the Standard (large + mid) MSCI ACWI ex U.S. (net). From 10/1/07 through 5/31/08 the benchmark was the Provisional Standard MSCI ACWI ex U.S. (net). From 10/1/03 to 9/30/07 the target was MSCI ACWI ex U.S. (net). From 1/1/01 to 9/30/03, the target was MSCI EAFE Free (net) plus Emerging Markets Free (net), and from 7/1/99 to 12/31/00 the target was MSCI EAFE Free (net) plus Emerging Markets Free (gross). From 7/1/99 to 9/30/03, the weighting of each index fluctuated with market capitalization. From 10/1/01 to 5/31/02 all international benchmarks being reported were the MSCI Provisional indices. From 12/31/96 to 6/30/99 the benchmark was fixed at 87% EAFE Free (net)/13% Emerging Markets Free (gross). On 5/1/96, the portfolio began transitioning from 100% EAFE Free (net) to the 12/31/96 fixed weights. Prior to 5/1/96 it was 100% the EAFE Free (net).

#### **Passive Domestic Equity Benchmark:**

A weighted average of the Russell 1000 and Russell 3000 effective 10/1/2016. From 10/1/2003 to 10/1/2016 it was equal to the Russell 3000. From 7/1/2000 to 9/30/2003, it was the Wilshire 5000 Investable Index. From 11/1/1993 to 6/30/2000, the target was the Wilshire 5000 as reported with no adjustments. Prior to 11/1/1993, the Wilshire 5000 was adjusted to reflect SBI mandated restrictions, which included liquor and tobacco, American Home Products and South Africa.

#### **Passive Manager Benchmark:**

Russell 3000 effective 10/1/2003. From 7/1/2000 to 9/30/2003, it was the Wilshire 5000 Investable Index. From 11/1/1993 to 6/30/2000, the target was the Wilshire 5000 as reported with no adjustments. Prior to 11/1/1993, the Wilshire 5000 was adjusted to reflect SBI mandated restrictions, which included liquor and tobacco, American Home Products and South Africa.

#### **Public Equity Benchmark:**

67% Russell 3000 and 33% MSCI ACWI ex USA effective 7/1/2017. Prior to 6/30/16 the returns of Domestic and International Equity were not reported as a total Public Equity return. From 6/30/16-6/30/17 the Public Equity benchmark adjusted by 2% each quarter from 75% Russell 3000 and 25% MSCI ACWI ex USA until it reached its current weighting.

#### **Semi-Passive Domestic Equity Benchmark:**

Russell 1000 index effective 1/1/2004. Prior to 1/1/2004 it was the Completeness Fund benchmark.