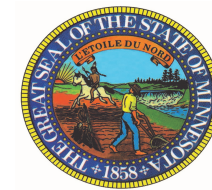


# Comprehensive Performance Report

March 31, 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

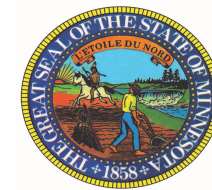
The Participant Directed Investment Program (PDIP) provides investment vehicles for a variety of retirement or other tax-advantaged savings plans. Investment goals among the PDIP's many participants are varied. In order to meet the variety of goals, participants may allocate their investments among one 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.

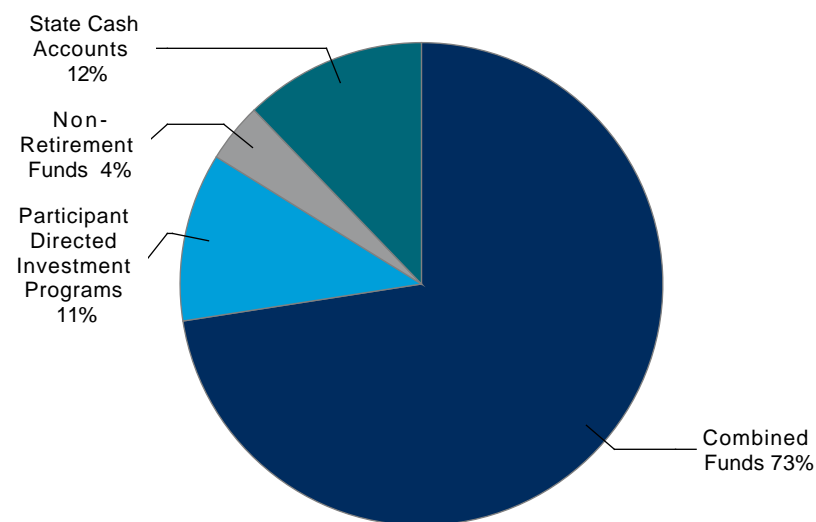
### State Cash

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	\$67,819
<b>PARTICIPANT DIRECTED INVESTMENT PROGRAMS</b>	
Supplemental Investment Fund*	3,684
State Deferred Compensation Plan**	5,472
Minnesota College Savings Plan	1,389
Achieve a Better Life Experience	2
<b>NON-RETIREMENT FUNDS</b>	
Assigned Risk Plan	317
Permanent School Fund	1,371
Environmental Trust Fund	1,093
Closed Landfill Investment Fund	87
Miscellaneous Trust Accounts	227
Other Post Employment Benefits Accounts	622
<b>STATE CASH ACCOUNTS</b>	
Treasurer's Cash	11,236
Other State Cash Accounts	164
<b>TOTAL</b>	
SBI AUM	93,480

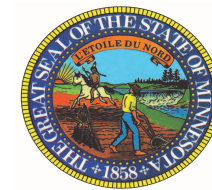


\* Includes assets of smaller retirement funds which are invested with the SBI but are not included in the Combined Funds

\*\* 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**

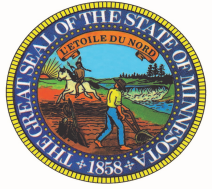
**Aggregate Level Data**

**Sub-Asset Class Level Data**

**Asset Class Level Data**

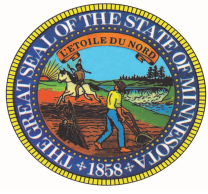
#### Note:

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

March 31, 2018



## Combined Funds Summary

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

	<u>One Quarter</u>
COMBINED FUNDS	
Beginning Market Value	\$68,377
Net Contributions	-613
Investment Return	55
Ending Market Value	67,819

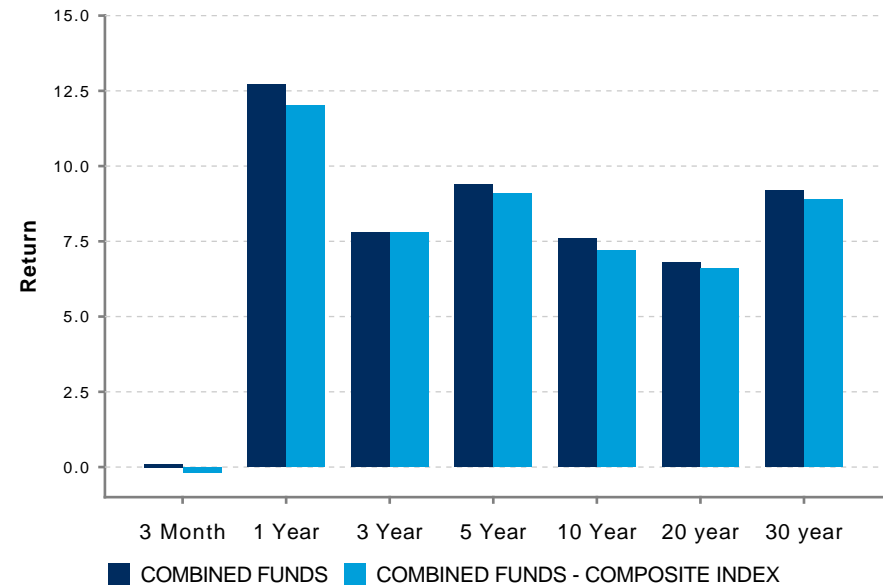
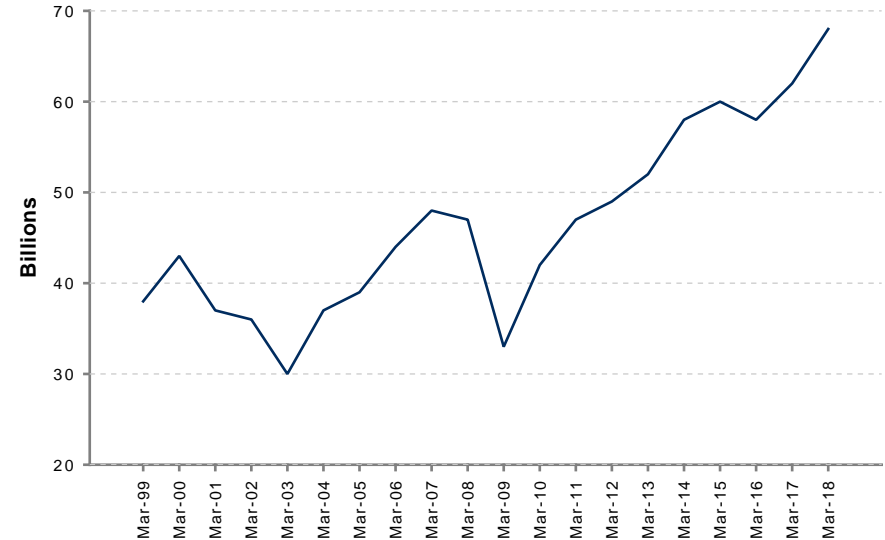
The change in market value of the Combined Funds since the end of last quarter is due to net contributions and investment returns.

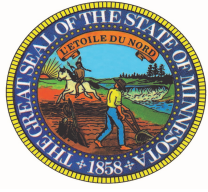
### Performance (Net of Fees)

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	0.1%	8.7%	12.7%	7.8%	9.4%	7.6%	6.8%	9.2%
COMBINED FUNDS - COMPOSITE INDEX	-0.2	8.2	12.0	7.8	9.1	7.2	6.6	8.9
Excess	0.3	0.4	0.8	0.0	0.3	0.4	0.1	0.3

### Asset Growth



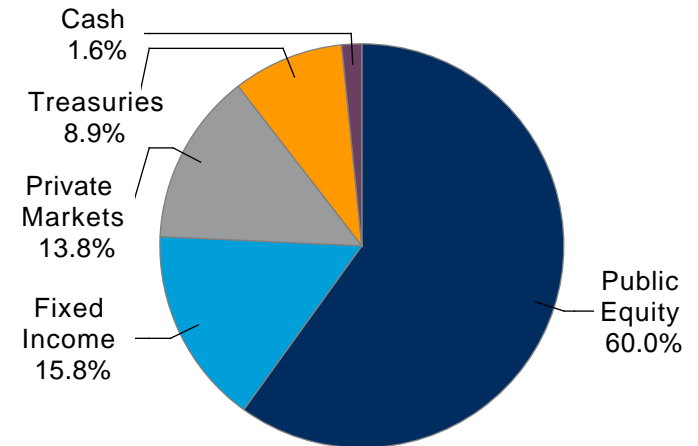


## Combined Funds Summary

### 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.

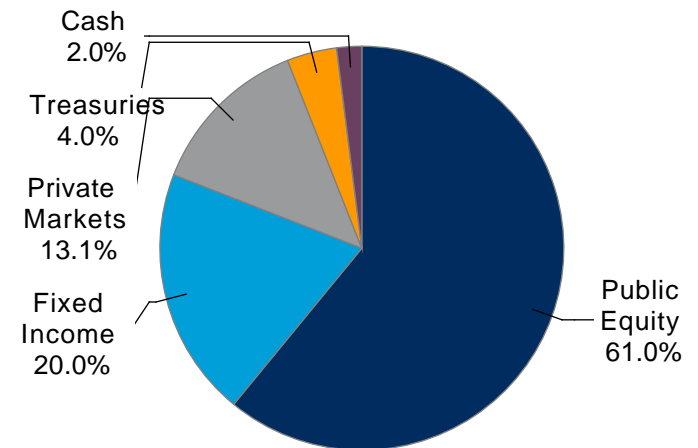
	<u>(Millions)</u>	<u>Actual Mix</u>	<u>Policy Target</u>
Public Equity	\$40,675	60.0%	47.0%
Fixed Income	10,713	15.8	18.0
Private Markets	9,326	13.8	25.0
Treasuries	6,047	8.9	8.0
Cash	1,058	1.6	2.0
<b>TOTAL</b>	<b>67,819</b>	<b>100.0</b>	

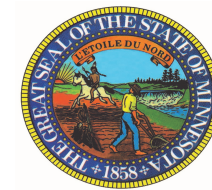


### Composite Index Comparison

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	61.0%	67% Russell 3000/33% MSCI ACWI ex US
Fixed Income	20.0	BB Barclays U.S. Aggregate
Private Markets	13.1	Private Markets
Treasuries	4.0	BB Barclays Treasury 5+ Years
Cash	2.0	3 Month T-Bills





## Combined Funds Asset Class Performance Summary

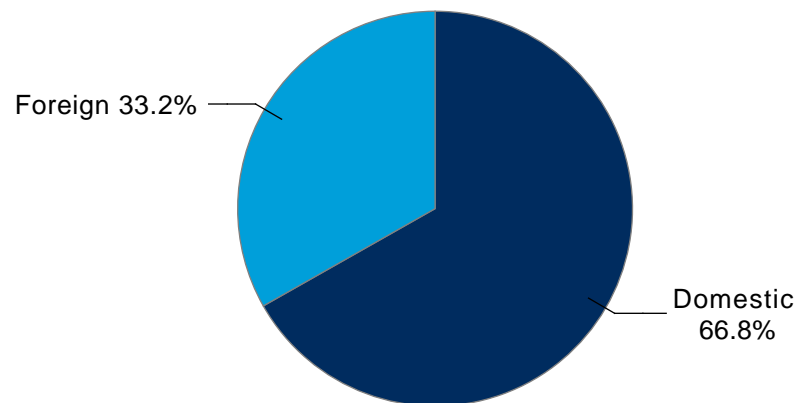
### Public Equity

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.

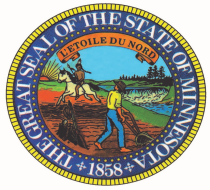
The Morgan Stanley Capital International All Country World Index ex U.S. (net) is a free float-adjusted market capitalization index that is designed to measure equity market performance in developed and emerging markets other than the United States.



	<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	-0.6%	10.6%	15.2%	9.1%	11.5%	8.1%	6.1%	9.7%
Public Equity Benchmark	-0.8	10.4	14.7					
Excess	0.2	0.2	0.6					
Domestic Equity	-0.3	10.8	14.3	9.8	13.1	9.6	6.4	10.0
Domestic Equity Benchmark	-0.6	10.5	13.8	10.2	13.0	9.6	6.5	10.2
Excess	0.4	0.3	0.5	-0.4	0.0	0.0	-0.2	-0.2
International Equity	-1.2	10.1	17.4	6.6	6.4	3.2	5.3	
International Equity Benchmark	-1.2	10.2	16.5	6.2	5.9	2.7	4.9	
Excess	0.0	-0.0	0.8	0.4	0.5	0.5	0.4	

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	-1.4%	0.1%	1.7%	1.7%	2.3%	4.4%	5.2%	6.5%
Fixed Income Benchmark	-1.5	-0.2	1.2	1.2	1.8	3.6	4.8	6.2
Excess	0.1	0.3	0.5	0.5	0.5	0.7	0.3	0.3

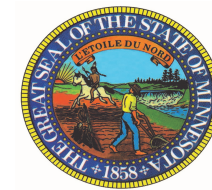
### Cash

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	0.4%	0.9%	1.2%	0.7%	0.5%	0.8%	2.5%	4.0%
90 DAY T-BILL	0.4	0.9	1.1	0.5	0.3	0.3	2.0	3.3

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	4.6%	12.2%	17.7%	11.7%	12.5%	8.9%	12.5%	13.5%	12.2%
Private Equity	5.5%	16.8%	23.1%	16.2%	16.0%	11.3%	13.7%	15.6%	
Private Credit	1.8	7.4	13.0	12.0	14.5	10.8	12.6		
Resources	4.1	3.6	7.6	-1.2	1.8	5.2	13.4	14.8	
Real Estate	3.3	9.1	12.9	11.7	13.1	4.6	8.7	9.0	

### 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.

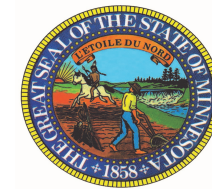
### **Resource Investments**

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

## March 31, 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.

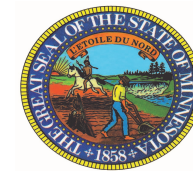
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## Domestic Equity

### March 31, 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>\$4,560,477,170</b>	<b>16.1%</b>	<b>1.9%</b>	<b>12.0%</b>	<b>16.5%</b>	<b>9.7%</b>	<b>13.4%</b>	<b>9.6%</b>		
Active Domestic Equity Benchmark			-0.6	9.6	12.5	9.8	12.7	9.5		
Excess			2.5	2.5	4.0	-0.2	0.7	0.0		
<b>SEMI PASSIVE DOMESTIC EQUITY AGGREGATE (2)</b>	<b>2,514,011,742</b>	<b>8.9</b>	<b>-0.6</b>	<b>11.7</b>	<b>14.6</b>	<b>10.1</b>	<b>13.3</b>	<b>9.8</b>		
Semi Passive Domestic Equity Benchmark			-0.7	10.6	14.0	10.4	13.2	9.6		
Excess			0.1	1.1	0.6	-0.3	0.1	0.2		
<b>PASSIVE DOMESTIC EQUITY AGGREGATE (3)</b>	<b>21,241,265,573</b>	<b>75.0</b>	<b>-0.7</b>	<b>10.5</b>	<b>13.9</b>	<b>10.2</b>	<b>13.0</b>	<b>9.7</b>		
Passive Domestic Equity Benchmark			-0.6	10.6	14.0	10.3	13.0	9.6		
Excess			-0.0	-0.0	-0.1	-0.0	-0.0	0.0		
TRANSITION AGGREGATE DOMESTIC EQUITY (4)	4,108,219	0.0								
<b>TOTAL DOMESTIC EQUITY (5)</b>	<b>28,319,862,704</b>	<b>100.0</b>	<b>-0.3</b>	<b>10.8</b>	<b>14.3</b>	<b>9.8</b>	<b>13.1</b>	<b>9.6</b>	<b>10.4</b>	<b>01/1984</b>
Domestic Equity Benchmark			-0.6	10.5	13.8	10.2	13.0	9.6	10.6	01/1984
Excess			0.4	0.3	0.5	-0.4	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.

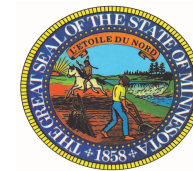
(2) The current Semi-Passive Domestic Equity Benchmark is the Russell 1000 index.

(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
TRANSITION AGGREGATE DOMESTIC EQUITY (4)					
<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>\$540,466,355</b>	<b>1.9%</b>	<b>9.6%</b>	<b>21.6%</b>	<b>30.3%</b>	<b>12.2%</b>	<b>15.5%</b>	<b>14.0%</b>	<b>10.9%</b>	<b>01/2005</b>
Russell 1000 Growth			1.4	15.8	21.3	12.9	15.5	11.3	9.6	01/2005
Excess			8.2	5.8	9.0	-0.7	0.0	2.7	1.3	
<b>WINSLOW</b>	<b>223,354,905</b>	<b>0.8</b>	<b>6.2</b>	<b>19.2</b>	<b>27.8</b>	<b>12.8</b>	<b>15.6</b>	<b>11.2</b>	<b>10.5</b>	<b>01/2005</b>
Russell 1000 Growth			1.4	15.8	21.3	12.9	15.5	11.3	9.6	01/2005
Excess			4.8	3.3	6.5	-0.1	0.1	-0.1	0.8	
<b>ZEVENBERGEN</b>	<b>496,437,499</b>	<b>1.8</b>	<b>9.0</b>	<b>17.5</b>	<b>30.4</b>	<b>14.0</b>	<b>17.7</b>	<b>12.5</b>	<b>10.7</b>	<b>04/1994</b>
Russell 1000 Growth			1.4	15.8	21.3	12.9	15.5	11.3	9.6	04/1994
Excess			7.5	1.6	9.2	1.1	2.2	1.1	1.1	
<b>RUSSELL 1000 GROWTH AGGREGATE</b>	<b>1,260,258,758</b>	<b>4.5</b>	<b>8.7</b>	<b>19.5</b>	<b>30.0</b>	<b>14.1</b>	<b>16.9</b>	<b>12.1</b>		
Russell 1000 Growth			1.4	15.8	21.3	12.9	15.5	11.3		
Excess			7.3	3.7	8.7	1.2	1.4	0.8		



	<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 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 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>\$370,077,156</b>	<b>1.3%</b>	<b>-3.1%</b>	<b>4.8%</b>	<b>7.6%</b>	<b>6.8%</b>	<b>11.0%</b>	<b>8.2%</b>	<b>7.9%</b>	<b>04/2004</b>
Russell 1000 Value			-2.8	5.5	6.9	7.9	10.8	7.8	7.8	04/2004
Excess			-0.3	-0.7	0.7	-1.0	0.2	0.4	0.2	
<b>EARNEST PARTNERS</b>	<b>269,278,323</b>	<b>1.0</b>	<b>-1.4</b>	<b>11.4</b>	<b>14.1</b>	<b>9.5</b>	<b>12.9</b>	<b>8.4</b>	<b>7.0</b>	<b>07/2000</b>
Russell 1000 Value			-2.8	5.5	6.9	7.9	10.8	7.8	7.1	07/2000
Excess			1.4	5.8	7.2	1.6	2.1	0.6	-0.1	
<b>LSV</b>	<b>419,040,571</b>	<b>1.5</b>	<b>-1.5</b>	<b>11.9</b>	<b>13.6</b>	<b>9.8</b>	<b>13.7</b>	<b>9.4</b>	<b>9.4</b>	<b>04/2004</b>
Russell 1000 Value			-2.8	5.5	6.9	7.9	10.8	7.8	7.8	04/2004
Excess			1.3	6.4	6.6	1.9	2.9	1.6	1.6	
<b>RUSSELL 1000 VALUE AGGREGATE</b>	<b>1,058,396,050</b>	<b>3.7</b>	<b>-2.1</b>	<b>9.2</b>	<b>11.6</b>	<b>8.3</b>	<b>12.1</b>	<b>8.4</b>		
Russell 1000 Value			-2.8	5.5	6.9	7.9	10.8	7.8		
Excess			0.8	3.7	4.6	0.5	1.3	0.6		



	<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 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



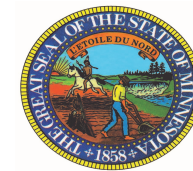
	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
<b>Semi-Passive Large Cap</b>										
<b>BLACKROCK</b>	<b>\$1,028,139,247</b>	<b>3.6%</b>	<b>0.4%</b>	<b>13.7%</b>	<b>17.2%</b>	<b>11.6%</b>	<b>14.3%</b>	<b>10.2%</b>	<b>10.0%</b>	<b>01/1995</b>
Semi Passive Domestic Equity Benchmark			-0.7	10.6	14.0	10.4	13.2	9.6	9.5	01/1995
Excess			1.1	3.1	3.2	1.2	1.2	0.6	0.5	
<b>J.P. MORGAN</b>	<b>1,485,872,496</b>	<b>5.2</b>	<b>-1.2</b>	<b>10.3</b>	<b>13.2</b>	<b>10.3</b>	<b>13.5</b>	<b>10.3</b>	<b>9.8</b>	<b>01/1995</b>
Semi Passive Domestic Equity Benchmark			-0.7	10.6	14.0	10.4	13.2	9.6	9.5	01/1995
Excess			-0.5	-0.3	-0.8	-0.1	0.3	0.7	0.3	
<b>SEMI-PASSIVE DOMESTIC EQUITY AGGREGATE</b>	<b>2,514,011,742</b>	<b>8.9</b>	<b>-0.6</b>	<b>11.7</b>	<b>14.6</b>	<b>10.1</b>	<b>13.3</b>	<b>9.8</b>		
Semi Passive Domestic Equity Benchmark			-0.7	10.6	14.0	10.4	13.2	9.6		
Excess			0.1	1.1	0.6	-0.3	0.1	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>\$213,265,438</b>	<b>0.8%</b>	<b>2.9%</b>	<b>15.1%</b>	<b>23.5%</b>				<b>27.9%</b>	<b>11/2016</b>
Russell 2000 Growth			2.3	13.6	18.6				25.6	11/2016
Excess			0.6	1.4	4.8				2.3	
<b>HOOD RIVER</b>	<b>234,423,494</b>	<b>0.8</b>	<b>1.6</b>	<b>7.7</b>	<b>15.8</b>				<b>22.8</b>	<b>11/2016</b>
Russell 2000 Growth			2.3	13.6	18.6				25.6	11/2016
Excess			-0.7	-6.0	-2.8				-2.8	
<b>RICE HALL JAMES</b>	<b>230,998,616</b>	<b>0.8</b>	<b>7.0</b>	<b>20.4</b>	<b>26.8</b>				<b>35.4</b>	<b>11/2016</b>
Russell 2000 Growth			2.3	13.6	18.6				25.6	11/2016
Excess			4.7	6.8	8.2				9.8	
<b>WELLINGTON</b>	<b>243,589,078</b>	<b>0.9</b>	<b>2.6</b>	<b>12.3</b>	<b>19.2</b>				<b>26.2</b>	<b>11/2016</b>
Russell 2000 Growth			2.3	13.6	18.6				25.6	11/2016
Excess			0.3	-1.4	0.6				0.6	
<b>RUSSELL 2000 GROWTH AGGREGATE</b>	<b>922,276,626</b>	<b>3.3</b>	<b>3.7</b>	<b>13.4</b>	<b>19.6</b>	<b>6.7</b>	<b>11.0</b>	<b>8.3</b>		
Russell 2000 Growth			2.3	13.6	18.6	8.8	12.9	11.0		
Excess			1.4	-0.3	0.9	-2.1	-1.9	-2.6		



	<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 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>\$357,448,387</b>	<b>1.3%</b>	<b>-1.9%</b>	<b>8.1%</b>	<b>8.5%</b>	<b>8.2%</b>	<b>11.6%</b>	<b>11.0%</b>	<b>9.9%</b>	<b>01/2004</b>
Russell 2000 Value			-2.6	4.4	5.1	7.9	10.0	8.6	8.1	01/2004
Excess			0.7	3.6	3.4	0.3	1.6	2.3	1.7	
<b>HOTCHKIS AND WILEY</b>	<b>298,960,190</b>	<b>1.1</b>	<b>-3.2</b>	<b>3.9</b>	<b>3.3</b>	<b>3.9</b>	<b>10.3</b>	<b>11.0</b>	<b>8.5</b>	<b>01/2004</b>
Russell 2000 Value			-2.6	4.4	5.1	7.9	10.0	8.6	8.1	01/2004
Excess			-0.6	-0.6	-1.9	-3.9	0.3	2.4	0.4	
<b>MARTINGALE</b>	<b>291,662,736</b>	<b>1.0</b>	<b>-1.9</b>	<b>6.2</b>	<b>7.3</b>	<b>8.5</b>	<b>12.7</b>	<b>9.7</b>	<b>8.3</b>	<b>01/2004</b>
Russell 2000 Value			-2.6	4.4	5.1	7.9	10.0	8.6	8.1	01/2004
Excess			0.8	1.8	2.1	0.6	2.7	1.0	0.2	
<b>PEREGRINE</b>	<b>371,474,422</b>	<b>1.3</b>	<b>-1.3</b>	<b>9.3</b>	<b>10.6</b>	<b>8.7</b>	<b>11.1</b>	<b>10.2</b>	<b>10.6</b>	<b>07/2000</b>
Russell 2000 Value			-2.6	4.4	5.1	7.9	10.0	8.6	9.7	07/2000
Excess			1.3	4.9	5.5	0.9	1.1	1.6	0.9	
<b>RUSSELL 2000 VALUE AGGREGATE</b>	<b>1,319,545,736</b>	<b>4.7</b>	<b>-2.0</b>	<b>7.0</b>	<b>7.6</b>	<b>7.4</b>	<b>11.3</b>	<b>10.4</b>		
Russell 2000 Value			-2.6	4.4	5.1	7.9	10.0	8.6		
Excess			0.6	2.6	2.5	-0.5	1.4	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 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>\$12,167,972,487</b>	<b>43.0%</b>	<b>-0.7%</b>	<b>10.6%</b>	<b>13.9%</b>				<b>19.0%</b>	<b>11/2016</b>
Russell 1000			-0.7	10.6	14.0				19.1	11/2016
Excess			-0.0	-0.0	-0.0				-0.0	
<b>BLACKROCK RUSSELL 3000 (1)</b>	<b>9,073,293,086</b>	<b>32.0</b>	<b>-0.6</b>	<b>10.5</b>	<b>13.8</b>	<b>10.3%</b>	<b>13.0%</b>	<b>9.7%</b>	<b>9.2</b>	<b>07/1995</b>
Passive Manager Benchmark			-0.6	10.5	13.8	10.2	13.0	9.6	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>21,241,265,573</b>	<b>75.0</b>	<b>-0.7</b>	<b>10.5</b>	<b>13.9</b>	<b>10.2</b>	<b>13.0</b>	<b>9.7</b>		
Passive Domestic Equity Benchmark			-0.6	10.6	14.0	10.3	13.0	9.6		
Excess			-0.0	-0.0	-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

## March 31, 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>\$10,127,571,707</b>	<b>73.9%</b>	<b>-1.9%</b>	<b>8.2%</b>	<b>15.0%</b>	<b>5.9%</b>	<b>6.8%</b>	<b>3.3%</b>		
BENCHMARK DM			-2.0	7.8	13.9	5.3	6.0	2.6		
Excess			0.2	0.3	1.1	0.6	0.8	0.7		
<b>EMERGING MARKETS (2)</b>	<b>3,509,486,896</b>	<b>25.6</b>	<b>1.2</b>	<b>16.5</b>	<b>24.6</b>	<b>8.5</b>	<b>4.6</b>	<b>2.6</b>		
BENCHMARK EM			1.4	17.6	24.9	8.8	5.0	3.0		
Excess			-0.3	-1.1	-0.3	-0.3	-0.4	-0.5		
TRANSITION AGGREGATE INTERNATIONAL EQUITY (3)	67,893,495	0.5								
<b>TOTAL INTERNATIONAL EQUITY (4)</b>	<b>13,704,952,097</b>	<b>100.0</b>	<b>-1.2</b>	<b>10.1</b>	<b>17.3</b>	<b>6.6</b>	<b>6.4</b>	<b>3.2</b>	<b>6.8</b>	<b>10/1992</b>
International Equity Benchmark			-1.2	10.2	16.5	6.2	5.9	2.7	6.3	10/1992
Excess			0.0	-0.0	0.8	0.4	0.5	0.5	0.5	

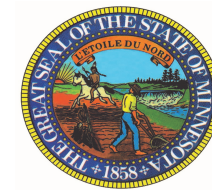
(1) The current benchmark for Developed Markets, Benchmark DM, is the Standard (large + mid) MSCI World ex USA (net).

(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 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).

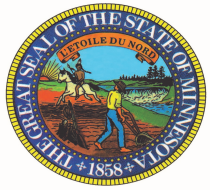
(3) The Transition Aggregate International Equity contains International Equity securities that are being transitioned to a different manager.

(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).

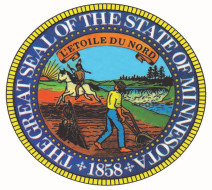
Note: All aggregates include the performance of terminated managers. For historical benchmark details please refer to the addendum of this report.



	<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>\$448,920,164</b>	<b>3.3%</b>	<b>-0.3%</b>	<b>12.6%</b>	<b>23.6%</b>	<b>13.6%</b>	<b>11.8%</b>	<b>4.4%</b>	<b>7.3%</b>	<b>07/2005</b>
BENCHMARK DM			-2.0	7.8	13.9	5.3	6.0	2.6	5.3	07/2005
Excess			1.7	4.7	9.7	8.3	5.8	1.8	2.0	
<b>COLUMBIA</b>	<b>348,644,722</b>	<b>2.5</b>	<b>-0.8</b>	<b>13.3</b>	<b>23.6</b>	<b>7.6</b>	<b>7.8</b>	<b>4.6</b>	<b>3.1</b>	<b>03/2000</b>
BENCHMARK DM			-2.0	7.8	13.9	5.3	6.0	2.6	3.6	03/2000
Excess			1.2	5.4	9.7	2.3	1.8	2.0	-0.4	
<b>FIDELITY</b>	<b>428,907,315</b>	<b>3.1</b>	<b>-2.0</b>	<b>8.6</b>	<b>16.2</b>	<b>6.1</b>	<b>7.2</b>	<b>4.2</b>	<b>6.8</b>	<b>07/2005</b>
BENCHMARK DM			-2.0	7.8	13.9	5.3	6.0	2.6	5.3	07/2005
Excess			0.0	0.7	2.3	0.8	1.1	1.6	1.5	
<b>JP MORGAN</b>	<b>262,828,311</b>	<b>1.9</b>	<b>-2.5</b>	<b>9.8</b>	<b>16.5</b>	<b>6.2</b>	<b>6.3</b>	<b>3.6</b>	<b>5.5</b>	<b>07/2005</b>
BENCHMARK DM			-2.0	7.8	13.9	5.3	6.0	2.6	5.3	07/2005
Excess			-0.4	1.9	2.6	0.9	0.3	1.0	0.2	
<b>MARATHON</b>	<b>822,961,570</b>	<b>6.0</b>	<b>-1.8</b>	<b>6.1</b>	<b>13.6</b>	<b>6.3</b>	<b>7.8</b>	<b>5.2</b>	<b>8.3</b>	<b>11/1993</b>
BENCHMARK DM			-2.0	7.8	13.9	5.3	6.0	2.6	5.2	11/1993
Excess			0.2	-1.7	-0.3	1.0	1.8	2.6	3.1	
<b>MCKINLEY</b>	<b>264,226,789</b>	<b>1.9</b>	<b>-0.9</b>	<b>12.0</b>	<b>19.2</b>	<b>5.8</b>	<b>6.9</b>	<b>1.9</b>	<b>5.1</b>	<b>07/2005</b>
BENCHMARK DM			-2.0	7.8	13.9	5.3	6.0	2.6	5.3	07/2005
Excess			1.1	4.1	5.3	0.5	0.9	-0.7	-0.1	
<b>ACTIVE DEVELOPED MARKETS AGGREGATE</b>	<b>2,576,488,871</b>	<b>18.8</b>	<b>-1.4</b>	<b>9.7</b>	<b>18.1</b>	<b>7.6</b>	<b>8.1</b>	<b>4.3</b>		
BENCHMARK DM			-2.0	7.8	13.9	5.3	6.0	2.6		
Excess			0.6	1.9	4.2	2.3	2.0	1.7		



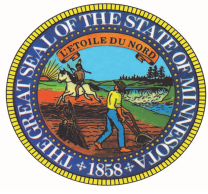
	<u>2017 Calendar Return</u>	<u>2016 Calendar Return</u>	<u>2015 Calendar Return</u>	<u>2014 Calendar Return</u>	<u>2013 Calendar Return</u>
<b>Active Developed Markets</b>					
<b>ACADIAN</b>	<b>37.0%</b>	<b>8.1%</b>	<b>2.4%</b>	<b>-1.7%</b>	<b>26.1%</b>
BENCHMARK DM	24.2	2.7	-3.0	-4.3	21.0
Excess	12.8	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 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



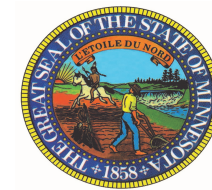
	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
<b>Semi-Passive Developed Markets</b>										
AQR	\$418,946,270	3.1%	-1.5%	8.2%	14.4%	6.3%	7.1%	3.8%	6.0%	07/2005
BENCHMARK DM			-2.0	7.8	13.9	5.3	6.0	2.6	5.3	07/2005
Excess			0.5	0.3	0.5	1.0	1.0	1.2	0.7	
<b>SEMI-PASSIVE DEVELOPED MARKETS AGGREGATE</b>	<b>418,946,270</b>	<b>3.1</b>	<b>-2.0</b>	<b>6.4</b>	<b>12.9</b>	<b>4.8</b>	<b>6.3</b>	<b>2.8</b>		
BENCHMARK DM			-2.0	7.8	13.9	5.3	6.0	2.6		
Excess			0.0	-1.4	-1.1	-0.5	0.3	0.2		



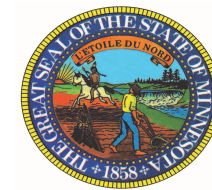
	<u>2017 Calendar Return</u>	<u>2016 Calendar Return</u>	<u>2015 Calendar Return</u>	<u>2014 Calendar Return</u>	<u>2013 Calendar Return</u>
<b>Semi-Passive Developed Markets</b>					
AQR	25.1%	0.8%	0.9%	-4.4%	24.1%
BENCHMARK DM	24.2	2.7	-3.0	-4.3	21.0
Excess	0.9	-2.0	3.9	-0.1	3.1
<b>SEMI-PASSIVE DEVELOPED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



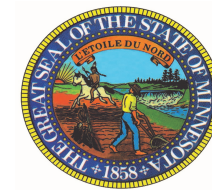
	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
<b>Total Developed Markets</b>										
<b>ACTIVE DEVELOPED MARKETS AGGREGATE</b>	<b>\$2,576,488,871</b>	<b>18.8%</b>	<b>-1.4%</b>	<b>9.7%</b>	<b>18.1%</b>	<b>7.6%</b>	<b>8.1%</b>	<b>4.3%</b>		
BENCHMARK DM			-2.0	7.8	13.9	5.3	6.0	2.6		
Excess			0.6	1.9	4.2	2.3	2.0	1.7		
<b>SEMI-PASSIVE DEVELOPED MARKETS AGGREGATE</b>	<b>418,946,270</b>	<b>3.1</b>	<b>-2.0</b>	<b>6.4</b>	<b>12.9</b>	<b>4.8</b>	<b>6.3</b>	<b>2.8</b>		
BENCHMARK DM			-2.0	7.8	13.9	5.3	6.0	2.6		
Excess			0.0	-1.4	-1.1	-0.5	0.3	0.2		
<b>SSgA DEVELOPED MARKETS PASSIVE</b>	<b>7,132,136,566</b>	<b>52.0</b>	<b>-2.1</b>	<b>7.8</b>	<b>14.1</b>	<b>5.7</b>	<b>6.4</b>	<b>3.0</b>	<b>6.4</b>	<b>10/1992</b>
BENCHMARK DM			-2.0	7.8	13.9	5.3	6.0	2.6	6.1	10/1992
Excess			-0.0	-0.0	0.2	0.4	0.4	0.4	0.3	
<b>DEVELOPED MARKETS TOTAL</b>	<b>10,127,571,707</b>	<b>73.9</b>	<b>-1.9</b>	<b>8.2</b>	<b>15.0</b>	<b>5.9</b>	<b>6.8</b>	<b>3.3</b>		
BENCHMARK DM			-2.0	7.8	13.9	5.3	6.0	2.6		
Excess			0.2	0.3	1.1	0.6	0.8	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>\$329,049,299</b>	<b>2.4%</b>	<b>2.1%</b>	<b>15.6%</b>	<b>24.9%</b>				<b>24.9%</b>	<b>04/2017</b>
MSCI EMERGING MARKETS			1.4	17.6	24.9				24.9	04/2017
Excess			0.7	-2.0	-0.1				-0.1	
<b>MARTIN CURRIE</b>	<b>359,645,133</b>	<b>2.6</b>	<b>1.4</b>	<b>22.1</b>	<b>32.9</b>				<b>32.9</b>	<b>04/2017</b>
BENCHMARK EM			1.4	17.6	24.9				24.9	04/2017
Excess			-0.0	4.5	8.0				8.0	
<b>MACQUARIE</b>	<b>336,301,514</b>	<b>2.5</b>	<b>0.6</b>	<b>15.6</b>	<b>23.9</b>				<b>23.9</b>	<b>04/2017</b>
BENCHMARK EM			1.4	17.6	24.9				24.9	04/2017
Excess			-0.8	-2.0	-1.1				-1.1	
<b>MORGAN STANLEY</b>	<b>666,369,874</b>	<b>4.9</b>	<b>1.2</b>	<b>15.2</b>	<b>24.6</b>	<b>9.2%</b>	<b>5.4%</b>	<b>3.6%</b>	<b>10.6</b>	<b>01/2001</b>
BENCHMARK EM			1.4	17.6	24.9	8.8	5.0	3.0	10.2	01/2001
Excess			-0.2	-2.3	-0.3	0.4	0.4	0.6	0.4	
<b>NEUBERGER BERMAN</b>	<b>345,480,156</b>	<b>2.5</b>	<b>1.0</b>	<b>19.3</b>	<b>27.5</b>				<b>27.5</b>	<b>04/2017</b>
BENCHMARK EM			1.4	17.6	24.9				24.9	04/2017
Excess			-0.4	1.8	2.6				2.6	
<b>PZENA</b>	<b>312,236,172</b>	<b>2.3</b>	<b>0.5</b>	<b>10.1</b>	<b>16.3</b>				<b>16.3</b>	<b>04/2017</b>
BENCHMARK EM			1.4	17.6	24.9				24.9	04/2017
Excess			-0.9	-7.5	-8.6				-8.6	
<b>ROCK CREEK</b>	<b>323,958,977</b>	<b>2.4</b>	<b>1.0</b>	<b>14.4</b>	<b>20.5</b>				<b>20.5</b>	<b>04/2017</b>
BENCHMARK EM			1.4	17.6	24.9				24.9	04/2017
Excess			-0.4	-3.1	-4.4				-4.4	



	<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>	<b>\$2,673,041,125</b>	<b>19.5%</b>	<b>1.1%</b>	<b>16.0%</b>	<b>24.4%</b>	<b>7.7%</b>	<b>4.1%</b>	<b>2.4%</b>		
BENCHMARK EM			1.4	17.6	24.9	8.8	5.0	3.0		
Excess			-0.3	-1.6	-0.6	-1.1	-0.9	-0.7		
<b>SSGA EMERGING MARKETS PASSIVE</b>	<b>836,445,771</b>	<b>6.1</b>	<b>1.2</b>	<b>17.5</b>	<b>25.1</b>	<b>8.9</b>	<b>5.2</b>		<b>6.6</b>	<b>01/2012</b>
BENCHMARK EM			1.4	17.6	24.9	8.8	5.0		6.5	01/2012
Excess			-0.2	-0.1	0.2	0.1	0.2		0.1	
<b>EMERGING MARKETS TOTAL</b>	<b>3,509,486,896</b>	<b>25.6</b>	<b>1.2</b>	<b>16.5</b>	<b>24.6</b>	<b>8.5</b>	<b>4.6</b>	<b>2.6</b>		
BENCHMARK EM			1.4	17.6	24.9	8.8	5.0	3.0		
Excess			-0.3	-1.1	-0.3	-0.3	-0.4	-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>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>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>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

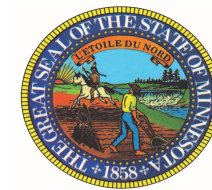
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# Fixed Income

## March 31, 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>\$5,501,165,102</b>	<b>49.7%</b>	<b>-1.2%</b>	<b>0.5%</b>	<b>2.3%</b>	<b>2.2%</b>	<b>2.7%</b>	<b>4.7%</b>		
BBG BARC Agg (Dly)			-1.5	-0.2	1.2	1.2	1.8	3.6		
Excess			0.3	0.8	1.1	1.0	0.8	1.0		
<b>SEMI PASSIVE FIXED INCOME AGGREGATE</b>	<b>5,569,811,055</b>	<b>50.3</b>	<b>-1.4</b>	<b>-0.2</b>	<b>1.4</b>	<b>1.4</b>	<b>2.0</b>	<b>4.0</b>		
BBG BARC Agg (Dly)			-1.5	-0.2	1.2	1.2	1.8	3.6		
Excess			0.0	0.1	0.2	0.2	0.2	0.4		
TRANSITION AGGREGATE FIXED INCOME (1)	18,398	0.0								
<b>TOTAL FIXED INCOME (2)</b>	<b>11,070,994,555</b>	<b>100.0</b>	<b>-1.3</b>	<b>0.2</b>	<b>1.8</b>	<b>1.8</b>	<b>2.3</b>	<b>4.3</b>	<b>7.6</b>	<b>07/1984</b>
Fixed Income Benchmark			-1.5	-0.2	1.2	1.2	1.8	3.6	7.2	07/1984
Excess			0.2	0.4	0.6	0.6	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.

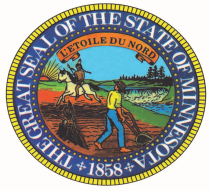


	<u>2017 Calendar Return</u>	<u>2016 Calendar Return</u>	<u>2015 Calendar Return</u>	<u>2014 Calendar Return</u>	<u>2013 Calendar Return</u>
<b>Total Fixed Income</b>					
<b>ACTIVE FIXED INCOME AGGREGATE</b>	<b>4.7%</b>	<b>4.4%</b>	<b>0.6%</b>	<b>6.2%</b>	<b>-0.8%</b>
BBG BARC Agg (Dly)	3.5	2.6	0.5	6.0	-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 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

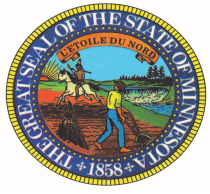
(1) The Transition Aggregate Fixed Income includes fixed income securities that are being transition to a different manager.

(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.

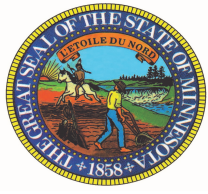
Note: All aggregates include the performance of terminated managers. Inception refers to the date of retention by the SBI.



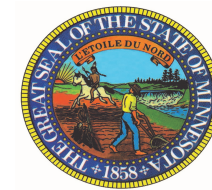
	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
<b>Active Fixed Income Managers</b>										
<b>COLUMBIA</b>	<b>\$1,167,570,652</b>	<b>10.5%</b>	<b>-1.2%</b>	<b>0.6%</b>	<b>2.4%</b>	<b>2.4%</b>	<b>2.6%</b>	<b>4.4%</b>	<b>5.4%</b>	<b>07/1993</b>
BBG BARC Agg (Dly)			-1.5	-0.2	1.2	1.2	1.8	3.6	5.2	07/1993
Excess			0.2	0.8	1.2	1.2	0.8	0.8	0.2	
<b>DODGE &amp; COX</b>	<b>1,659,623,402</b>	<b>15.0</b>	<b>-0.9</b>	<b>0.8</b>	<b>2.3</b>	<b>2.3</b>	<b>2.9</b>	<b>5.1</b>	<b>6.0</b>	<b>02/2000</b>
BBG BARC Agg (Dly)			-1.5	-0.2	1.2	1.2	1.8	3.6	5.0	02/2000
Excess			0.6	1.0	1.1	1.1	1.1	1.5	1.0	
<b>PIMCO</b>	<b>1,075,176,660</b>	<b>9.7</b>	<b>-1.3</b>	<b>0.1</b>	<b>1.8</b>	<b>1.6</b>	<b>2.1</b>		<b>5.4</b>	<b>10/2008</b>
BBG BARC Agg (Dly)			-1.5	-0.2	1.2	1.2	1.8		4.0	10/2008
Excess			0.1	0.4	0.6	0.4	0.2		1.4	
<b>WESTERN</b>	<b>1,598,794,388</b>	<b>14.4</b>	<b>-1.3</b>	<b>0.7</b>	<b>2.9</b>	<b>2.6</b>	<b>3.0</b>	<b>5.0</b>	<b>8.4</b>	<b>07/1984</b>
BBG BARC Agg (Dly)			-1.5	-0.2	1.2	1.2	1.8	3.6	7.3	07/1984
Excess			0.2	0.9	1.7	1.4	1.2	1.4	1.2	
<b>ACTIVE FIXED INCOME AGGREGATE</b>	<b>5,501,165,102</b>	<b>49.7</b>	<b>-1.2</b>	<b>0.5</b>	<b>2.3</b>	<b>2.2</b>	<b>2.7</b>	<b>4.7</b>		
BBG BARC Agg (Dly)			-1.5	-0.2	1.2	1.2	1.8	3.6		
Excess			0.3	0.8	1.1	1.0	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>4.2</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	0.7	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>\$1,661,947,582</b>	<b>15.0%</b>	<b>-1.5%</b>	<b>-0.2%</b>	<b>1.2%</b>	<b>1.3%</b>	<b>2.0%</b>	<b>3.6%</b>	<b>5.2%</b>	<b>04/1996</b>
BBG BARC Agg (Dly)			-1.5	-0.2	1.2	1.2	1.8	3.6	5.1	04/1996
Excess			-0.0	0.0	0.0	0.1	0.2	0.0	0.1	
<b>GOLDMAN SACHS</b>	<b>2,083,799,569</b>	<b>18.8</b>	<b>-1.3</b>	<b>-0.0</b>	<b>1.5</b>	<b>1.5</b>	<b>2.1</b>	<b>4.2</b>	<b>5.5</b>	<b>07/1993</b>
BBG BARC Agg (Dly)			-1.5	-0.2	1.2	1.2	1.8	3.6	5.2	07/1993
Excess			0.1	0.2	0.3	0.3	0.3	0.6	0.3	
<b>NEUBERGER</b>	<b>1,824,063,904</b>	<b>16.5</b>	<b>-1.5</b>	<b>-0.2</b>	<b>1.3</b>	<b>1.2</b>	<b>1.9</b>	<b>4.3</b>	<b>6.4</b>	<b>07/1988</b>
BBG BARC Agg (Dly)			-1.5	-0.2	1.2	1.2	1.8	3.6	6.2	07/1988
Excess			-0.0	-0.0	0.1	0.0	0.1	0.6	0.2	
<b>SEMI PASSIVE FIXED INCOME</b>	<b>5,569,811,055</b>	<b>50.3</b>	<b>-1.4</b>	<b>-0.2</b>	<b>1.4</b>	<b>1.4</b>	<b>2.0</b>	<b>4.0</b>		
BBG BARC Agg (Dly)			-1.5	-0.2	1.2	1.2	1.8	3.6		
Excess			0.0	0.1	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

## March 31, 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>\$1,959,371,187</b>	<b>32.4%</b>							<b>0.1%</b>	<b>02/2018</b>
BBG BARC 5Y + Us Tsy Idx									0.2	02/2018
Excess									-0.1	
<b>GOLDMAN SACHS</b>	<b>1,946,255,276</b>	<b>32.2</b>							<b>0.1</b>	<b>02/2018</b>
BBG BARC 5Y + Us Tsy Idx									0.2	02/2018
Excess									-0.0	
<b>NEUBERGER</b>	<b>1,967,797,723</b>	<b>32.5</b>							<b>0.1%</b>	<b>02/2018</b>
BBG BARC 5Y + Us Tsy Idx									0.2	02/2018
Excess									-0.1	
TREASURIES TRANSITION ACCOUNT	180,130,424	3.0								
<b>TOTAL TREASURIES</b>	<b>6,053,554,611</b>	<b>100.0</b>							<b>0.0%</b>	<b>02/2018</b>
BBG BARC 5Y + Us Tsy Idx									0.2	02/2018
Excess									-0.2	

Note: The Treasuries asset class was initially funded by transfers from other asset classes in January and March of 2018.



	<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>					
BBG BARC 5Y + Us Tsy Idx					
Excess					
<b>GOLDMAN SACHS</b>					
BBG BARC 5Y + Us Tsy Idx					
Excess					
<b>NEUBERGER</b>					
BBG BARC 5Y + Us Tsy Idx					
Excess					
<b>TOTAL TREASURIES</b>					
BBG BARC 5Y + Us Tsy Idx					
Excess					

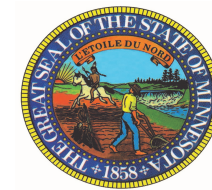
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# Private Markets

## March 31, 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	4.6%	12.2%	17.7%	11.7%	12.5%	8.9%	12.5%	13.5%	12.2%
Private Equity	5.5%	16.8%	23.1%	16.2%	16.0%	11.3%	13.7%	15.6%	
Private Credit	1.8	7.4	13.0	12.0	14.5	10.8	12.6		
Resources	4.1	3.6	7.6	-1.2	1.8	5.2	13.4	14.8	
Real Estate	3.3	9.1	12.9	11.7	13.1	4.6	8.7	9.0	

### 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 March 31, 2018**

<b>Investment</b>	<b>Total Commitment</b>	<b>Funded Commitment</b>	<b>Market Value</b>	<b>Distributions</b>	<b>Unfunded Commitment</b>	<b>IRR %</b>	<b>MOIC*</b>	<b>Period Years</b>
<b>I. PRIVATE EQUITY</b>								
<b>Adams Street Partners</b>								
<i>Adams Street Global Secondary Fund 5</i>	100,000,000	76,529,750	61,074,576	26,434,531	23,470,250	5.77	<b>1.14</b>	<b>5.79</b>
<i>Adams Street Global Secondary Fund 6</i>	69,798,500	0	0	0	69,798,500	0.00	<b>0.00</b>	<b>1.00</b>
<b>Advent International</b>								
<i>Advent International GPE VI</i>	50,000,000	50,000,000	23,784,553	84,135,574	0	17.26	<b>2.16</b>	<b>10.00</b>
<i>Advent International GPE VII</i>	90,000,000	84,600,000	101,824,764	41,580,083	5,400,000	18.18	<b>1.70</b>	<b>5.54</b>
<i>Advent International GPE VIII</i>	100,000,000	49,150,000	52,472,491	0	50,850,000	8.85	<b>1.07</b>	<b>2.15</b>
<b>Affinity Ventures</b>								
<i>Affinity Ventures IV</i>	4,000,000	4,000,000	576,106	1,541,970	0	-13.05	<b>0.53</b>	<b>13.76</b>
<i>Affinity Ventures V</i>	5,000,000	5,000,000	2,323,398	1,706,245	0	-4.40	<b>0.81</b>	<b>9.75</b>
<b>APAX Partners</b>								
<i>Apax VIII - USD</i>	200,000,000	207,506,059	222,599,075	62,443,891	28,571,096	12.89	<b>1.37</b>	<b>5.07</b>
<i>Apax IX - USD</i>	150,000,000	66,417,205	69,400,479	746,702	84,329,497	10.79	<b>1.06</b>	<b>1.86</b>
<b>Asia Alternatives</b>								
<i>Asia Alternatives Capital Partners V</i>	99,000,000	4,138,052	3,694,685	75	94,861,948	-15.25	<b>0.89</b>	<b>0.75</b>
<b>Banc Fund</b>								
<i>Banc Fund VII</i>	45,000,000	45,000,000	23,117,097	42,851,725	0	3.63	<b>1.47</b>	<b>13.01</b>
<i>Banc Fund VIII</i>	98,250,000	98,250,000	125,827,313	89,405,973	0	14.98	<b>2.19</b>	<b>9.94</b>
<i>Banc Fund IX</i>	107,205,932	107,205,932	130,075,316	5,160,021	0	14.27	<b>1.26</b>	<b>3.81</b>
<b>Blackstone Capital Partners</b>								
<i>Blackstone Capital Partners IV</i>	70,000,000	72,354,340	7,213,761	193,288,642	1,916,968	37.04	<b>2.77</b>	<b>15.73</b>
<i>Blackstone Capital Partners V</i>	140,000,000	130,994,409	14,371,880	229,944,340	7,057,008	8.04	<b>1.87</b>	<b>12.16</b>
<i>Blackstone Capital Partners VI</i>	100,000,000	91,756,656	95,179,613	52,219,416	14,412,040	12.56	<b>1.61</b>	<b>9.69</b>
<i>Blackstone Capital Partners VII</i>	130,000,000	31,344,275	33,552,123	1,891,275	100,375,709	3.40	<b>1.13</b>	<b>2.75</b>
<b>Blackstone Strategic Partners (CSFB/ DLJ)</b>								
<i>Strategic Partners II B</i>	100,000,000	86,190,387	1,068	162,536,282	4,657,174	35.07	<b>1.89</b>	<b>14.71</b>
<i>Strategic Partners III B</i>	100,000,000	78,157,079	12,948,247	107,459,891	15,001,769	6.64	<b>1.54</b>	<b>12.84</b>
<i>Strategic Partners III VC</i>	25,000,000	24,854,706	5,343,196	29,113,976	1,102,511	6.35	<b>1.39</b>	<b>12.84</b>
<i>Strategic Partners IV B</i>	100,000,000	92,349,011	17,981,289	136,177,976	18,071,129	12.54	<b>1.67</b>	<b>10.02</b>
<i>Strategic Partners IV VC</i>	40,500,000	40,176,196	11,726,133	49,237,425	2,838,320	9.22	<b>1.52</b>	<b>9.79</b>
<i>Strategic Partners V</i>	100,000,000	79,380,586	29,487,739	102,879,422	39,836,896	20.04	<b>1.67</b>	<b>6.62</b>

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<i>Strategic Partners VI</i>	150,000,000	86,179,886	72,840,556	57,309,708	66,718,335	20.28	<b>1.51</b>	<b>3.96</b>
<i>Strategic Partners VII</i>	150,000,000	65,129,489	77,024,841	5,104,121	89,951,524	63.44	<b>1.26</b>	<b>1.27</b>
<b>Blum Capital Partners</b>								
<i>Blum Strategic Partners II</i>	50,000,000	40,238,050	0	90,142,155	2,127,584	22.43	<b>2.24</b>	<b>16.71</b>
<i>Blum Strategic Partners III</i>	75,000,000	78,121,020	0	83,524,046	471,064	0.26	<b>1.07</b>	<b>12.84</b>
<i>Blum Strategic Partners IV</i>	150,000,000	172,056,780	0	167,939,991	4,756,033	-0.89	<b>0.98</b>	<b>10.37</b>
<b>Bridgepoint</b>								
<i>Bridgepoint Europe VI</i>	184,477,562	0	0	0	184,477,562	0.00	<b>0.00</b>	<b>0.03</b>
<b>Brookfield Asset Management</b>								
<i>Brookfield Capital Partners Fund IV</i>	100,000,000	59,730,955	130,016,135	34,018,302	47,555,780	92.63	<b>2.75</b>	<b>2.55</b>
<b>Cardinal Partners</b>								
<i>DSV Partners IV</i>	10,000,000	10,000,000	31,085	39,196,082	0	10.61	<b>3.92</b>	<b>33.27</b>
<b>Carlyle Group</b>								
<i>Carlyle Partners VII</i>	150,000,000	0	0	0	150,000,000	0.00	<b>0.00</b>	<b>0.29</b>
<b>Chicago Growth Partners (William Blair)</b>								
<i>William Blair Capital Partners VII</i>	50,000,000	48,150,000	966,170	69,201,191	1,650,000	8.60	<b>1.46</b>	<b>17.07</b>
<i>Chicago Growth Partners I</i>	50,000,000	52,441,998	3,057,412	54,532,745	300,000	2.16	<b>1.10</b>	<b>12.69</b>
<i>Chicago Growth Partners II</i>	60,000,000	58,095,626	5,234,113	117,713,720	1,652,374	19.55	<b>2.12</b>	<b>10.06</b>
<b>Court Square Capital Partners</b>								
<i>Court Square Capital Partners</i>	100,000,000	80,827,220	360,386	182,160,766	185,289	28.92	<b>2.26</b>	<b>16.31</b>
<i>Court Square Capital Partners II</i>	175,000,000	158,445,938	42,498,053	263,555,092	17,601,260	13.00	<b>1.93</b>	<b>11.58</b>
<i>Court Square Capital Partners III</i>	175,000,000	128,700,378	89,794,031	68,344,272	53,963,711	10.45	<b>1.23</b>	<b>5.83</b>
<b>Crescendo</b>								
<i>Crescendo IV</i>	101,500,000	101,500,000	10,604,547	43,048,440	0	-5.57	<b>0.53</b>	<b>18.07</b>
<b>CVC Capital Partners</b>								
<i>CVC European Equity Partners V</i>	134,057,904	132,667,980	48,706,345	219,413,867	1,489,776	15.62	<b>2.02</b>	<b>10.02</b>
<i>CVC Capital Partners VI</i>	260,426,797	229,805,906	237,855,832	41,085,856	36,621,017	13.77	<b>1.21</b>	<b>4.73</b>
<b>Elevation Partners</b>								
<i>Elevation Partners</i>	75,000,000	69,311,710	151,770	113,492,106	799,634	11.82	<b>1.64</b>	<b>12.88</b>
<b>Fox Paine &amp; Company</b>								
<i>Fox Paine Capital Fund II</i>	50,000,000	46,299,626	19,807	90,989,702	11,953,212	18.88	<b>1.97</b>	<b>17.76</b>

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<b>GHJM Marathon Fund</b>								
<i>GHJM TrailHead Fund</i>	20,000,000	16,064,187	24,241,908	2,406,955	3,935,813	13.45	<b>1.66</b>	<b>6.10</b>
<b>Glouston Capital Partners**</b>								
<i>Glouston Private Equity Opportunities Fund IV</i>	5,337,098	4,247,098	1,735,706	2,840,487	1,090,000	2.93	<b>1.08</b>	<b>3.25</b>
<b>GS Capital Partners</b>								
<i>GS Capital Partners 2000</i>	50,000,000	50,000,000	1,018	115,308,929	0	23.49	<b>2.31</b>	<b>17.59</b>
<i>GS Capital Partners V</i>	100,000,000	73,958,901	685,350	220,823,529	1,041,099	18.25	<b>3.00</b>	<b>13.01</b>
<i>GS Capital Partners VI</i>	100,000,000	80,215,619	15,067,116	125,957,405	3,311,065	7.18	<b>1.76</b>	<b>11.17</b>
<i>West Street Capital Partners</i>	150,000,000	22,500,000	19,860,908	0	127,500,000	-11.60	<b>0.88</b>	<b>1.28</b>
<i>GS Vintage VII</i>	100,000,000	42,460,769	36,674,362	8,272,028	57,739,430	26.86	<b>1.06</b>	<b>1.76</b>
<b>GTCR</b>								
<i>GTCR IX</i>	75,000,000	71,414,933	7,528,197	119,144,001	3,585,067	13.56	<b>1.77</b>	<b>11.76</b>
<i>GTCR X</i>	100,000,000	93,248,604	69,664,099	138,151,010	6,751,396	22.37	<b>2.23</b>	<b>7.31</b>
<i>GTCR XI</i>	110,000,000	93,258,444	99,405,544	26,939,116	16,741,556	19.79	<b>1.35</b>	<b>4.38</b>
<b>HarbourVest**</b>								
<i>Dover Street VII Cayman Fund</i>	2,198,112	2,065,696	538,522	1,384,813	132,416	-4.22	<b>0.93</b>	<b>3.25</b>
<i>HarbourVest Intl PE Partners V Cayman</i>	3,537,381	3,340,605	1,183,201	3,023,064	196,776	13.54	<b>1.26</b>	<b>3.25</b>
<i>Harbourvest Intl PE Partners VI Cayman</i>	4,261,139	3,916,781	3,938,022	1,639,696	344,358	17.01	<b>1.42</b>	<b>3.25</b>
<i>HarbourVest Partners VIII Cayman Buyout</i>	4,506,711	4,272,711	2,199,552	3,354,529	234,000	14.36	<b>1.30</b>	<b>3.25</b>
<i>HarbourVest Partners VIII Cayman Venture</i>	7,190,898	7,050,898	4,198,832	3,991,234	140,000	6.48	<b>1.16</b>	<b>3.25</b>
<b>Hellman &amp; Friedman</b>								
<i>Hellman &amp; Friedman Capital Partners V</i>	160,000,000	146,165,961	2,555,884	415,483,079	8,070,303	27.89	<b>2.86</b>	<b>13.34</b>
<i>Hellman &amp; Friedman Capital Partners VI</i>	175,000,000	171,037,755	42,844,321	311,889,122	5,084,864	13.16	<b>2.07</b>	<b>11.01</b>
<i>Hellman &amp; Friedman Capital Partners VII</i>	50,000,000	47,528,206	63,691,072	44,206,872	2,471,794	23.70	<b>2.27</b>	<b>8.95</b>
<b>IK Investment Partners</b>								
<i>IK Fund VII</i>	180,987,692	172,208,922	166,234,136	64,501,543	8,778,770	10.24	<b>1.30</b>	<b>4.55</b>
<i>IK Fund VIII</i>	179,808,261	61,797,320	67,893,479	2,213,957	120,156,843	14.86	<b>1.08</b>	<b>1.70</b>
<b>Kohlberg Kravis Roberts</b>								
<i>KKR Millennium Fund</i>	200,000,000	200,000,000	22,741,268	400,827,308	0	16.35	<b>2.12</b>	<b>15.32</b>
<i>KKR 2006 Fund</i>	200,000,000	211,063,288	56,264,969	300,103,386	3,360,223	8.47	<b>1.69</b>	<b>11.52</b>
<i>KKR Americas Fund XII</i>	150,000,000	17,250,429	15,955,802	0	132,749,571	-32.34	<b>0.92</b>	<b>2.08</b>

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<i><b>KKR Asian Fund III</b></i>	100,000,000	7,021,357	5,753,209	0	92,978,643	-18.41	<b>0.00</b>	<b>1.00</b>
<b>Leonard Green &amp; Partners</b>								
<i><b>Green Equity Investors VI</b></i>	200,000,000	214,469,506	202,258,073	106,835,075	21,248,883	14.53	<b>1.44</b>	<b>6.05</b>
<b>Lexington Capital Partners</b>								
<i><b>Lexington Capital Partners VI</b></i>	100,000,000	98,365,297	13,154,307	131,271,898	1,634,703	7.93	<b>1.47</b>	<b>12.27</b>
<i><b>Lexington Capital Partners VII</b></i>	200,000,000	170,296,470	69,305,155	196,211,934	38,275,710	15.18	<b>1.56</b>	<b>9.22</b>
<i><b>Lexington Capital Partners VIII</b></i>	150,000,000	80,802,860	72,745,021	32,347,739	79,422,985	24.05	<b>1.30</b>	<b>4.08</b>
<i><b>Lexington Middle Market Investors IV</b></i>	100,000,000	0	0	1,458,011	100,000,000	0.00	<b>0.00</b>	<b>1.27</b>
<i><b>Lexington Co-Investment Partners IV</b></i>	200,000,000	31,104,587	30,923,745	0	168,895,413	-0.59	<b>0.99</b>	<b>1.66</b>
<b>Madison Dearborn Capital Partners</b>								
<i><b>Madison Dearborn Capital Partners VII</b></i>	100,000,000	32,947,790	33,573,206	1,105,151	68,100,164	4.10	<b>1.05</b>	<b>2.28</b>
<b>Neuberger Berman</b>								
<i><b>Dyal Capital Partners III</b></i>	175,000,000	129,479,666	67,045,838	75,464,200	120,377,984	20.40	<b>1.10</b>	<b>2.95</b>
<b>Nordic Capital</b>								
<i><b>Nordic Capital Fund VIII</b></i>	182,607,935	183,416,790	198,855,303	58,635,734	14,532,660	17.74	<b>1.40</b>	<b>4.55</b>
<b>North Sky Capital**</b>								
<i><b>North Sky Capital LBO Fund III</b></i>	1,070,259	720,259	391,092	574,184	350,000	14.59	<b>1.34</b>	<b>3.25</b>
<i><b>North Sky Capital Venture Fund III</b></i>	1,384,080	1,277,830	442,444	1,048,548	106,250	8.45	<b>1.17</b>	<b>3.25</b>
<b>Oak Hill Capital Management</b>								
<i><b>Oak Hill Capital Partners IV</b></i>	150,000,000	26,896,000	19,464,725	13,130,886	136,180,542	50.97	<b>1.21</b>	<b>1.31</b>
<b>Paine &amp; Partners</b>								
<i><b>Paine &amp; Partners Capital Fund IV</b></i>	75,000,000	49,126,479	53,419,035	1,074,740	26,929,526	6.85	<b>1.11</b>	<b>3.30</b>
<b>Permira</b>								
<i><b>Permira V</b></i>	179,798,627	167,871,236	203,591,490	33,883,295	27,049,796	13.17	<b>1.41</b>	<b>4.25</b>
<i><b>Permira VI</b></i>	144,568,794	36,243,569	40,165,739	0	108,325,224	15.50	<b>1.11</b>	<b>1.68</b>
<b>Public Pension Capital Management</b>								
<i><b>Public Pension Capital</b></i>	100,000,000	54,466,399	70,621,468	2,971,953	46,170,514	15.66	<b>1.35</b>	<b>3.88</b>
<b>RWI Ventures</b>								
<i><b>RWI Ventures I</b></i>	7,603,265	7,603,265	483,008	6,094,262	0	-4.22	<b>0.87</b>	<b>11.76</b>
<b>Silver Lake Partners</b>								
<i><b>Silver Lake Partners II</b></i>	100,000,000	90,144,987	9,941,482	160,349,511	11,771,953	10.96	<b>1.89</b>	<b>13.76</b>
<i><b>Silver Lake Partners III</b></i>	100,000,000	91,610,613	46,121,915	160,633,636	10,559,311	18.64	<b>2.26</b>	<b>11.01</b>
<i><b>Silver Lake Partners IV</b></i>	100,000,000	96,645,531	109,720,961	33,124,810	15,746,239	23.77	<b>1.48</b>	<b>5.51</b>

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<i>Silver Lake Partners V</i>	135,000,000	0	0	0	135,000,000	0.00	<b>0.00</b>	<b>1.00</b>
<b>Split Rock Partners</b>								
<i>Split Rock Partners</i>	50,000,000	47,890,906	6,637,587	56,816,177	2,109,094	3.52	<b>1.32</b>	<b>12.92</b>
<i>Split Rock Partners II</i>	60,000,000	58,845,000	45,006,562	37,974,545	1,155,000	8.10	<b>1.41</b>	<b>9.93</b>
<b>Summit Partners</b>								
<i>Summit Ventures V</i>	25,000,000	24,125,000	0	33,463,419	875,000	8.12	<b>1.39</b>	<b>20.01</b>
<i>Summit Partners Growth Equity Fund VIII</i>	100,000,000	106,489,649	92,626,603	95,113,904	23,943,829	22.05	<b>1.76</b>	<b>6.91</b>
<i>Summit Partners Growth Equity Fund IX</i>	100,000,000	22,900,000	20,241,128	9,973,626	87,073,626	69.91	<b>1.32</b>	<b>2.59</b>
<b>Thoma Bravo</b>								
<i>Thoma Bravo Fund XII</i>	75,000,000	49,589,319	50,716,152	2,298,018	27,708,699	7.40	<b>1.07</b>	<b>1.56</b>
<b>Thoma Cressey</b>								
<i>Thoma Cressey Fund VII</i>	50,000,000	50,000,000	844,389	106,625,069	0	23.59	<b>2.15</b>	<b>17.61</b>
<i>Thoma Cressey Fund VIII</i>	70,000,000	68,932,574	1,541,901	233,860,926	770,000	18.26	<b>3.41</b>	<b>11.92</b>
<b>Thomas H. Lee Partners</b>								
<i>Thomas H. Lee Equity Fund VII</i>	100,000,000	66,236,399	75,227,739	12,486,945	39,192,144	30.46	<b>1.32</b>	<b>2.56</b>
<b>Thomas, McNerney &amp; Partners</b>								
<i>Thomas, McNerney &amp; Partners I</i>	30,000,000	30,000,000	2,950,991	15,087,143	0	-8.53	<b>0.60</b>	<b>15.41</b>
<i>Thomas, McNerney &amp; Partners II</i>	50,000,000	48,125,000	12,903,721	95,314,704	1,875,000	16.51	<b>2.25</b>	<b>11.76</b>
<b>TPG Capital</b>								
<i>TPG Partners VII</i>	100,000,000	52,830,046	55,572,651	6,237,106	53,168,004	15.12	<b>1.17</b>	<b>2.56</b>
<b>Vestar Capital Partners</b>								
<i>Vestar Capital Partners IV</i>	55,000,000	53,635,969	637,677	102,249,550	57,313	14.65	<b>1.92</b>	<b>18.30</b>
<i>Vestar Capital Partners V</i>	75,000,000	75,011,502	19,340,222	82,940,705	-11,502	4.29	<b>1.36</b>	<b>12.29</b>
<i>Vestar Capital Partners VI</i>	100,000,000	99,970,993	100,075,371	72,444,917	960,325	29.98	<b>1.73</b>	<b>6.52</b>
<i>Vestar Capital Partners VII</i>	150,000,000	0	0	0	150,000,000	0.00	<b>0.00</b>	<b>0.29</b>
<b>Warburg Pincus</b>								
<i>Warburg Pincus Equity Partners</i>	100,000,000	100,000,000	614,957	163,222,253	0	10.03	<b>1.64</b>	<b>19.78</b>
<i>Warburg Pincus Private Equity VIII</i>	100,000,000	100,000,000	10,811,013	220,991,851	0	14.86	<b>2.32</b>	<b>15.97</b>
<i>Warburg Pincus Private Equity IX</i>	100,000,000	100,000,000	10,843,552	164,844,296	0	9.92	<b>1.76</b>	<b>12.69</b>
<i>Warburg Pincus Private Equity X</i>	150,000,000	150,000,000	71,259,687	159,880,302	0	8.14	<b>1.54</b>	<b>10.44</b>
<i>Warburg Pincus Private Equity XI</i>	200,000,000	194,200,000	174,182,442	109,258,086	5,800,000	13.22	<b>1.46</b>	<b>5.28</b>
<i>Warburg Pincus Private Equity XII</i>	131,000,000	69,757,500	71,890,689	1,008,700	61,242,500	4.65	<b>1.05</b>	<b>2.36</b>

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<i>Warburg Pincus China</i>	45,000,000	18,270,000	17,272,396	1,935,000	28,665,000	8.75	<b>1.05</b>	<b>1.30</b>
<i>Warburg Pincus Financial Sector</i>	90,000,000	14,310,000	14,064,712	0	75,690,000	-2.63	<b>0.00</b>	<b>0.29</b>
<b>Wellspring Capital Partners</b>								
<i>Wellspring Capital Partners VI</i>	125,000,000	0	0	0	125,000,000	0.00	<b>0.00</b>	<b>1.55</b>
<b>Welsh, Carson, Anderson &amp; Stowe</b>								
<i>Welsh, Carson, Anderson &amp; Stowe X</i>	100,000,000	98,000,000	5,431,853	162,137,595	2,000,000	8.13	<b>1.71</b>	<b>12.30</b>
<i>Welsh, Carson, Anderson &amp; Stowe XI</i>	100,000,000	100,000,000	51,104,124	111,084,910	0	12.78	<b>1.62</b>	<b>9.70</b>
<i>Welsh, Carson, Anderson &amp; Stowe XII</i>	150,000,000	61,907,194	69,338,922	14,140,409	88,092,806	15.94	<b>1.35</b>	<b>3.28</b>
<b>Windjammer Capital Investors</b>								
<i>Windjammer Mezzanine &amp; Equity Fund II</i>	66,708,861	56,569,498	63,310	84,876,800	10,139,363	8.94	<b>1.50</b>	<b>18.01</b>
<i>Windjammer Senior Equity Fund III</i>	75,000,000	61,619,620	0	154,618,016	13,380,380	19.52	<b>2.51</b>	<b>12.25</b>
<i>Windjammer Senior Equity Fund IV</i>	100,000,000	78,493,952	85,171,983	7,347,571	24,174,969	6.03	<b>1.18</b>	<b>6.10</b>
<i>Private Equity Total</i>	<b>11,826,785,807</b>	<b>8,366,344,944</b>	<b>4,803,188,803</b>	<b>8,808,437,771</b>	<b>3,784,958,362</b>	<b>12.49</b>	<b>1.62</b>	

**II. PRIVATE CREDIT**

**Audax Group**

<i>Audax Mezzanine Fund III</i>	100,000,000	93,046,382	33,720,321	86,867,694	8,418,259	9.98	<b>1.30</b>	<b>7.99</b>
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<i>Audax Mezzanine Fund IV</i>	100,000,000	21,699,973	19,578,554	4,085,813	78,946,977	13.36	<b>1.09</b>	<b>2.98</b>
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**Citicorp Mezzanine**

<i>CM Liquidating Partnership</i>	100,000,000	88,029,296	1,186,265	149,642,633	0	16.45	<b>1.71</b>	<b>18.42</b>
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**Crescent Capital Group**

<i>TCW/Crescent Mezzanine Partners III</i>	75,000,000	68,835,269	2,408,452	156,868,939	29,733,852	35.88	<b>2.31</b>	<b>17.01</b>
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**GS Mezzanine Partners**

<i>GS Mezzanine Partners 2006</i>	100,000,000	74,999,888	1,332,320	134,136,541	9,858,563	4.99	<b>1.81</b>	<b>11.99</b>
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<i>GS Mezzanine Partners V</i>	150,000,000	112,057,963	2,686,631	177,011,645	37,594,230	8.89	<b>1.60</b>	<b>10.44</b>
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**Gold Hill Venture Lending**

<i>Gold Hill Venture Lending</i>	40,000,000	40,000,000	1,058,271	64,391,012	0	10.70	<b>1.64</b>	<b>13.52</b>
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<i>Gold Hill 2008</i>	25,852,584	25,852,584	7,558,380	33,841,601	0	11.75	<b>1.60</b>	<b>9.75</b>
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**Kohlberg Kravis Roberts**

<i>KKR Lending Partners II</i>	75,000,000	84,130,494	63,131,023	36,203,986	8,915,212	11.90	<b>1.18</b>	<b>3.08</b>
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<i>KKR Lending Partners III</i>	159,000,000	38,955,000	40,514,563	0	120,045,000	12.12	<b>1.04</b>	<b>0.98</b>
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**LBC Credit Partners**

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<i><b>LBC Credit Partners IV</b></i>	100,000,000	40,000,000	39,353,301	4,276,688	61,922,909	11.65	<b>1.09</b>	<b>1.92</b>
<b>Merit Capital Partners</b>								
<i><b>William Blair Mezzan. Cap. Fd. III</b></i>	60,000,000	57,243,241	184,591	113,323,763	2,756,759	15.51	<b>1.98</b>	<b>18.26</b>
<i><b>Merit Mezzanine Fund IV</b></i>	75,000,000	70,178,571	17,966,864	109,445,558	4,821,429	10.70	<b>1.82</b>	<b>13.30</b>
<i><b>Merit Mezzanine Fund V</b></i>	75,000,000	70,420,408	43,442,863	55,560,149	4,579,592	9.58	<b>1.41</b>	<b>8.29</b>
<i><b>Merit Mezzanine Fund VI</b></i>	86,340,625	34,700,000	34,131,716	2,446,092	51,640,625	5.91	<b>1.05</b>	<b>2.02</b>
<b>Portfolio Advisors</b>								
<i><b>DLJ Investment Partners II</b></i>	27,375,168	23,164,217	86,451	34,829,566	0	10.37	<b>1.51</b>	<b>18.26</b>
<i><b>DLJ Investment Partners III</b></i>	100,000,000	72,260,040	920,373	96,336,774	3,158,038	6.90	<b>1.35</b>	<b>11.78</b>
<b>Prudential Capital Partners</b>								
<i><b>Prudential Capital Partners II</b></i>	100,000,000	97,288,320	5,271,027	135,809,660	2,844,433	8.86	<b>1.45</b>	<b>12.76</b>
<i><b>Prudential Capital Partners III</b></i>	100,000,000	96,818,042	16,132,016	148,264,594	6,624,352	13.52	<b>1.70</b>	<b>8.96</b>
<i><b>Prudential Capital Partners IV</b></i>	100,000,000	97,040,005	71,501,008	50,550,389	3,526,110	10.31	<b>1.26</b>	<b>6.20</b>
<i><b>Prudential Capital Partners V</b></i>	150,000,000	44,551,274	43,753,678	3,333,676	105,448,726	11.96	<b>1.06</b>	<b>1.62</b>
<b>Summit Partners</b>								
<i><b>Summit Subordinated Debt Fund III</b></i>	45,000,000	42,750,000	7,050,908	58,922,343	2,250,000	9.46	<b>1.54</b>	<b>14.13</b>
<i><b>Summit Subordinated Debt Fund IV</b></i>	50,000,000	55,134,261	14,226,732	60,501,330	19,837,698	10.09	<b>1.36</b>	<b>10.01</b>
<b>TCW Asset Management</b>								
<i><b>TCW Direct Lending</b></i>	100,000,000	83,421,617	58,377,861	33,634,651	25,329,409	6.74	<b>1.10</b>	<b>3.53</b>
<i><b>Private Credit Total</b></i>	<b>2,093,568,377</b>	<b>1,532,576,846</b>	<b>525,574,171</b>	<b>1,750,285,098</b>	<b>588,252,173</b>	<b>13.05</b>	<b>1.48</b>	
 <b>III. REAL ASSETS</b>								
<b>BlackRock</b>								
<i><b>BlackRock Global Renewable Power Fund II</b></i>	98,500,000	43,635,235	42,801,147	537,604	55,282,898	-5.19	<b>0.99</b>	<b>2.35</b>
<b>EIG Global Energy Partners</b>								
<i><b>EIG Energy Fund XIV</b></i>	100,000,000	113,013,074	12,355,403	92,181,918	2,761,129	-2.90	<b>0.93</b>	<b>10.96</b>
<i><b>EIG Energy Fund XV</b></i>	150,000,000	151,824,733	88,790,271	94,926,804	24,307,985	5.00	<b>1.21</b>	<b>7.82</b>
<i><b>EIG Energy Fund XVI</b></i>	200,000,000	148,642,489	123,208,643	51,710,642	83,287,951	7.77	<b>1.18</b>	<b>4.55</b>
<b>EnCap Energy</b>								
<i><b>EnCap Energy Capital Fund VII</b></i>	100,000,000	97,492,592	7,183,955	132,528,983	0	14.69	<b>1.43</b>	<b>10.76</b>
<i><b>EnCap Energy Capital Fund VIII</b></i>	100,000,000	94,419,855	34,123,167	52,072,209	9,383,470	-2.87	<b>0.91</b>	<b>7.50</b>

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<i>Encap Energy Capital Fund IX</i>	100,000,000	105,299,729	75,659,876	66,395,587	11,118,251	15.82	<b>1.35</b>	<b>5.32</b>
<i>EnCap Energy Capital Fund X</i>	100,000,000	75,243,785	69,533,629	15,854,457	32,542,958	13.09	<b>1.13</b>	<b>3.07</b>
<b>EnerVest Energy</b>								
<i>EnerVest Energy Institutional Fund XIV</i>	100,000,000	92,403,263	89,002,079	7,899,254	9,351,531	2.87	<b>1.05</b>	<b>2.81</b>
<b>Energy Capital Partners</b>								
<i>Energy Capital Partners II</i>	100,000,000	80,880,014	44,433,824	92,508,280	29,749,110	13.24	<b>1.69</b>	<b>7.70</b>
<i>Energy Capital Partners III</i>	200,000,000	182,781,351	203,178,712	11,296,108	23,125,499	11.39	<b>1.17</b>	<b>4.28</b>
<i>Energy Capital Partners IV</i>	105,808,339	26,452,085	26,452,085	0	79,356,254	0.00	<b>0.00</b>	<b>0.25</b>
<b>Energy &amp; Minerals Group</b>								
<i>NGP Midstream &amp; Resources</i>	100,000,000	100,090,315	60,470,642	131,931,565	230,871	14.74	<b>1.92</b>	<b>11.01</b>
<i>The Energy &amp; Minerals Group Fund II</i>	100,000,000	96,992,656	111,989,591	69,535,757	3,292,789	16.06	<b>1.87</b>	<b>6.52</b>
<i>The Energy &amp; Minerals Group Fund III</i>	200,000,000	189,005,992	157,901,504	11,245,621	12,747,869	-3.76	<b>0.89</b>	<b>4.07</b>
<i>The Energy &amp; Minerals Group Fund IV</i>	150,000,000	92,817,585	104,620,067	15,776,674	70,278,465	15.11	<b>1.30</b>	<b>2.42</b>
<b>First Reserve</b>								
<i>First Reserve Fund X</i>	100,000,000	100,000,000	421,230	182,429,002	0	31.05	<b>1.83</b>	<b>13.42</b>
<i>First Reserve Fund XI</i>	150,000,000	150,292,121	8,066,009	94,066,313	0	-8.47	<b>0.68</b>	<b>11.28</b>
<i>First Reserve Fund XII</i>	150,000,000	160,809,795	33,801,155	80,719,259	2,773,677	-8.20	<b>0.71</b>	<b>9.42</b>
<i>First Reserve Fund XIII</i>	200,000,000	98,062,140	85,423,794	21,947,422	101,937,860	5.07	<b>1.09</b>	<b>4.41</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	<b>0.00</b>	<b>0.01</b>
<b>Merit Energy Partners</b>								
<i>Merit Energy Partners B</i>	24,000,000	24,000,000	8,811,045	183,415,358	0	24.30	<b>8.01</b>	<b>21.20</b>
<i>Merit Energy Partners C</i>	50,000,000	50,000,000	20,918,594	498,833,407	0	31.12	<b>10.40</b>	<b>19.43</b>
<i>Merit Energy Partners D</i>	88,000,000	70,938,303	32,780,884	312,878,750	0	23.42	<b>4.87</b>	<b>16.86</b>
<i>Merit Energy Partners E</i>	100,000,000	39,983,197	18,742,379	74,625,223	0	15.29	<b>2.34</b>	<b>13.50</b>
<i>Merit Energy Partners F</i>	100,000,000	59,522,861	20,559,140	27,251,921	0	-3.63	<b>0.80</b>	<b>12.03</b>
<i>Merit Energy Partners H</i>	100,000,000	100,000,000	74,784,776	24,238,423	0	-0.26	<b>0.99</b>	<b>7.16</b>
<i>Merit Energy Partners I</i>	169,721,518	146,099,999	203,358,342	24,839,059	23,621,519	30.20	<b>1.56</b>	<b>3.45</b>
<b>NGP</b>								
<i>Natural Gas Partners IX</i>	150,000,000	162,022,644	9,645,700	235,762,409	1,153,855	11.87	<b>1.51</b>	<b>10.44</b>
<i>NGP Natural Resources X</i>	150,000,000	141,804,796	74,355,005	94,628,121	8,195,204	5.95	<b>1.19</b>	<b>6.48</b>
<i>Natural Gas Capital Resources XI</i>	150,000,000	125,758,384	141,542,566	19,030,572	30,403,622	23.02	<b>1.28</b>	<b>3.31</b>

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<i>NGP Natural Resources XII</i>	149,500,000	20,896,589	19,786,562	0	128,603,411	-6.02	<b>0.00</b>	<b>0.67</b>
<b>Sheridan</b>								
<i>Sheridan Production Partners I</i>	100,000,000	116,550,000	66,894,010	82,750,000	0	5.75	<b>1.28</b>	<b>11.01</b>
<i>Sheridan Production Partners II</i>	100,000,000	103,500,000	50,220,028	7,000,000	3,500,000	-12.14	<b>0.55</b>	<b>7.50</b>
<i>Sheridan Production Partners III</i>	100,000,000	34,350,000	38,103,998	14,300,000	65,650,000	30.15	<b>1.53</b>	<b>3.31</b>
<i>Real Assets Total</i>	<b>4,285,379,857</b>	<b>3,395,585,582</b>	<b>2,159,919,810</b>	<b>2,825,116,703</b>	<b>962,506,178</b>	<b>15.81</b>	<b>1.47</b>	
<b>IV. REAL ESTATE</b>								
<b>Angelo, Gordon &amp; Co.</b>								
<i>AG Realty Fund IX</i>	100,000,000	66,250,000	65,824,207	8,000,000	37,900,000	8.40	<b>1.11</b>	<b>3.31</b>
<i>AG Asia Realty Fund III</i>	50,000,000	35,625,000	35,197,131	5,000,000	17,446,250	12.43	<b>1.13</b>	<b>1.50</b>
<b>Blackstone Real Estate Partners</b>								
<i>Blackstone Real Estate Partners V</i>	100,000,000	97,030,342	27,646,904	179,360,511	4,174,052	10.91	<b>2.13</b>	<b>11.93</b>
<i>Blackstone Real Estate Partners VI</i>	100,000,000	99,320,387	16,159,412	201,802,160	4,907,906	13.14	<b>2.19</b>	<b>11.01</b>
<i>Blackstone Real Estate Partners VII</i>	100,000,000	95,357,438	81,471,421	98,662,221	15,126,809	17.90	<b>1.89</b>	<b>6.34</b>
<i>Blackstone Real Estate Partners VIII</i>	150,000,000	89,131,696	82,483,161	32,285,077	83,537,949	14.87	<b>1.29</b>	<b>3.01</b>
<i>Blackstone Real Estate Partners Asia II</i>	75,000,000	0	0	0	75,000,000	0.00	<b>0.00</b>	<b>0.52</b>
<b>Blackstone Strategic Partners (CSFB)</b>								
<i>Strategic Partners III RE</i>	25,000,000	25,752,810	2,893,903	12,513,526	9,006	-6.58	<b>0.60</b>	<b>12.76</b>
<i>Strategic Partners IV RE</i>	50,000,000	50,713,953	8,555,440	42,133,039	1,256,295	-0.20	<b>1.00</b>	<b>9.79</b>
<b>Carlyle Group</b>								
<i>Carlyle Realty Partners VIII</i>	150,000,000	1,383,826	222,265	0	148,616,174	-94.56	<b>0.16</b>	<b>0.90</b>
<b>Colony Capital</b>								
<i>Colony Investors III</i>	100,000,000	100,000,000	4,818,600	172,642,105	0	14.54	<b>1.77</b>	<b>20.26</b>
<b>Landmark Partners</b>								
<i>Landmark Real Estate Partners VIII</i>	149,500,000	16,765,979	24,226,488	67,715	132,734,021	42.10	<b>1.45</b>	<b>1.29</b>
<b>Lubert Adler</b>								
<i>Lubert-Adler Real Estate Fund VII</i>	74,147,868	18,536,967	18,687,061	1,250,230	55,610,901	4.01	<b>1.08</b>	<b>1.48</b>
<b>Rockpoint</b>								
<i>Rockpoint Real Estate Fund V</i>	100,000,000	47,038,733	48,632,051	5,586,764	58,548,031	5.80	<b>1.15</b>	<b>3.22</b>
<b>Rockwood</b>								
<i>Rockwood Capital RE Partners X</i>	100,000,000	35,797,421	34,767,350	772,727	64,202,579	-0.54	<b>0.99</b>	<b>2.71</b>

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<b>Silverpeak Real Estate Partners</b>								
<i>Silverpeak Legacy Pension Partners II</i>	75,000,000	77,196,820	3,721,408	87,952,458	9,219,273	4.36	<b>1.19</b>	<b>12.67</b>
<i>Silverpeak Legacy Pension Partners III</i>	150,000,000	70,240,494	15,773,277	9,667,017	79,759,506	-12.10	<b>0.36</b>	<b>9.92</b>
<b>T.A. Associates Realty</b>								
<i>Realty Associates Fund VIII</i>	100,000,000	100,000,000	19,027,715	78,922,951	0	-0.24	<b>0.98</b>	<b>11.76</b>
<i>Realty Associates Fund IX</i>	100,000,000	100,000,000	1,450,252	159,608,332	0	10.53	<b>1.61</b>	<b>9.60</b>
<i>Realty Associates Fund X</i>	100,000,000	100,000,000	66,092,431	81,045,325	0	12.26	<b>1.47</b>	<b>6.08</b>
<i>Realty Associates Fund XI</i>	100,000,000	100,000,000	102,665,800	1,341,917	0	5.14	<b>1.04</b>	<b>2.75</b>
<b>Real Estate Total</b>	<b>2,048,647,868</b>	<b>1,326,141,866</b>	<b>660,316,276</b>	<b>1,178,614,075</b>	<b>788,048,751</b>	<b>7.91</b>	<b>1.39</b>	
<b>V. DISTRESSED/ OPPORTUNISTIC</b>								
<b>Avenue Capital Partners</b>								
<i>Avenue Energy Opportunities Fund</i>	100,000,000	100,000,000	121,098,100	934,495	0	8.35	<b>1.22</b>	<b>3.75</b>
<i>Avenue Energy Opportunities Fund II</i>	100,000,000	35,000,000	35,048,720	0	65,000,000	0.22	<b>1.00</b>	<b>0.91</b>
<b>BlackRock**</b>								
<i>BlackRock Tempus Fund</i>	1,774,870	1,774,870	703,378	1,324,425	0	10.13	<b>1.14</b>	<b>2.81</b>
<b>Carlyle Group</b>								
<i>Carlyle Strategic Partners IV</i>	100,000,000	17,491,445	14,700,674	4,674,546	87,183,049	15.10	<b>1.11</b>	<b>2.00</b>
<b>Carval Investors</b>								
<i>CVI Global Value Fund</i>	200,000,000	190,000,000	29,653,826	290,286,276	10,000,000	9.59	<b>1.68</b>	<b>11.22</b>
<i>CVI Credit Value Fund I</i>	100,000,000	95,000,000	30,604,403	180,676,509	5,000,000	18.85	<b>2.22</b>	<b>7.50</b>
<i>CVI Credit Value Fund A II</i>	150,000,000	142,500,000	74,915,123	130,546,113	7,500,000	9.35	<b>1.44</b>	<b>5.42</b>
<i>CVI Credit Value Fund A III</i>	150,000,000	112,500,000	141,959,475	0	37,500,000	13.72	<b>1.26</b>	<b>2.83</b>
<i>CVI Credit Value Fund IV</i>	150,000,000	0	0	0	150,000,000	0.00	<b>0.00</b>	<b>0.49</b>
<b>Merced Capital</b>								
<i>Merced Partners II</i>	75,000,000	63,768,881	286,734	130,393,875	0	23.97	<b>2.05</b>	<b>11.01</b>
<i>Merced Partners III</i>	100,000,000	100,000,000	47,648,414	85,997,107	0	6.37	<b>1.34</b>	<b>7.90</b>
<i>Merced Partners IV</i>	125,000,000	125,000,000	98,418,131	56,247,049	0	6.85	<b>1.24</b>	<b>4.72</b>
<i>Merced Partners V</i>	53,737,500	48,363,750	52,531,883	0	5,373,750	8.63	<b>1.09</b>	<b>0.75</b>
<b>MHR Institutional Partners</b>								
<i>MHR Institutional Partners IV</i>	75,000,000	26,250,000	22,224,091	2,014,108	50,521,136	-5.50	<b>0.92</b>	<b>3.78</b>
<b>Oaktree Capital Management</b>								

**Minnesota State Board of Investment**  
**- Alternative Investments -**  
**As of March 31, 2018**

<b>Investment</b>	<b>Total Commitment</b>	<b>Funded Commitment</b>	<b>Market Value</b>	<b>Distributions</b>	<b>Unfunded Commitment</b>	<b>IRR %</b>	<b>MOIC*</b>	<b>Period Years</b>
<i>Oaktree Principal Fund VI</i>	100,000,000	54,385,347	50,711,594	13,606,490	58,822,283	19.63	<b>1.18</b>	<b>3.25</b>
<i>Oaktree Opportunities Fund X</i>	50,000,000	35,000,000	36,757,590	5,619,660	20,000,000	19.85	<b>1.21</b>	<b>3.13</b>
<i>Oaktree Opportunities Fund Xb</i>	100,000,000	0	0	0	100,000,000	0.00	<b>0.00</b>	<b>3.13</b>
<b>Pimco Brovo</b>								
<i>Pimco Bravo Fund OnShore Feeder I</i>	3,958,027	3,958,027	182,935	3,830,753	2,200,191	1.44	<b>1.01</b>	<b>3.25</b>
<i>Pimco Bravo Fund OnShore Feeder II</i>	5,243,670	4,646,129	4,558,999	1,252,403	1,844,756	6.76	<b>1.25</b>	<b>3.25</b>
<b>Varde Fund</b>								
<i>Varde Fund IX</i>	100,000,000	100,000,000	7,546,305	212,271,530	0	15.24	<b>2.20</b>	<b>9.78</b>
<i>Varde Fund X</i>	150,000,000	150,000,000	74,461,254	213,696,730	0	12.19	<b>1.92</b>	<b>7.95</b>
<i>Varde Fund XI</i>	200,000,000	200,000,000	222,979,088	51,183,477	0	7.87	<b>1.37</b>	<b>4.73</b>
<b>Wayzata</b>								
<i>Wayzata Opportunities Fund</i>	100,000,000	93,180,000	709,262	156,425,778	18,920,000	8.44	<b>1.69</b>	<b>12.28</b>
<i>Wayzata Opportunities Fund II</i>	150,000,000	174,750,000	9,801,544	319,228,413	30,000,000	16.52	<b>1.88</b>	<b>10.44</b>
<i>Wayzata Opportunities Fund III</i>	150,000,000	68,415,000	35,501,834	32,728,171	15,000,000	-0.11	<b>1.00</b>	<b>5.79</b>
<i>Distressed/Opportunistic Total</i>	<b>2,589,714,067</b>	<b>1,941,983,449</b>	<b>1,113,003,356</b>	<b>1,892,937,907</b>	<b>664,865,165</b>		<b>1.55</b>	
<i>Private Markets Total</i>	<b>22,844,095,976</b>	<b>16,562,632,687</b>	<b>9,262,002,415</b>	<b>16,455,391,554</b>	<b>6,788,630,629</b>	<b>12.50</b>	<b>1.55</b>	

<b>Private Markets Portfolio Status</b>	<b>Investment Manager Count</b>	<b>Investments Count</b>
PRIVATE EQUITY	51	119
PRIVATE CREDIT	12	24
REAL ASSETS	11	35
REAL ESTATE	11	21
DISTRESSED/ OPPORTUNISTIC	10	25
<b>Total</b>	<b>95</b>	<b>224</b>

**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.

**Minnesota State Board of Investment**  
**- Alternative Investments -**  
**As of March 31, 2018**

<b>Investment</b>	<b>Total Commitment</b>	<b>Funded Commitment</b>	<b>MarketValue</b>	<b>Distributions</b>	<b>Unfunded Commitment</b>	<b>IRR %</b>	<b>MOIC*</b>	<b>Period Years</b>
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\* MOIC: Multiple of Invested Capital

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

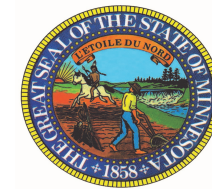


# Participant Directed Investment Program

March 31, 2018

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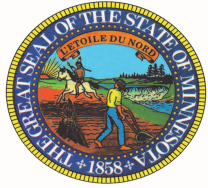
## Quarterly Report

# 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 Voluntary 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.

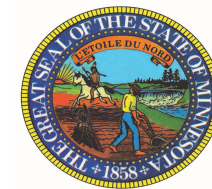
### Investment Option Descriptions

- 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 Voluntary 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	\$434,069,686	-0.8%	8.9%	6.9%	8.7%	7.8%	01/1980
U.S. ACTIVELY MANAGED FUND	246,178,940	1.0	16.5	10.2	13.5	9.8	07/1986
U.S. STOCK INDEX FUND	598,046,689	-0.6	13.8	10.2	13.0	9.7	07/1986
BROAD INTERNATIONAL STOCK FUND	202,715,775	-1.2	17.4	6.6	6.4	3.3	09/1994
BOND FUND	171,804,658	-1.4	1.7	1.7	2.3	4.4	07/1986
MONEY MARKET FUND	396,914,208	0.4	1.3	0.7	0.5	0.5	07/1986
STABLE VALUE FUND	1,545,287,094	0.5	2.2	2.1	2.0	2.9	11/1994
VOLUNTEER FIREFIGHTER ACCOUNT	88,641,073	-1.0	8.2	5.5	6.7		01/2010
TOTAL SUPPLEMENTAL INVESTMENT FUND	3,683,658,123						

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

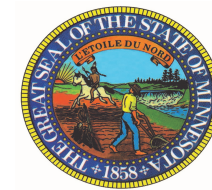
The primary investment objective of the Balanced Fund is to gain exposure to publicly traded U.S. equities, bond and cash in a diversified investment portfolio. The Fund seeks to maximize long-term real rates of return, while limiting short-run portfolio return volatility. The Balanced Fund is invested 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>\$434,069,686</b>	<b>-0.8%</b>	<b>8.9%</b>	<b>6.9%</b>	<b>8.7%</b>	<b>7.8%</b>
SIF BALANCED FUND BENCHMARK		-0.8	8.7	6.6	8.5	7.1
Excess		-0.0	0.3	0.2	0.3	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>246,178,940</b>	<b>1.0</b>	<b>16.5</b>	<b>10.2</b>	<b>13.5</b>	<b>9.8</b>
Russell 3000		-0.6	13.8	10.2	13.0	9.6
Excess		1.6	2.6	0.0	0.4	0.2



## Supplemental Investment Fund Performance

### U.S. Stock Index Fund

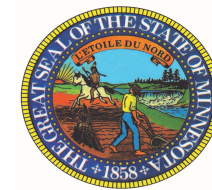
The investment objective of the U.S. Stock Index Fund is to generate returns that track those of the U.S. stock market as a whole. The Fund is designed to track the performance of the Russell 3000 Index, a broad-based equity market indicator. The Fund is invested 100% in common stock.

	<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>\$598,046,689</b>	<b>-0.6%</b>	<b>13.8%</b>	<b>10.2%</b>	<b>13.0%</b>	<b>9.7%</b>
Russell 3000		-0.6	13.8	10.2	13.0	9.6
Excess		0.0	0.0	0.0	0.0	0.1

### 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>202,715,775</b>	<b>-1.2</b>	<b>17.4</b>	<b>6.6</b>	<b>6.4</b>	<b>3.3</b>
International Equity Benchmark		-1.2	16.5	6.2	5.9	2.7
Excess		0.0	0.8	0.4	0.5	0.6



## Supplemental Investment Fund Performance

### Bond Fund

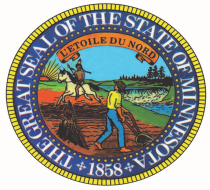
The investment objective of the Bond Fund is to exceed the return of the broad domestic bond market by investing in fixed income securities. The Bond Fund invests primarily in high-quality, government and corporate bonds that have intermediate to long-term maturities, usually 3 to 20 years. The Bond 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>\$171,804,658</b>	<b>-1.4%</b>	<b>1.7%</b>	<b>1.7%</b>	<b>2.3%</b>	<b>4.4%</b>
BBG BARC US Agg		-1.5	1.2	1.2	1.8	3.6
Excess		0.1	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>396,914,208</b>	<b>0.4</b>	<b>1.3</b>	<b>0.7</b>	<b>0.5</b>	<b>0.5</b>
90 DAY T-BILL		0.4	1.1	0.5	0.3	0.3
Excess		0.0	0.1	0.2	0.2	0.2



## Supplemental Investment Fund Performance

### Stable Value Fund

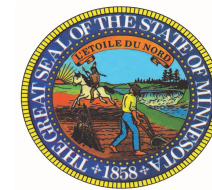
The investment objectives of the Stable Value Fund are to protect investors from loss of their original investment and to provide competitive interest rates using somewhat longer-term investments than typically found in a money market fund. The Fund is invested in a well-diversified portfolio of high-quality 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>\$1,545,287,094</b>	<b>0.5%</b>	<b>2.2%</b>	<b>2.1%</b>	<b>2.0%</b>	<b>2.9%</b>
Fixed Interest Blended Benchmark		0.7	2.1	1.7	1.5	1.5
Excess		-0.1	0.1	0.4	0.5	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>88,641,073</b>	<b>-1.0</b>	<b>8.2</b>	<b>5.5</b>	<b>6.7</b>	
SIF Volunteer Firefighter Account BM		-1.0	7.8	5.2	6.3	
Excess		-0.0	0.4	0.4	0.3	



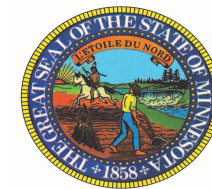
## Deferred Compensation Plan Summary

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	\$1,224,794,029	-0.8%	14.0%	10.8%	13.3%	9.5%	07/1999
VANGUARD DIVIDEND GROWTH	596,626,890	-1.1	11.5				10/2016
VANGUARD MID CAP INDEX	536,101,444	0.0	12.3	7.9	12.3	10.2	01/2004
T. ROWE PRICE SMALL-CAP STOCK	687,947,275	1.9	13.6	9.3	12.5	12.9	04/2000
FIDELITY DIVERSIFIED INTERNATIONAL	315,152,431	-1.7	15.3	5.1	7.5	3.1	07/1999
VANGUARD TOTAL INTERNATIONAL STOCK INDEX	205,006,676	-0.4	17.1	7.0	6.4		07/2011
VANGUARD BALANCED INDEX	773,917,950	-0.9	8.7	6.6	8.5	7.6	12/2003
DODGE & COX INCOME	240,150,858	-0.9	2.2	2.3	2.8	4.9	07/1999
VANGUARD TOTAL BOND MARKET INDEX	210,055,773	-1.5	1.1	1.1	1.7	3.6	12/2003
2020 FUND	118,229,323	-1.0	5.8	3.9	4.8		07/2011
2025 FUND	116,102,176	-1.1	7.9	5.0	6.2		07/2011
2030 FUND	81,344,190	-1.1	10.1	6.0	7.4		07/2011
2035 FUND	63,085,325	-1.0	11.3	6.6	8.0		07/2011
2040 FUND	46,031,561	-1.0	12.3	7.0	8.5		07/2011
2045 FUND	38,276,961	-0.9	13.0	7.3	8.9		07/2011
2050 FUND	28,239,779	-0.9	13.7	7.7	9.1		07/2011
2055 FUND	15,492,752	-0.9	13.7	7.7	9.1		07/2011
2060 FUND	14,524,748	-0.9	13.7	7.7	9.1		07/2011
INCOME FUND	86,507,373	-0.9	4.8	3.3	3.5		07/2011
TD Ameritrade SDB	74,197,786						
TD Ameritrade SDB Roth	633,351						
Total Deferred Compensation Plan	5,472,418,652						



## 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

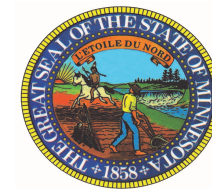
#### **Fidelity Diversified International (active)**

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
<b>Large Cap US Equity</b>						
<b>VANGUARD INSTITUTIONAL INDEX PLUS</b>	<b>\$1,224,794,029</b>	<b>-0.8%</b>	<b>14.0%</b>	<b>10.8%</b>	<b>13.3%</b>	<b>07/1999</b>
S&P 500		-0.8	14.0	10.8	13.3	07/1999
Excess		-0.0	-0.0	-0.0	-0.0	
<b>VANGUARD DIVIDEND GROWTH</b>	<b>596,626,890</b>	<b>-1.1</b>	<b>11.5</b>			<b>10/2016</b>
NASDAQ US Dividend Achievers Select		-0.5	14.6			10/2016
Excess		-0.6	-3.1			
<b>Mid Cap US Equity</b>						
<b>VANGUARD MID CAP INDEX</b>	<b>536,101,444</b>	<b>0.0</b>	<b>12.3</b>	<b>7.9</b>	<b>12.3</b>	<b>01/2004</b>
CRSP US Mid Cap Index		0.0	12.4	7.9	12.3	01/2004
Excess		-0.0	-0.0	-0.0	-0.0	
<b>Small Cap US Equity</b>						
<b>T. ROWE PRICE SMALL-CAP STOCK</b>	<b>687,947,275</b>	<b>1.9</b>	<b>13.6</b>	<b>9.3</b>	<b>12.5</b>	<b>04/2000</b>
Russell 2000		-0.1	11.8	8.4	11.5	04/2000
Excess		2.0	1.8	0.9	1.0	
<b>International Equity</b>						
<b>FIDELITY DIVERSIFIED INTERNATIONAL</b>	<b>315,152,431</b>	<b>-1.7</b>	<b>15.3</b>	<b>5.1</b>	<b>7.5</b>	<b>07/1999</b>
MSCI EAFE FREE (NET)		-1.5	14.8	5.6	6.5	07/1999
Excess		-0.2	0.5	-0.4	1.0	
<b>VANGUARD TOTAL INTERNATIONAL STOCK INDEX</b>	<b>205,006,676</b>	<b>-0.4</b>	<b>17.1</b>	<b>7.0</b>	<b>6.4</b>	<b>07/2011</b>
FTSE Global All Cap ex US Index Net		-1.2	16.5	6.6	6.3	07/2011
Excess		0.7	0.6	0.4	0.2	



## 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.

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

#### **Balanced Funds**

<b>VANGUARD BALANCED INDEX</b>	<b>\$773,917,950</b>	<b>-0.9%</b>	<b>8.7%</b>	<b>6.6%</b>	<b>8.5%</b>	<b>12/2003</b>
Vanguard Balanced Fund Benchmark		-0.9	8.7	6.7	8.6	12/2003
Excess		0.0	0.0	-0.0	-0.0	

#### **Fixed Income**

<b>DODGE &amp; COX INCOME</b>	<b>240,150,858</b>	<b>-0.9</b>	<b>2.2</b>	<b>2.3</b>	<b>2.8</b>	<b>07/1999</b>
BBG BARC Agg Bd		-1.5	1.2	1.2	1.8	07/1999
Excess		0.6	1.0	1.1	0.9	

<b>VANGUARD TOTAL BOND MARKET INDEX</b>	<b>210,055,773</b>	<b>-1.5</b>	<b>1.1</b>	<b>1.1</b>	<b>1.7</b>	<b>12/2003</b>
BBG BARC Agg Bd		-1.5	1.2	1.2	1.8	12/2003
Excess		-0.0	-0.1	-0.1	-0.1	

<b>MONEY MARKET FUND</b>	<b>396,914,208</b>	<b>0.4</b>	<b>1.3</b>	<b>0.7</b>	<b>0.5</b>	<b>07/1986</b>
90 DAY T-BILL		0.4	1.1	0.5	0.3	07/1986
Excess		0.0	0.1	0.2	0.2	

#### **Stable Value**

<b>STABLE VALUE FUND</b>	<b>1,545,287,094</b>	<b>0.5</b>	<b>2.2</b>	<b>2.1</b>	<b>2.0</b>	<b>11/1994</b>
Fixed Interest Blended Benchmark		0.7	2.1	1.7	1.5	11/1994
Excess		-0.1	0.1	0.4	0.5	

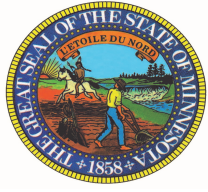
(1) Vanguard Dividend Growth replaced the Janus Twenty Fund in the third quarter of 2016.

(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.



## Deferred Compensation Options

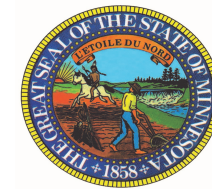
### MN TARGET RETIREMENT ACCOUNTS

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>	
SSgA														
2020 FUND	\$118,229,323	-1.0%	5.8%	3.9%	4.8%	07/2011		2045 FUND	\$38,276,961	-0.9%	13.0%	7.3%	8.9%	07/2011
2020 FUND BENCHMARK		-1.0	5.7	3.9	4.8	07/2011		2045 FUND BENCHMARK		-1.0	12.9	7.3	8.9	07/2011
Excess		0.0	0.0	-0.0	-0.0			Excess		0.1	0.1	0.0	-0.0	
2025 FUND	116,102,176	-1.1	7.9	5.0	6.2	07/2011		2050 FUND	28,239,779	-0.9	13.7	7.7	9.1	07/2011
2025 FUND BENCHMARK		-1.1	7.8	5.0	6.2	07/2011		2050 FUND BENCHMARK		-0.9	13.6	7.7	9.1	07/2011
Excess		0.0	0.0	-0.0	-0.0			Excess		0.1	0.1	0.0	-0.0	
2030 FUND	81,344,190	-1.1	10.1	6.0	7.4	07/2011		2055 FUND	15,492,752	-0.9	13.7	7.7	9.1	07/2011
2030 FUND BENCHMARK		-1.1	10.0	6.0	7.4	07/2011		2055 FUND BENCHMARK		-0.9	13.6	7.7	9.1	07/2011
Excess		0.0	0.1	-0.0	-0.0			Excess		0.1	0.1	0.0	-0.0	
2035 FUND	63,085,325	-1.0	11.3	6.6	8.0	07/2011		2060 FUND	14,524,748	-0.9	13.7	7.7	9.1	07/2011
2035 FUND BENCHMARK		-1.1	11.2	6.6	8.0	07/2011		2060 FUND BENCHMARK		-0.9	13.6	7.7	9.1	07/2011
Excess		0.1	0.1	-0.0	-0.0			Excess		0.1	0.1	0.0	-0.0	
2040 FUND	46,031,561	-1.0	12.3	7.0	8.5	07/2011		INCOME FUND	86,507,373	-0.9	4.8	3.3	3.5	07/2011
2040 FUND BENCHMARK		-1.0	12.2	7.0	8.5	07/2011		INCOME FUND BENCHMARK		-0.9	4.8	3.4	3.6	07/2011
Excess		0.1	0.1	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

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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: March 31, 2018**

Fund Name	Ending Market	3 Months	1 Year	Annualized				Inception Date
				3 Years	5 Years	10 Years	Since Inception	
Managed Ages 0-4	\$29,898,364	-1.07%	11.28%	7.02%	-	-	7.31%	8/12/2014
BM: Managed Ages 0-4		-1.29%	10.72%	7.05%	-	-	7.32%	
Managed Ages 5-8	\$69,824,435	-1.18%	9.85%	6.27%			6.57%	8/12/2014
BM: Managed Ages 5-8		-1.26%	9.51%	6.38%			6.66%	
Managed Ages 9-10	\$67,754,633	-1.20%	8.55%	5.58%			5.89%	8/12/2014
BM: Managed Ages 9-10		-1.24%	8.32%	5.70%			6.00%	
Managed Ages 11-12	\$102,050,417	-1.15%	7.33%	4.88%			5.17%	8/12/2014
BM: Managed Ages 11-12		-1.15%	7.12%	4.96%			5.25%	
Managed Ages 13-14	\$136,711,270	-1.10%	6.26%	4.20%			4.47%	8/12/2014
BM: Managed Ages 13-14		-1.06%	5.92%	4.22%			4.50%	
Managed Age 15	\$78,586,124	-0.70%	5.06%	3.50%			3.72%	8/12/2014
BM: Managed Age 15		-0.82%	4.71%	3.37%			3.59%	
Managed Age 16	\$78,430,748	-0.71%	4.46%	3.08%			3.30%	8/12/2014
BM: Managed Age 16		-0.66%	4.11%	2.92%			3.10%	
Managed Age 17	\$76,105,560	-0.54%	3.93%	2.79%			2.94%	8/12/2014
BM: Managed Age 17		-0.51%	3.50%	2.47%			2.61%	
Managed Ages 18 & Over	\$182,721,218	-0.45%	3.21%	2.36%			2.50%	8/12/2014
BM: Managed Ages 18 & Over		-0.35%	2.90%	2.01%			2.12%	
U.S. and International Equity Option	\$301,009,120	-1.04%	13.47%	8.31%	10.36%	7.11%	7.01%	10/ 1/2001
BM: U.S. and International Equity Option		-1.35%	13.14%	8.38%	10.46%	7.68%	7.90%	

**MINNESOTA COLLEGE SAVINGS PLAN**

**Performance Statistics for the Period Ending: March 31, 2018**

Fund Name	Ending Market	3 Months	1 Year	Annualized				Inception Date
				3 Years	5 Years	10 Years	Since Inception	
Moderate Allocation Option	\$65,204,854	-1.21%	8.48%	5.54%	6.76%	5.80%	5.18%	8/ 2/2007
BM: Moderate Allocation Option		-1.24%	8.32%	5.70%	6.93%	6.33%	5.75%	
100% Fixed-Income Option	\$13,603,672	-1.38%	0.78%	1.12%	1.13%	2.93%	3.42%	8/16/2007
BM: 100% Fixed-Income Option		-1.21%	1.27%	1.49%	1.55%	3.56%	4.11%	
International Equity Index Option	\$4,656,155	-0.15%	17.18%	6.37%			6.14%	6/18/2013
BM: International Equity Index Option		-1.10%	16.61%	6.23%			6.31%	
Money Market Option	\$10,788,151	0.29%	0.78%	0.32%	0.19%	0.20%	0.34%	11/ 1/2007
BM: Money Market Option		0.24%	0.66%	0.28%	0.17%	0.24%	0.37%	
Principal Plus Interest Option	\$114,458,213	0.46%	1.61%	1.45%	1.36%	1.95%	2.55%	10/10/2001
Citigroup 3-Month U.S. Treasury Bill		0.34%	1.06%	0.49%	0.31%	0.31%	1.26%	
Aggressive Allocation Option	\$19,699,965	-0.92%	11.38%	7.02%			7.31%	8/12/2014
BM: Aggressive Allocation Option		-1.29%	10.72%	7.05%			7.32%	
Conservative Allocation Option	\$9,566,928	-0.61%	5.20%	3.50%			3.51%	8/18/2014
BM: Conservative Allocation Option		-0.82%	4.71%	3.37%			3.40%	
Equity and Interest Accumulation Option	\$2,528,270	-0.16%	7.56%	5.72%			5.75%	8/18/2014
BM: Equity and Interest Accumulation Option		-0.10%	7.34%	5.39%			5.41%	
U.S. Large Cap Equity Option	\$22,542,520	-0.88%	13.70%	10.53%			11.00%	8/12/2014
BM: U.S. Large Cap Equity Option		-0.76%	13.99%	10.78%			11.25%	
Matching Grant	\$2,455,723	0.46%	1.61%	1.45%	1.36%	1.95%	2.57%	3/22/2002
Citigroup 3-Month U.S. Treasury Bill		0.34%	1.06%	0.49%	0.31%	0.31%	1.24%	

# MINNESOTAABLEplan

A member of The National ABLE Alliance

Performance as of  
03/31/18

Total Market Value: \$ 2,180,519

<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	\$ 222,008	10.18%	(0.43)	(0.85)	(0.85)	11.27				12.54	12/15/16
ABLE Aggressive Custom Benchmark			(0.72)	(1.03)	(1.03)	11.53					
<b>Variance</b>			<b>0.29</b>	<b>0.18</b>	<b>0.18</b>	<b>(0.26)</b>					
Moderately Aggressive Option	\$ 184,915	8.48%	(0.26)	(0.78)	(0.78)	9.51				10.66	12/15/16
ABLE Moderately Aggressive Custom Benchmark			(0.51)	(0.93)	(0.93)	9.72					
<b>Variance</b>			<b>0.25</b>	<b>0.15</b>	<b>0.15</b>	<b>(0.21)</b>					
Growth Option	\$ 329,037	15.09%	(0.09)	(0.71)	(0.71)	7.63				8.71	12/15/16
ABLE Growth Custom Benchmark			(0.30)	(0.82)	(0.82)	7.92					
<b>Variance</b>			<b>0.21</b>	<b>0.11</b>	<b>0.11</b>	<b>(0.29)</b>					
Moderate Option	\$ 273,960	12.56%	0.09	(0.64)	(0.64)	5.82				6.97	12/15/16
ABLE Moderate Custom Benchmark			(0.09)	(0.72)	(0.72)	6.14					
<b>Variance</b>			<b>0.18</b>	<b>0.08</b>	<b>0.08</b>	<b>(0.32)</b>					
Moderately Conservative Option	\$ 226,558	10.39%	0.09	(0.37)	(0.37)	4.11				4.91	12/15/16
ABLE Moderately Conservative Custom Benchmark			0.02	(0.42)	(0.42)	4.42					
<b>Variance</b>			<b>0.07</b>	<b>0.05</b>	<b>0.05</b>	<b>(0.31)</b>					
Conservative Option	\$ 363,769	16.68%	0.19	0.00	0.00	1.98				2.31	12/15/16
ABLE Conservative Custom Benchmark			0.16	(0.02)	(0.02)	2.16					
<b>Variance</b>			<b>0.03</b>	<b>0.02</b>	<b>0.02</b>	<b>(0.18)</b>					
Checking Option	\$ 580,272	26.61%									03/30/17

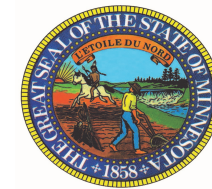
## MINNESOTA ACHIEVE A BETTER LIFE EXPERIENCE

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.

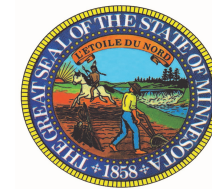
## RISK BASED ALLOCATIONS

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

## March 31, 2018



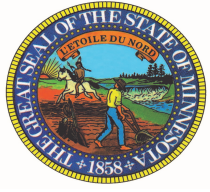
## Quarterly Report

# 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

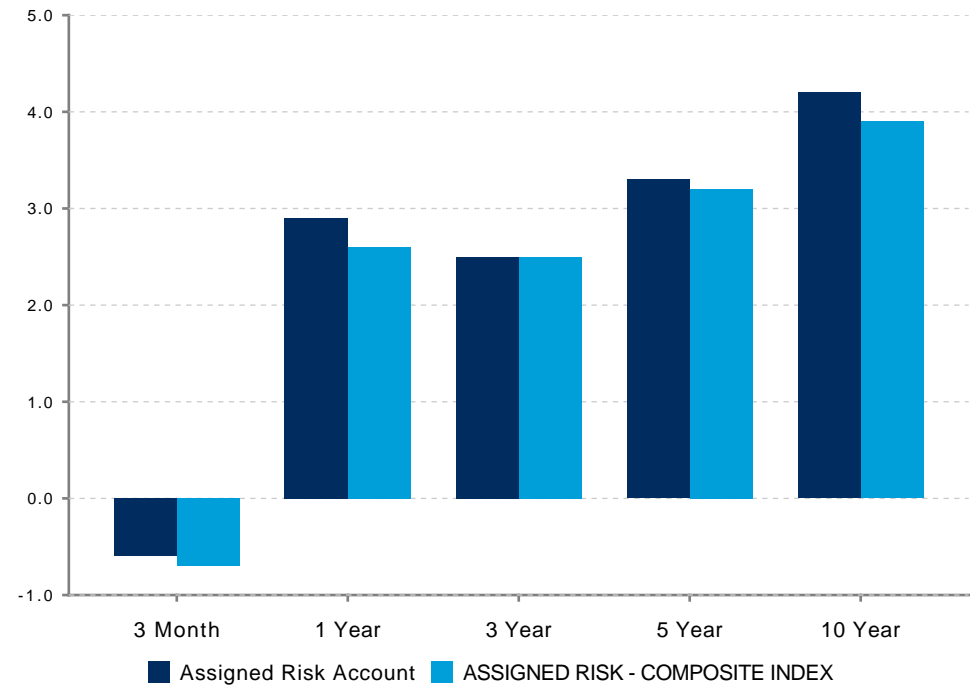
### Assigned Risk Plan

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.

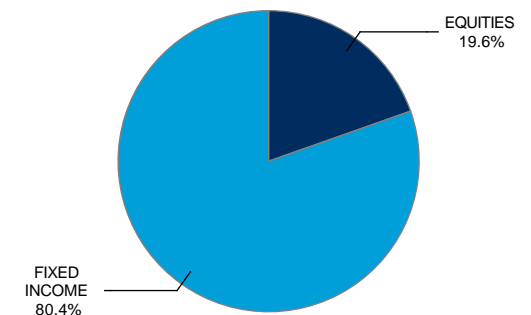
The Assigned Risk Plan is invested in a portfolio of common stocks and bonds

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	\$316,636,116	-0.6%	2.9%	2.5%	3.3%	4.2%
EQUITIES	61,975,084	-0.7	14.0	9.5	12.7	9.1
FIXED INCOME	254,661,033	-0.7	0.1	0.6	0.8	2.7
ASSIGNED RISK - COMPOSITE INDEX		-0.7	2.6	2.5	3.2	3.9
Excess		0.0	0.2	-0.1	0.0	0.3
S&P 500		-0.8	14.0	10.8	13.3	9.5
BBG BARC US Gov: Int		-0.7	-0.1	0.5	0.7	2.2



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.



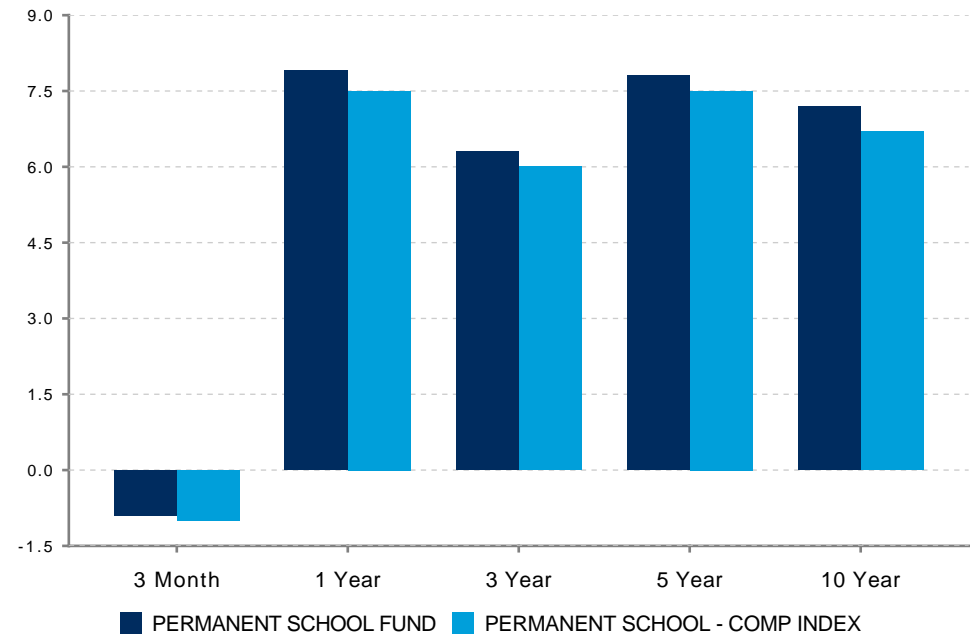
## Non-Retirement

### Permanent School Fund

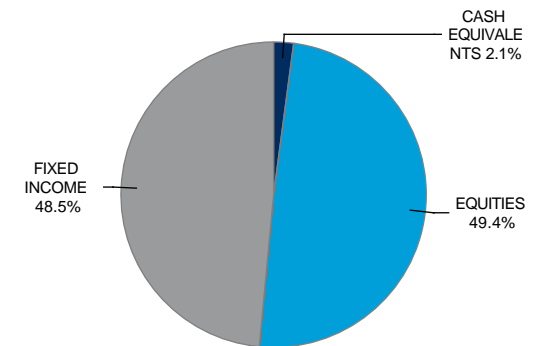
The investment objective of the Permanent School Fund is to produce a growing level of spendable income, within the constraints of maintaining adequate portfolio quality and liquidity. The income from the portfolio is transferred to the school endowment fund and distributed to Minnesota's public schools.

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.

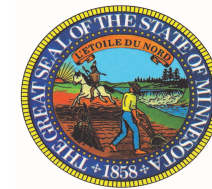
The stock segment is passively managed to track the performance of the S&P 500. The bond segment is actively managed to add incremental value through sector, security and yield curve decisions. The fixed income benchmark is the Bloomberg Barclays U.S. Aggregate. The total fund benchmark is a combination 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.



	Ending Market Value	Last Qtr	1 Year	3 Year	5 Year	10 Year
PERMANENT SCHOOL FUND	\$1,370,665,713	-0.9%	7.9%	6.3%	7.8%	7.2%
CASH EQUIVALENTS	28,099,454	0.4	1.2	0.6	0.4	0.5
EQUITIES	677,305,576	-0.7	14.0	10.8	13.3	9.5
FIXED INCOME	665,260,683	-1.5	1.3	1.6	2.4	4.4
PERMANENT SCHOOL - COMP INDEX		-1.0	7.5	6.0	7.5	6.7
Excess		0.1	0.3	0.3	0.3	0.5
S&P 500		-0.8	14.0	10.8	13.3	9.5
BBG BARC US Agg		-1.5	1.2	1.2	1.8	3.6



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.



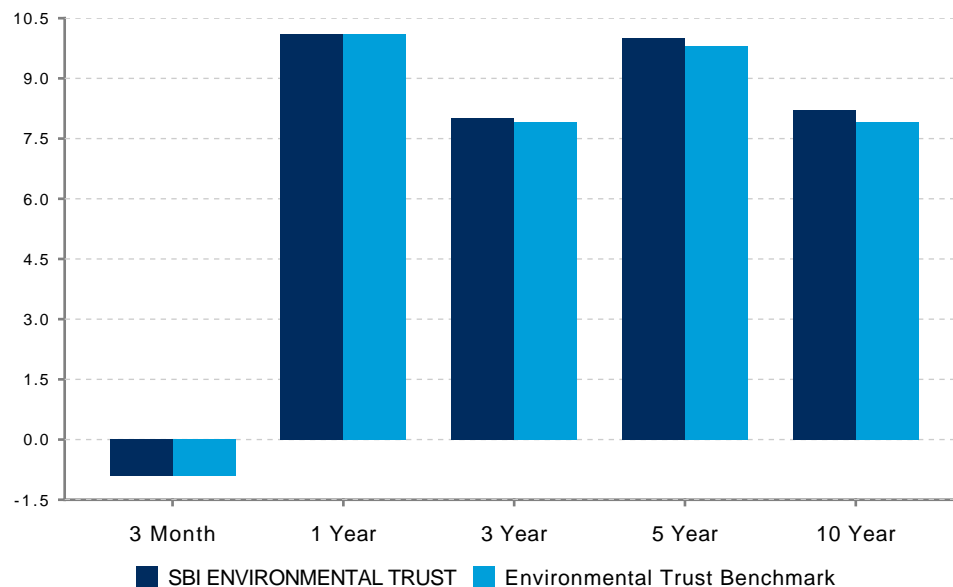
## Non-Retirement

### Environmental Trust Fund

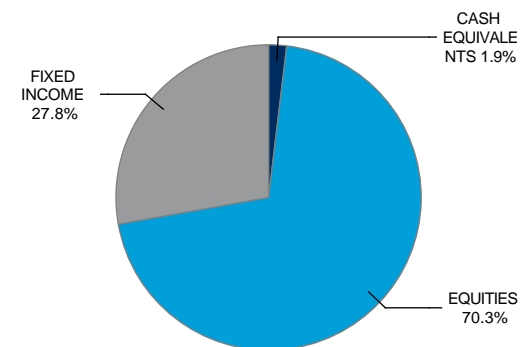
The objective of the Environmental Trust Fund is to increase the market value of the Fund over time in order to increase the annual amount made available for spending within the constraints of maintaining adequate portfolio quality and liquidity.

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.

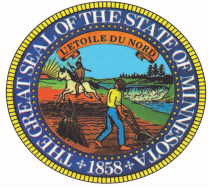
The bond segment is actively managed to add incremental value through sector, security and yield curve decisions. The stock segment is passively managed to track the performance of the S&P 500. The fixed income benchmark is the Bloomberg Barclays U.S. Aggregate. The total fund benchmark is a combination 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	\$1,093,048,795	-0.9%	10.1%	8.0%	10.0%	8.2%
CASH EQUIVALENTS	21,169,936	0.4	1.2	0.6	0.4	0.5
EQUITIES	768,299,438	-0.7	14.0	10.8	13.3	9.5
FIXED INCOME	303,579,421	-1.5	1.3	1.6	2.4	4.4
Environmental Trust Benchmark		-0.9	10.1	7.9	9.8	7.9
Excess		-0.0	-0.0	0.1	0.1	0.3
S&P 500		-0.8	14.0	10.8	13.3	9.5
BBG BARC US Agg		-1.5	1.2	1.2	1.8	3.6



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.

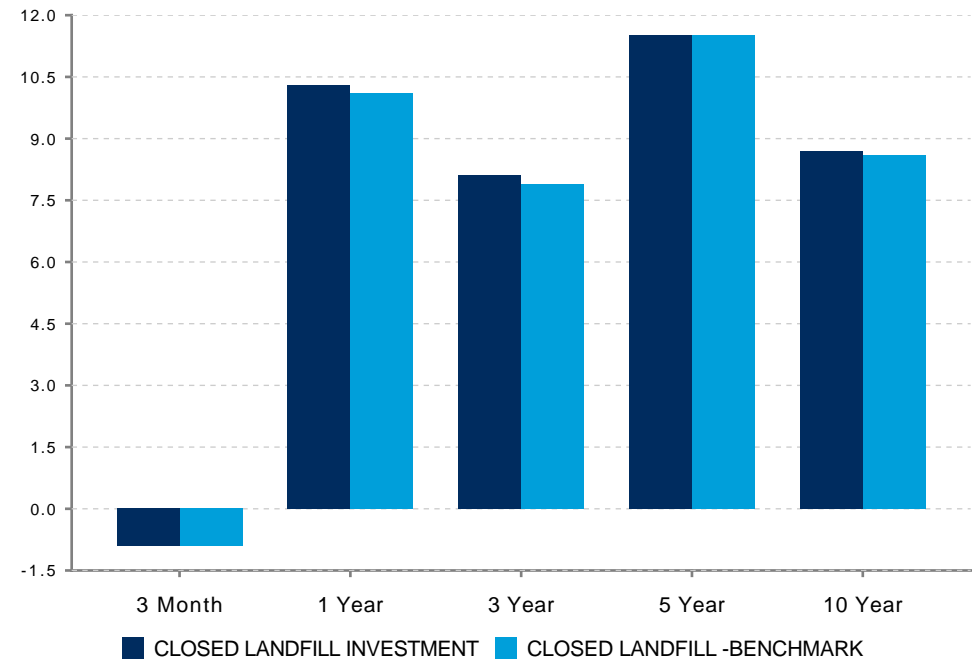


## Non-Retirement

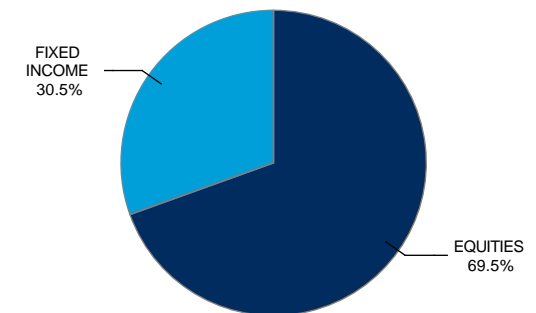
### Closed Landfill Investment Fund

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.



	Ending Market Value	Last Qtr	1 Year	3 Year	5 Year	10 Year
CLOSED LANDFILL INVESTMENT	\$87,235,211	-0.9%	10.3%	8.1%	11.5%	8.7%
EQUITIES	60,664,779	-0.7	14.0	10.8	13.3	9.5
FIXED INCOME	26,570,432	-1.5	1.3	1.6		
CLOSED LANDFILL -BENCHMARK		-0.9	10.1	7.9	11.5	8.6
Excess		0.0	0.2	0.1	0.1	0.1
S&P 500		-0.8	14.0	10.8	13.3	9.5
BBG BARC US Agg		-1.5	1.2	1.2	1.8	3.6



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>2,125,949,150</b>	<b>-0.8</b>							<b>12/2017</b>
S&P 500 INDEX (DAILY)		-0.8							12/2017
Excess		0.0							
<b>SBI INTERNAL EQUITY INDEX</b>	<b>309,376</b>								
<b>NON RETIREMENT EQUITY INDEX</b>	<b>2,126,258,526</b>	<b>-0.8</b>	<b>10.6</b>	<b>14.0</b>	<b>10.8</b>	<b>13.3</b>	<b>9.5</b>	<b>9.6</b>	<b>07/1993</b>
S&P 500 INDEX (DAILY)		-0.8	10.6	14.0	10.8	13.3	9.5	9.5	07/1993
Excess		0.0	-0.0	-0.0	0.0	-0.0	0.0	0.1	
<b>PRUDENTIAL</b>	<b>1,154,579,458</b>	<b>-1.5</b>							<b>12/2017</b>
BBG BARC Agg (Dly)		-1.5							12/2017
Excess		-0.0							
<b>NON RETIREMENT FIXED INCOME</b>	<b>1,154,579,458</b>	<b>-1.5</b>	<b>-0.3</b>	<b>1.3</b>	<b>1.6</b>	<b>2.4</b>	<b>4.3</b>	<b>6.0</b>	<b>07/1994</b>
BBG BARC Agg (Dly)		-1.5	-0.2	1.2	1.2	1.8	3.6	5.5	07/1994
Excess		-0.0	-0.0	0.1	0.4	0.5	0.7	0.5	
<b>RBC</b>	<b>254,661,136</b>	<b>-0.7</b>	<b>-0.6</b>	<b>0.1</b>	<b>0.6</b>	<b>0.8</b>	<b>2.7</b>	<b>4.9</b>	<b>07/1991</b>
RBC Custom Benchmark		-0.7	-0.8	-0.1	0.5	0.7	2.3	5.0	07/1991
Excess		0.0	0.2	0.2	0.1	0.1	0.3	-0.1	

Note:

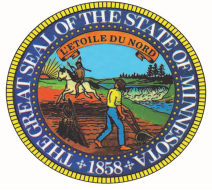
RBC is the manager for the fixed income portion of the assigned risk account. RBC changed its name from Voyageur Asset Management on 1/1/2010. The current benchmark is the Bloomberg Barclays Intermediate Government Index. Prior to 7/1/11 the Voyageur Custom Index was 10% 90 day T-Bill, 25% Merrill 1-3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

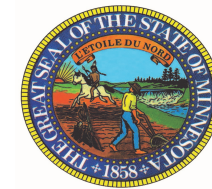
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# State Cash

## March 31, 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.

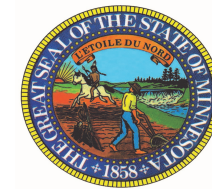
Beginning in January 2003, the Treasurer's Cash Pool is measured against the iMoneyNet, All Taxable Money Fund Report Average.

	<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	11,236,426,747	0.3	1.2	0.9	0.7	1.0
iMoneyNet Money Fund Average-All Taxable		0.3	0.7	0.3	0.2	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	75,034,408	-1.0	1.2	1.7		
Housing Finance	27,931,193	0.4	1.0	1.0		
Public Facilities Authority	60,793,598	-0.2	2.0	1.8		



## 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:**

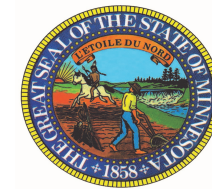
The Composite Index performance is calculated by multiplying the beginning of month Composite weights by the monthly returns of the asset class benchmarks. Effective 1/1/2017, the Combined Funds Composite weight is set as the Strategic Asset Allocation Policy Target with the uninvested portion of Private 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.