



Comprehensive Performance Report

March 31, 2019



Description of SBI Investment Programs

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.

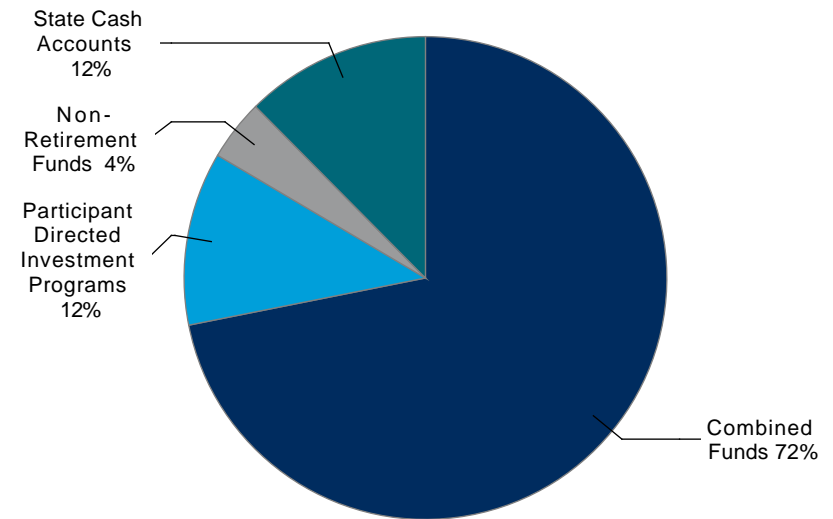
State Cash

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>
COMBINED FUNDS	
Combined Funds	\$68,816
PARTICIPANT DIRECTED INVESTMENT PROGRAMS	
Supplemental Investment Fund*	3,856
State Deferred Compensation Plan**	5,818
Minnesota College Savings Plan	1,448
Achieve a Better Life Experience	5
NON-RETIREMENT FUNDS	
Assigned Risk Plan	282
Permanent School Fund	1,463
Environmental Trust Fund	1,172
Closed Landfill Investment Fund	93
Miscellaneous	248
Other Post Employment Benefits Accounts	653
STATE CASH ACCOUNTS	
Treasurer's Cash	11,591
Other State Cash Accounts	306
TOTAL	
SBI AUM	95,752



* 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

Table of Contents

Combined Funds	Page 5
Domestic Equity	
International Equity	
Fixed Income	
Private Markets	
Treasuries	
Participant Directed Investment Program	Page 67
Supplemental Investment Fund	
Deferred Compensation Program	
Minnesota College Savings Plan	
Achieve a Better Life Experience	
Non-Retirement Funds	Page 83
Assigned Risk Plan	
Permanent School Fund	
Environmental Trust Fund	
Closed Landfill Investment Fund	
Non-Retirement Managers	
State Cash Accounts	Page 91
Invested Treasurer's Cash	
Other State Cash Accounts	
Addendum	Page 93

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, 2019



Combined Funds Summary

Combined Funds Change in Market Value (\$Millions)

	<u>One Quarter</u>
COMBINED FUNDS	
Beginning Market Value	\$64,107
Net Contributions	-667
Investment Return	5,376
Ending Market Value	68,816

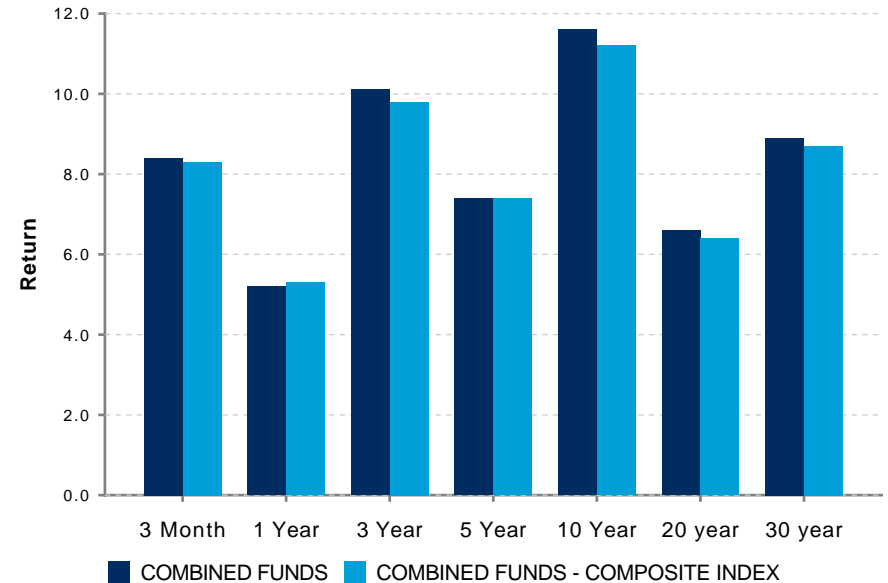
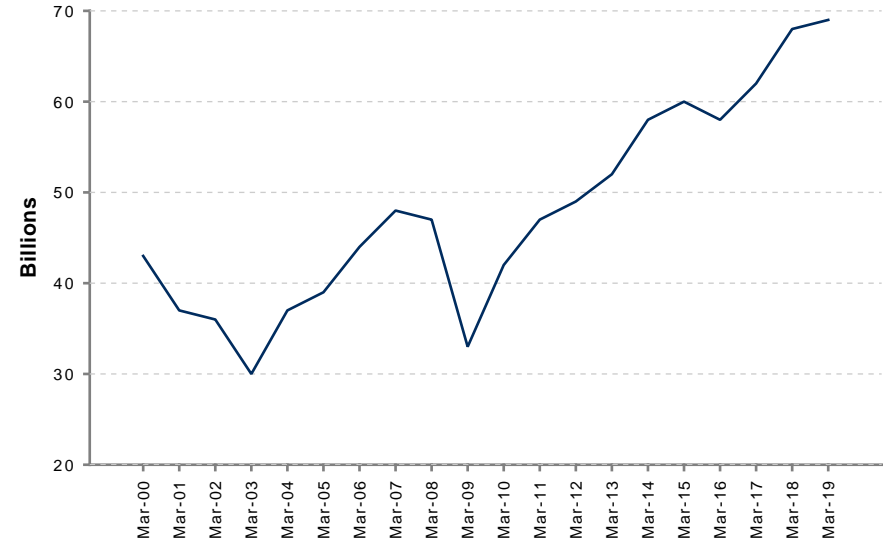
The change in market value of the Combined Funds since the end of last quarter is due to net contributions and investment returns.

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	8.4%	3.6%	5.2%	10.1%	7.4%	11.6%	6.6%	8.9%
COMBINED FUNDS - COMPOSITE INDEX	8.3	3.8	5.3	9.8	7.4	11.2	6.4	8.7
Excess	0.2	-0.2	-0.1	0.3	0.0	0.5	0.2	0.3

Asset Growth



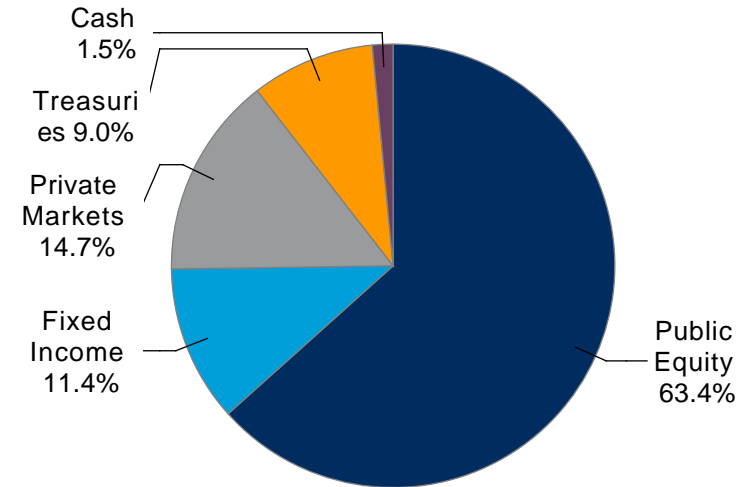


Combined Funds Summary

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.

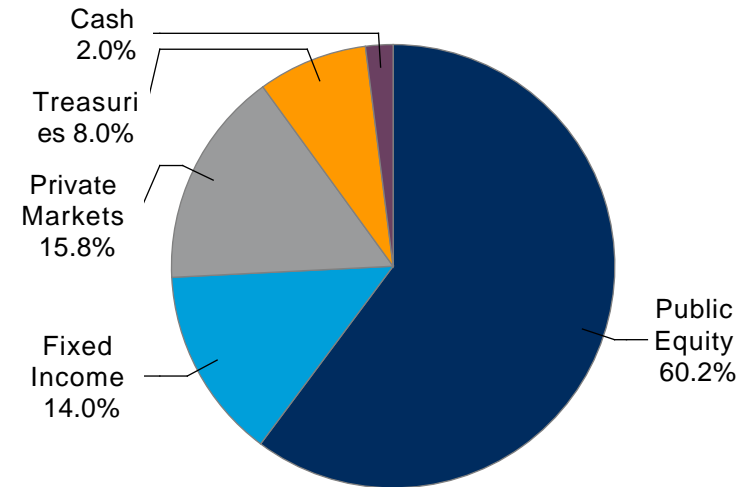
	<u>(Millions)</u>	<u>Actual Mix</u>	<u>Policy Target</u>
Public Equity	\$43,594	63.3%	53.0%
Fixed Income	7,870	11.4	12.0
Private Markets	10,088	14.7	25.0
Treasuries	6,203	9.0	8.0
Cash	1,060	1.5	2.0
TOTAL	68,816	100.0	



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>Benchmark</u>
Public Equity	60.2%	Public Equity Benchmark
Fixed Income	14.0	BB Barclays U.S. Aggregate
Private Markets	15.8	Private Markets
Treasuries	8.0	BB Barclays Treasury 5+ Years
Cash	2.0	3 Month T-Bills





Combined Funds Asset Class Performance Summary

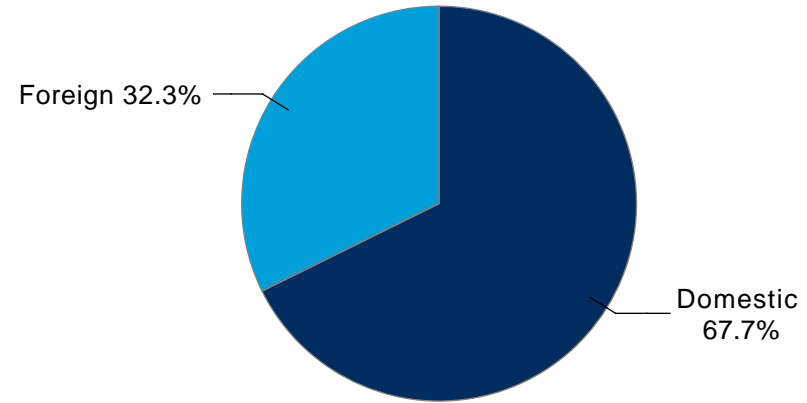
Public Equity

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

The Public Equity benchmark is 60.3% Russell 1000, 6.7% Russell 2000, 24.75% MSCI World ex US (net), and 8.25% MSCI EM (net).

The Russell 1000 and Russell 2000 measure the performance of the 1000 largest and 2000 next largest U.S. companies based on total market capitalization.

The MSCI World ex US index is composed of large and mid cap companies that capture approximately 85% of the total market capitalization in 22 of the 23 developed markets. The MSCI Emerging Markets index is composed of large and mid cap companies that capture approximately 85% of the total market capitalization across 24 Emergin Markets countries.



	<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	13.1%	2.2%	4.2%	11.9%	8.1%	14.3%	5.9%	9.3%
Public Equity Benchmark	12.8	2.7	4.4					
Excess	0.2	-0.5	-0.2					
Domestic Equity	14.2	4.2	8.5	13.6	10.1	16.0	6.2	9.8
Domestic Equity Benchmark	14.1	4.7	8.8	13.5	10.4	16.0	6.3	9.9
Excess	0.2	-0.5	-0.3	0.1	-0.3	0.0	-0.1	-0.2
International Equity	10.5	-2.1	-4.4	7.9	2.9	9.3	4.9	
International Equity Benchmark	10.3	-1.6	-4.2	8.1	2.6	8.9	4.5	
Excess	0.2	-0.4	-0.2	-0.2	0.3	0.4	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 program includes Core Fixed Income and Treasuries. The Combined Funds performance for these asset classes is shown here.

The Core 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.

The Treasuries benchmark is the Bloomberg Barclays Treasury 5+ Years Index.

	<u>Last Qtr</u>	<u>FYTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>20 Year</u>	<u>30 year</u>
Fixed Income	3.4%	4.9%	4.9%	2.7%	3.2%	5.2%	5.1%	6.5%
Fixed Income Benchmark	2.9	4.6	4.5	2.0	2.7	3.8	4.7	6.2
Excess	0.5	0.2	0.4	0.7	0.4	1.4	0.4	0.3
Treasuries	3.4	5.5	5.5					
BBG BARC 5Y + Us Tsy Idx	3.3	5.6	5.7					
Excess	0.0	-0.1	-0.2					

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	0.6%	1.7%	2.2%	1.3%	0.9%	0.7%	2.3%	3.8%
90 DAY T-BILL	0.6	1.7	2.1	1.2	0.7	0.4	1.9	3.1

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	-0.6%	7.4%	9.9%	13.7%	10.8%	11.3%	12.7%	13.4%	12.1%
Private Equity	0.0%	9.0%	11.7%	16.2%	14.3%	14.8%	13.5%	15.0%	
Private Credit	1.7	8.6	13.3	15.0	13.4	12.5	12.6		
Resources	-3.8	3.5	4.3	7.9	-0.5	5.1	16.3	14.8	
Real Estate	0.7	5.8	8.6	9.4	12.1	6.5	8.8	9.4	

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, 2019

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.

This page intentionally left blank.



Domestic Equity

March 31, 2019



	<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>
Total Domestic Equity										
ACTIVE DOMESTIC EQUITY AGGREGATE (1)	\$4,467,368,170	14.5%	15.6%	-0.8%	6.1%	14.1%	9.1%	15.8%		
Active Domestic Equity Benchmark			14.1	-0.1	5.6	12.6	9.3	15.6		
Excess			1.6	-0.7	0.4	1.5	-0.1	0.2		
SEMI PASSIVE DOMESTIC EQUITY AGGREGATE (2)	2,374,447,897	7.7	13.6	5.1	8.6	13.3	10.5	16.2		
Semi Passive Domestic Equity Benchmark			14.0	5.5	9.3	13.5	10.6	16.0		
Excess			-0.4	-0.4	-0.7	-0.2	-0.1	0.1		
PASSIVE DOMESTIC EQUITY AGGREGATE (3)	23,891,815,801	77.7	14.0	5.2	9.0	13.6	10.4	16.0		
Passive Domestic Equity Benchmark			14.0	5.2	9.1	13.6	10.4	16.0		
Excess			0.0	-0.0	-0.0	-0.1	-0.0	-0.0		
TRANSITION AGGREGATE DOMESTIC EQUITY (4)	25,860	0.0								
TOTAL DOMESTIC EQUITY (5)	30,733,657,728	100.0	14.3	4.2	8.5	13.6	10.1	16.0	10.4	01/1984
Domestic Equity Benchmark			14.1	4.7	8.8	13.5	10.4	16.0	10.6	01/1984
Excess			0.2	-0.5	-0.3	0.1	-0.3	-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, Russell 2000 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 90% Russell 1000 and 10% Russell 2000.

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



	<u>2018 Calendar Return</u>	<u>2017 Calendar Return</u>	<u>2016 Calendar Return</u>	<u>2015 Calendar Return</u>	<u>2014 Calendar Return</u>
Total Domestic Equity					
ACTIVE DOMESTIC EQUITY AGGREGATE (1)	-6.5%	20.6%	10.9%	-0.4%	9.3%
Active Domestic Equity Benchmark	-8.0	18.3	15.7	-0.6	11.0
Excess	1.4	2.3	-4.8	0.3	-1.7
SEMI PASSIVE DOMESTIC EQUITY AGGREGATE (2)	-4.9	22.5	11.1	0.5	14.2
Semi Passive Domestic Equity Benchmark	-4.8	21.7	12.1	0.9	13.2
Excess	-0.1	0.8	-1.0	-0.4	1.0
PASSIVE DOMESTIC EQUITY AGGREGATE (3)	-5.0	21.3	12.6	0.5	12.6
Passive Domestic Equity Benchmark	-5.0	21.5	12.5	0.5	12.6
Excess	-0.0	-0.2	0.1	0.0	0.0
TRANSITION AGGREGATE DOMESTIC EQUITY (4)					
TOTAL DOMESTIC EQUITY (5)	-5.3%	21.4%	11.5	0.3	12.3
Domestic Equity Benchmark	-5.2%	21.1%	12.7	0.5	12.6
Excess	-0.0%	0.2%	-1.3	-0.2	-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, Russell 2000 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 90% Russell 1000 and 10% Russell 2000.

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>
Active Large Cap Growth										
SANDS	\$475,909,162	1.5%	22.3%	7.9%	19.4%	22.2%	13.0%	21.4%	11.5%	01/2005
Russell 1000 Growth			16.1	6.6	12.7	16.5	13.5	17.5	9.8	01/2005
Excess			6.2	1.2	6.7	5.6	-0.5	3.9	1.7	
WINSLOW	257,777,490	0.8	17.7	7.3	15.4	19.3	13.9	17.2	10.8	01/2005
Russell 1000 Growth			16.1	6.6	12.7	16.5	13.5	17.5	9.8	01/2005
Excess			1.6	0.7	2.7	2.7	0.4	-0.3	1.0	
ZEVENBERGEN	421,530,837	1.4	27.5	4.8	19.7	23.8	13.5	19.2	11.1	04/1994
Russell 1000 Growth			16.1	6.6	12.7	16.5	13.5	17.5	9.7	04/1994
Excess			11.4	-1.8	7.0	7.3	-0.0	1.7	1.3	
RUSSELL 1000 GROWTH AGGREGATE	1,155,217,489	3.8	23.4	6.5	18.8	22.1	14.7	19.2		
Russell 1000 Growth			16.1	6.6	12.7	16.5	13.5	17.5		
Excess			7.3	-0.2	6.0	5.6	1.2	1.6		



	<u>2018 Calendar Return</u>	<u>2017 Calendar Return</u>	<u>2016 Calendar Return</u>	<u>2015 Calendar Return</u>	<u>2014 Calendar Return</u>
Active Large Cap Growth					
SANDS	7.0%	35.3%	-6.9%	2.9%	9.1%
Russell 1000 Growth	-1.5	30.2	7.1	5.7	13.0
Excess	8.6	5.1	-13.9	-2.8	-3.9
WINSLOW	4.2	33.2	-1.9	6.7	11.0
Russell 1000 Growth	-1.5	30.2	7.1	5.7	13.0
Excess	5.7	3.0	-9.0	1.0	-2.0
ZEVENBERGEN	2.3	35.1	-2.8	6.4	3.4
Russell 1000 Growth	-1.5	30.2	7.1	5.7	13.0
Excess	3.8	4.9	-9.9	0.7	-9.6
RUSSELL 1000 GROWTH AGGREGATE	4.7%	33.4%	1.0	4.6	9.6
Russell 1000 Growth	-1.5%	30.2%	7.1	5.7	13.0
Excess	6.2%	3.2%	-6.1	-1.1	-3.4



	<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>
Active Large Cap Value										
BARROW HANLEY	\$394,803,783	1.3%	9.8%	3.3%	6.7%	10.2%	7.4%	14.2%	7.8%	04/2004
Russell 1000 Value			11.9	4.4	5.7	10.5	7.7	14.5	7.6	04/2004
Excess			-2.1	-1.2	1.0	-0.3	-0.4	-0.4	0.2	
EARNEST PARTNERS	286,544,331	0.9	13.6	5.0	6.4	13.7	9.7	14.5	7.0	07/2000
Russell 1000 Value			11.9	4.4	5.7	10.5	7.7	14.5	7.1	07/2000
Excess			1.7	0.5	0.7	3.3	2.0	0.0	-0.1	
LSV	377,745,926	1.2	11.7	-0.1	-0.0	11.0	8.0	15.8	8.7	04/2004
Russell 1000 Value			11.9	4.4	5.7	10.5	7.7	14.5	7.6	04/2004
Excess			-0.3	-4.5	-5.7	0.6	0.3	1.3	1.1	
RUSSELL 1000 VALUE AGGREGATE	1,059,094,040	3.4	11.5	2.4	4.0	11.6	7.9	14.6		
Russell 1000 Value			11.9	4.4	5.7	10.5	7.7	14.5		
Excess			-0.4	-2.0	-1.7	1.2	0.2	0.1		



	<u>2018 Calendar Return</u>	<u>2017 Calendar Return</u>	<u>2016 Calendar Return</u>	<u>2015 Calendar Return</u>	<u>2014 Calendar Return</u>
Active Large Cap Value					
BARROW HANLEY	-5.9%	14.6%	12.8%	-2.1%	13.0%
Russell 1000 Value	-8.3	13.7	17.3	-3.8	13.5
Excess	2.4	0.9	-4.5	1.7	-0.5
EARNEST PARTNERS	-7.7	19.9	16.2	-2.7	14.0
Russell 1000 Value	-8.3	13.7	17.3	-3.8	13.5
Excess	0.6	6.2	-1.1	1.1	0.5
LSV	-11.8	18.6	17.0	-2.2	14.0
Russell 1000 Value	-8.3	13.7	17.3	-3.8	13.5
Excess	-3.6	4.9	-0.4	1.6	0.6
RUSSELL 1000 VALUE AGGREGATE	-8.7%	17.3%	15.3	-3.2	13.1
Russell 1000 Value	-8.3%	13.7%	17.3	-3.8	13.5
Excess	-0.4%	3.7%	-2.1	0.6	-0.4



	<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>
Semi-Passive Large Cap										
BLACKROCK	\$1,076,580,810	3.5%	13.9%	5.4%	8.8%	14.9%	11.6%	16.6%	9.9%	01/1995
Semi Passive Domestic Equity Benchmark			14.0	5.5	9.3	13.5	10.6	16.0	9.5	01/1995
Excess			-0.1	-0.1	-0.5	1.4	0.9	0.5	0.4	
J.P. MORGAN										
J.P. MORGAN	1,297,867,087	4.2	13.3	4.9	8.5	13.3	10.6	16.5	9.7	01/1995
Semi Passive Domestic Equity Benchmark			14.0	5.5	9.3	13.5	10.6	16.0	9.5	01/1995
Excess			-0.7	-0.6	-0.8	-0.3	-0.0	0.5	0.2	
SEMI-PASSIVE DOMESTIC EQUITY AGGREGATE										
SEMI-PASSIVE DOMESTIC EQUITY AGGREGATE	2,374,447,897	7.7	13.6	5.1	8.6	13.3	10.5	16.2		
Semi Passive Domestic Equity Benchmark			14.0	5.5	9.3	13.5	10.6	16.0		
Excess			-0.4	-0.4	-0.7	-0.2	-0.1	0.1		



	<u>2018 Calendar Return</u>	<u>2017 Calendar Return</u>	<u>2016 Calendar Return</u>	<u>2015 Calendar Return</u>	<u>2014 Calendar Return</u>
Semi-Passive Large Cap					
BLACKROCK	-4.1%	24.6%	12.5%	0.8%	14.2%
Semi Passive Domestic Equity Benchmark	-4.8	21.7	12.1	0.9	13.2
Excess	0.7	2.9	0.5	-0.1	1.0
J.P. MORGAN					
J.P. MORGAN	-5.4	21.8	12.3	0.8	15.0
Semi Passive Domestic Equity Benchmark	-4.8	21.7	12.1	0.9	13.2
Excess	-0.6	0.1	0.2	-0.1	1.8
SEMI-PASSIVE DOMESTIC EQUITY AGGREGATE					
SEMI-PASSIVE DOMESTIC EQUITY AGGREGATE	-4.9%	22.5%	11.1	0.5	14.2
Semi Passive Domestic Equity Benchmark	-4.8%	21.7%	12.1	0.9	13.2
Excess	-0.1%	0.8%	-1.0	-0.4	1.0



	<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>
Active Small Cap Growth										
ARROWMARK	\$237,777,350	0.8%	13.7%	0.9%	11.5%				20.8%	11/2016
Russell 2000 Growth			17.1	-3.2	3.9				16.1	11/2016
Excess			-3.5	4.1	7.6				4.8	
HOOD RIVER	255,140,201	0.8	18.9	0.6	8.8				16.8	11/2016
Russell 2000 Growth			17.1	-3.2	3.9				16.1	11/2016
Excess			1.7	3.8	5.0				0.7	
RICE HALL JAMES	220,827,938	0.7	9.9	-10.3	-4.4				17.2	11/2016
Russell 2000 Growth			17.1	-3.2	3.9				16.1	11/2016
Excess			-7.2	-7.1	-8.3				1.1	
WELLINGTON	253,147,224	0.8	20.6	-1.9	3.9				16.5	11/2016
Russell 2000 Growth			17.1	-3.2	3.9				16.1	11/2016
Excess			3.4	1.2	0.1				0.4	
RUSSELL 2000 GROWTH AGGREGATE	966,892,712	3.1	15.8	-2.7	4.8	13.8	6.5	14.7		
Russell 2000 Growth			17.1	-3.2	3.9	14.9	8.4	16.5		
Excess			-1.3	0.5	1.0	-1.1	-1.9	-1.8		



	<u>2018 Calendar Return</u>	<u>2017 Calendar Return</u>	<u>2016 Calendar Return</u>	<u>2015 Calendar Return</u>	<u>2014 Calendar Return</u>
Active Small Cap Growth					
ARROWMARK	0.9%	26.2%			
Russell 2000 Growth	-9.3	22.2			
Excess	10.3	4.1			
HOOD RIVER	-7.0	21.3			
Russell 2000 Growth	-9.3	22.2			
Excess	2.3	-0.9			
RICE HALL JAMES	-6.9	27.9			
Russell 2000 Growth	-9.3	22.2			
Excess	2.4	5.8			
WELLINGTON	-11.6	22.6			
Russell 2000 Growth	-9.3	22.2			
Excess	-2.3	0.4			
RUSSELL 2000 GROWTH AGGREGATE	-6.2%	22.0%	4.7	1.0	-3.4
Russell 2000 Growth	-9.3%	22.2%	11.3	-1.4	5.6
Excess	3.2%	-0.1%	-6.6	2.4	-9.0



	<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>
Active Small Cap Value										
GOLDMAN SACHS	\$355,232,839	1.2%	12.5%	-4.3%	-0.6%	10.8%	6.4%	15.6%	9.1%	01/2004
Russell 2000 Value			11.9	-7.5	0.2	10.9	5.6	14.1	7.6	01/2004
Excess			0.5	3.2	-0.8	-0.0	0.8	1.5	1.6	
HOTCHKIS AND WILEY	295,161,391	1.0	11.6	-9.5	-1.3	8.4	4.5	18.8	7.8	01/2004
Russell 2000 Value			11.9	-7.5	0.2	10.9	5.6	14.1	7.6	01/2004
Excess			-0.3	-2.0	-1.4	-2.5	-1.1	4.7	0.2	
MARTINGALE	281,474,030	0.9	11.4	-9.0	-3.5	9.6	6.2	15.6	7.5	01/2004
Russell 2000 Value			11.9	-7.5	0.2	10.9	5.6	14.1	7.6	01/2004
Excess			-0.6	-1.5	-3.7	-1.2	0.6	1.5	-0.1	
PEREGRINE	354,295,668	1.2	12.3	-10.1	-4.6	10.1	5.4	16.7	9.8	07/2000
Russell 2000 Value			11.9	-7.5	0.2	10.9	5.6	14.1	9.2	07/2000
Excess			0.3	-2.6	-4.8	-0.7	-0.2	2.5	0.5	
RUSSELL 2000 VALUE AGGREGATE	1,286,163,929	4.2	12.0	-8.2	-2.5	9.8	5.6	16.5		
Russell 2000 Value			11.9	-7.5	0.2	10.9	5.6	14.1		
Excess			0.0	-0.7	-2.7	-1.0	0.0	2.4		



	<u>2018 Calendar Return</u>	<u>2017 Calendar Return</u>	<u>2016 Calendar Return</u>	<u>2015 Calendar Return</u>	<u>2014 Calendar Return</u>
Active Small Cap Value					
GOLDMAN SACHS	-13.3%	12.6%	24.6%	-5.2%	7.4%
Russell 2000 Value	-12.9	7.8	31.7	-7.5	4.2
Excess	-0.5	4.7	-7.1	2.3	3.1
HOTCHKIS AND WILEY					
	-14.4	7.9	19.9	-8.5	13.0
Russell 2000 Value	-12.9	7.8	31.7	-7.5	4.2
Excess	-1.5	0.0	-11.8	-1.0	8.8
MARTINGALE					
	-15.0	6.9	34.3	-5.2	7.3
Russell 2000 Value	-12.9	7.8	31.7	-7.5	4.2
Excess	-2.1	-0.9	2.5	2.3	3.1
PEREGRINE					
	-16.1	12.5	27.8	-6.7	4.1
Russell 2000 Value	-12.9	7.8	31.7	-7.5	4.2
Excess	-3.3	4.7	-3.9	0.8	-0.1
RUSSELL 2000 VALUE AGGREGATE					
	-14.7%	10.2%	26.5	-6.5	7.5
Russell 2000 Value	-12.9%	7.8%	31.7	-7.5	4.2
Excess	-1.8%	2.3%	-5.2	1.0	3.3



	<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>
Total Passive Domestic Equity										
BLACKROCK RUSSELL 1000	\$21,754,642,243	70.8%	14.0%	5.5%	9.3%				14.9%	11/2016
Russell 1000			14.0	5.5	9.3				14.9	11/2016
Excess			0.0	-0.0	-0.0				-0.0	
BLACKROCK RUSSELL 2000	581,953,732		14.4						2.6	11/2018
RUSSELL 2000 (DAILY)			14.6						2.6	11/2018
Excess			-0.2						0.1	
BLACKROCK RUSSELL 3000 (1)	1,555,219,825	5.1	14.1	4.7	8.8	13.5%	10.4%	16.0%	9.2	07/1995
Passive Manager Benchmark			14.0	4.7	8.8	13.5	10.4	16.0	9.1	07/1995
PASSIVE DOMESTIC EQUITY AGGREGATE	23,891,815,801	77.7	14.0	5.2	9.0	13.6	10.4	16.0		
Passive Domestic Equity Benchmark			14.0	5.2	9.1	13.6	10.4	16.0		
Excess			0.0	-0.0	-0.0	-0.1	-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.

The passively managed portfolios may, at times, exhibit minimal tracking error from the benchmark as a result of the Sudan and Iran restrictions.



	<u>2018 Calendar Return</u>	<u>2017 Calendar Return</u>	<u>2016 Calendar Return</u>	<u>2015 Calendar Return</u>	<u>2014 Calendar Return</u>
Total Passive Domestic Equity					
BLACKROCK RUSSELL 1000	-4.8%	21.7%			
Russell 1000	-4.8	21.7			
Excess	-0.0	-0.0			
BLACKROCK RUSSELL 2000					
RUSSELL 2000 (DAILY)					
Excess					
BLACKROCK RUSSELL 3000 (1)	-5.2	21.1	12.7%	0.5%	12.6%
Passive Manager Benchmark	-5.2	21.1	12.7	0.5	12.6
PASSIVE DOMESTIC EQUITY AGGREGATE	-5.0%	21.3%	12.6	0.5	12.6
Passive Domestic Equity Benchmark	-5.0%	21.5%	12.5	0.5	12.6
Excess	-0.0%	-0.2%	0.1	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.

This page intentionally left blank.



International Equity

March 31, 2019



	<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>
Total International Equity										
DEVELOPED MARKETS (1)	\$10,632,288,971	74.5%	10.8%	-2.7%	-3.1%	7.3%	2.7%	9.5%		
BENCHMARK DM			10.4	-2.4	-3.1	7.3	2.2	8.8		
Excess			0.4	-0.3	0.1	0.0	0.5	0.7		
EMERGING MARKETS (2)	3,640,350,809	25.5	9.9	0.3	-8.0	9.8	3.1	8.4		
BENCHMARK EM			9.9	0.6	-7.4	10.7	3.7	8.9		
Excess			0.0	-0.3	-0.6	-0.9	-0.5	-0.6		
TRANSITION AGGREGATE INTERNATIONAL EQUITY (3)	3,482,295	0.0								
TOTAL INTERNATIONAL EQUITY (4)	14,276,122,076	100.0	10.5	-2.1	-4.4	7.8	2.8	9.3	6.4	10/1992
International Equity Benchmark			10.3	-1.6	-4.2	8.1	2.6	8.9	5.9	10/1992
Excess			0.2	-0.5	-0.2	-0.3	0.3	0.4	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 75% MSCI World ex USA (net) and 25% MSCI Emerging Markets Free (net).

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



	<u>2018 Calendar Return</u>	<u>2017 Calendar Return</u>	<u>2016 Calendar Return</u>	<u>2015 Calendar Return</u>	<u>2014 Calendar Return</u>
Total International Equity					
DEVELOPED MARKETS (1)	-14.2%	24.9%	1.3%	-0.3%	-4.1%
BENCHMARK DM	-14.1	24.2	2.7	-3.0	-4.3
Excess	-0.1	0.7	-1.5	2.8	0.2
EMERGING MARKETS (2)	-15.4	37.7	7.5	-13.1	-3.8
BENCHMARK EM	-14.6	37.3	11.2	-14.9	-2.2
Excess	-0.8	0.4	-3.7	1.9	-1.6
TRANSITION AGGREGATE INTERNATIONAL EQUITY (3)					
TOTAL INTERNATIONAL EQUITY (4)	-14.5%	27.6%	2.6	-2.9	-4.0
International Equity Benchmark	-14.2%	27.2%	4.5	-5.7	-3.9
Excess	-0.3%	0.4%	-1.8	2.8	-0.2

(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 75% MSCI World ex USA (net) and 25% MSCI Emerging Markets Free (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>
Active Developed Markets										
ACADIAN	\$377,923,187	2.6%	9.9%	-5.4%	-4.7%	12.0%	6.5%	12.1%	6.4%	07/2005
BENCHMARK DM			10.4	-2.4	-3.1	7.3	2.2	8.8	4.6	07/2005
Excess			-0.6	-3.0	-1.5	4.7	4.3	3.3	1.7	
COLUMBIA	337,105,099	2.4	12.7	-2.9	-3.3	8.1	4.6	10.1	2.8	03/2000
BENCHMARK DM			10.4	-2.4	-3.1	7.3	2.2	8.8	3.2	03/2000
Excess			2.3	-0.5	-0.2	0.8	2.4	1.3	-0.4	
FIDELITY	366,490,345	2.6	11.8	-3.0	-2.5	7.8	3.1	10.2	6.1	07/2005
BENCHMARK DM			10.4	-2.4	-3.1	7.3	2.2	8.8	4.6	07/2005
Excess			1.4	-0.6	0.6	0.5	0.9	1.3	1.4	
JP MORGAN	251,952,594	1.8	13.1	-2.9	-4.1	9.0	2.7	9.2	4.8	07/2005
BENCHMARK DM			10.4	-2.4	-3.1	7.3	2.2	8.8	4.6	07/2005
Excess			2.7	-0.5	-1.0	1.7	0.5	0.4	0.1	
MARATHON	442,663,898	3.1	9.9	-4.0	-3.0	6.2	3.3	10.8	7.9	11/1993
BENCHMARK DM			10.4	-2.4	-3.1	7.3	2.2	8.8	4.9	11/1993
Excess			-0.5	-1.6	0.2	-1.1	1.1	2.0	3.0	
MCKINLEY	250,865,753	1.8	11.8	-5.8	-5.2	6.2	2.1	8.4	4.3	07/2005
BENCHMARK DM			10.4	-2.4	-3.1	7.3	2.2	8.8	4.6	07/2005
Excess			1.4	-3.4	-2.0	-1.1	-0.1	-0.4	-0.3	
ACTIVE DEVELOPED MARKETS AGGREGATE	2,027,000,876	14.2	11.3	-3.9	-3.5	8.0	3.8	10.2		
BENCHMARK DM			10.4	-2.4	-3.1	7.3	2.2	8.8		
Excess			0.9	-1.5	-0.3	0.7	1.6	1.4		



	<u>2018 Calendar Return</u>	<u>2017 Calendar Return</u>	<u>2016 Calendar Return</u>	<u>2015 Calendar Return</u>	<u>2014 Calendar Return</u>
Active Developed Markets					
ACADIAN	-13.5%	37.0%	8.1%	2.4%	-1.7%
BENCHMARK DM	-14.1	24.2	2.7	-3.0	-4.3
Excess	0.6	12.8	5.4	5.4	2.6
COLUMBIA	-14.9	32.7	-5.6	6.4	-5.6
BENCHMARK DM	-14.1	24.2	2.7	-3.0	-4.3
Excess	-0.8	8.5	-8.3	9.4	-1.2
FIDELITY	-14.6	25.9	1.2	0.1	-5.6
BENCHMARK DM	-14.1	24.2	2.7	-3.0	-4.3
Excess	-0.5	1.7	-1.5	3.2	-1.3
JP MORGAN	-17.3	28.3	4.0	-4.7	-5.1
BENCHMARK DM	-14.1	24.2	2.7	-3.0	-4.3
Excess	-3.3	4.1	1.2	-1.6	-0.7
MARATHON	-13.4	23.1	-1.1	6.7	-4.0
BENCHMARK DM	-14.1	24.2	2.7	-3.0	-4.3
Excess	0.7	-1.1	-3.8	9.7	0.3
MCKINLEY	-15.9	28.5	-7.5	3.1	-2.7
BENCHMARK DM	-14.1	24.2	2.7	-3.0	-4.3
Excess	-1.9	4.3	-10.2	6.2	1.6
ACTIVE DEVELOPED MARKETS AGGREGATE	-14.5%	28.4%	-0.2	3.2	-4.1
BENCHMARK DM	-14.1%	24.2%	2.7	-3.0	-4.3
Excess	-0.4%	4.2%	-3.0	6.2	0.2



	<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>
Semi-Passive Developed Markets										
AQR	\$338,512,227	2.4%	12.2%	-3.5%	-6.9%	5.8%	1.9%	9.6%	5.0%	07/2005
BENCHMARK DM			10.4	-2.4	-3.1	7.3	2.2	8.8	4.6	07/2005
Excess			1.7	-1.1	-3.7	-1.4	-0.3	0.8	0.3	
SEMI-PASSIVE DEVELOPED MARKETS AGGREGATE	338,512,227	2.4	12.2	-3.5	-6.9	5.1	1.2	8.8		
BENCHMARK DM			10.4	-2.4	-3.1	7.3	2.2	8.8		
Excess			1.7	-1.1	-3.7	-2.2	-1.0	-0.1		



	<u>2018 Calendar Return</u>	<u>2017 Calendar Return</u>	<u>2016 Calendar Return</u>	<u>2015 Calendar Return</u>	<u>2014 Calendar Return</u>
Semi-Passive Developed Markets					
AQR	-18.2%	25.1%	0.8%	0.9%	-4.4%
BENCHMARK DM	-14.1	24.2	2.7	-3.0	-4.3
Excess	-4.1	0.9	-2.0	3.9	-0.1
SEMI-PASSIVE DEVELOPED MARKETS AGGREGATE	-18.7%	23.3%	-0.4	-0.3	-4.4
BENCHMARK DM	-14.1%	24.2%	2.7	-3.0	-4.3
Excess	-4.6%	-0.9%	-3.1	2.7	-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>
Total Developed Markets										
ACTIVE DEVELOPED MARKETS AGGREGATE	\$2,027,000,876	14.2%	11.3%	-3.9%	-3.5%	8.0%	3.8%	10.2%		
BENCHMARK DM			10.4	-2.4	-3.1	7.3	2.2	8.8		
Excess			0.9	-1.5	-0.3	0.7	1.6	1.4		
SEMI-PASSIVE DEVELOPED MARKETS AGGREGATE	338,512,227	2.4	12.2	-3.5	-6.9	5.1	1.2	8.8		
BENCHMARK DM			10.4	-2.4	-3.1	7.3	2.2	8.8		
Excess			1.7	-1.1	-3.7	-2.2	-1.0	-0.1		
SSgA DEVELOPED MARKETS PASSIVE	8,266,775,868	57.9	10.7	-2.3	-2.7	7.7	2.6	9.3	6.1	10/1992
BENCHMARK DM			10.4	-2.4	-3.1	7.3	2.2	8.8	5.7	10/1992
Excess			0.2	0.2	0.4	0.4	0.4	0.4	0.3	
DEVELOPED MARKETS TOTAL	10,632,288,971	74.5	10.8	-2.7	-3.1	7.3	2.7	9.5		
BENCHMARK DM			10.4	-2.4	-3.1	7.3	2.2	8.8		
Excess			0.4	-0.3	0.1	0.0	0.5	0.7		



	<u>2018 Calendar Return</u>	<u>2017 Calendar Return</u>	<u>2016 Calendar Return</u>	<u>2015 Calendar Return</u>	<u>2014 Calendar Return</u>
Total Developed Markets					
ACTIVE DEVELOPED MARKETS AGGREGATE	-14.5%	28.4%	-0.2%	3.2%	-4.1%
BENCHMARK DM	-14.1	24.2	2.7	-3.0	-4.3
Excess	-0.4	4.2	-3.0	6.2	0.2
SEMI-PASSIVE DEVELOPED MARKETS AGGREGATE	-18.7	23.3	-0.4	-0.3	-4.4
BENCHMARK DM	-14.1	24.2	2.7	-3.0	-4.3
Excess	-4.6	-0.9	-3.1	2.7	-0.1
SSgA DEVELOPED MARKETS PASSIVE	-13.9%	24.7%	3.2	-2.6	-3.9
BENCHMARK DM	-14.1%	24.2%	2.7	-3.0	-4.3
Excess	0.2%	0.5%	0.4	0.5	0.4
DEVELOPED MARKETS TOTAL	-14.2%	24.9%	1.3	-0.3	-4.1
BENCHMARK DM	-14.1%	24.2%	2.7	-3.0	-4.3
Excess	-0.1%	0.7%	-1.5	2.8	0.2



	<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>
Active Emerging Markets										
EARNEST PARTNERS	\$307,656,930	2.2%	12.9%	4.6%	-6.5%				8.1%	04/2017
MSCI EMERGING MARKETS			9.9	0.6	-7.4				7.6	04/2017
Excess			2.9	4.0	0.9				0.5	
MARTIN CURRIE	333,558,558	2.3	12.7	-1.1	-7.3				11.0	04/2017
BENCHMARK EM			9.9	0.6	-7.4				7.6	04/2017
Excess			2.8	-1.7	0.2				3.5	
MACQUARIE	319,914,803	2.2	10.4	1.7	-4.9				8.5	04/2017
BENCHMARK EM			9.9	0.6	-7.4				7.6	04/2017
Excess			0.5	1.1	2.5				1.0	
MORGAN STANLEY	589,585,749	4.1	7.5	-1.3	-11.5	8.0%	3.1%	9.3%	9.2	01/2001
BENCHMARK EM			9.9	0.6	-7.4	10.7	3.7	8.9	9.1	01/2001
Excess			-2.4	-1.9	-4.1	-2.7	-0.6	0.3	0.1	
NEUBERGER BERMAN	315,160,596	2.2	11.2	-1.0	-8.8				7.8	04/2017
BENCHMARK EM			9.9	0.6	-7.4				7.6	04/2017
Excess			1.3	-1.6	-1.4				0.3	
PZENA	296,966,883	2.1	7.1	2.5	-4.9				5.2	04/2017
BENCHMARK EM			9.9	0.6	-7.4				7.6	04/2017
Excess			-2.8	1.9	2.5				-2.4	
ROCK CREEK	289,814,764	2.0	9.7	-2.5	-10.5				3.8	04/2017
BENCHMARK EM			9.9	0.6	-7.4				7.6	04/2017
Excess			-0.2	-3.1	-3.1				-3.7	



	<u>2018 Calendar Return</u>	<u>2017 Calendar Return</u>	<u>2016 Calendar Return</u>	<u>2015 Calendar Return</u>	<u>2014 Calendar Return</u>
Active Emerging Markets					
EARNEST PARTNERS	-15.4%				
MSCI EMERGING MARKETS	-14.6				
Excess	-0.8				
MARTIN CURRIE					
BENCHMARK EM	-16.6				
BENCHMARK EM	-14.6				
Excess	-2.0				
MACQUARIE					
BENCHMARK EM	-13.3				
BENCHMARK EM	-14.6				
Excess	1.3				
MORGAN STANLEY					
BENCHMARK EM	-16.7	37.9%	6.1%	-9.4%	-2.5%
BENCHMARK EM	-14.6	37.3	11.2	-14.9	-2.2
Excess	-2.2	0.6	-5.1	5.5	-0.3
NEUBERGER BERMAN					
BENCHMARK EM	-17.1				
BENCHMARK EM	-14.6				
Excess	-2.6				
PZENA					
BENCHMARK EM	-10.8				
BENCHMARK EM	-14.6				
Excess	3.8				
ROCK CREEK					
BENCHMARK EM	-17.6				
BENCHMARK EM	-14.6				
Excess	-3.1				



	<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>
Total Emerging Markets										
ACTIVE EMERGING MARKETS AGGREGATE	\$2,452,658,284	17.2%	9.9%	0.2%	-8.2%	8.9%	2.6%	8.1%		
BENCHMARK EM			9.9	0.6	-7.4	10.7	3.7	8.9		
Excess			-0.0	-0.4	-0.8	-1.8	-1.1	-0.8		
SSGA EMERGING MARKETS PASSIVE	1,187,692,525	8.3	10.1	0.8	-7.2	10.7	3.9		4.6	01/2012
BENCHMARK EM			9.9	0.6	-7.4	10.7	3.7		4.5	01/2012
Excess			0.2	0.2	0.2	-0.0	0.2		0.1	
EMERGING MARKETS TOTAL	3,640,350,809	25.5	9.9	0.3	-8.0	9.8	3.1	8.4		
BENCHMARK EM			9.9	0.6	-7.4	10.7	3.7	8.9		
Excess			0.0	-0.3	-0.6	-0.9	-0.5	-0.6		



	<u>2018 Calendar Return</u>	<u>2017 Calendar Return</u>	<u>2016 Calendar Return</u>	<u>2015 Calendar Return</u>	<u>2014 Calendar Return</u>
Total Emerging Markets					
ACTIVE EMERGING MARKETS AGGREGATE	-15.6%	37.2%	5.3%	-12.7%	-4.1%
BENCHMARK EM	-14.6	37.3	11.2	-14.9	-2.2
Excess	-1.0	-0.1	-5.9	2.2	-2.0
SSGA EMERGING MARKETS PASSIVE					
SSGA EMERGING MARKETS PASSIVE	-14.7%	37.4%	11.1	-14.6	-2.1
BENCHMARK EM	-14.6%	37.3%	11.2	-14.9	-2.2
Excess	-0.1%	0.1%	-0.1	0.3	0.0
EMERGING MARKETS TOTAL					
EMERGING MARKETS TOTAL	-15.4%	37.7%	7.5	-13.1	-3.8
BENCHMARK EM	-14.6%	37.3%	11.2	-14.9	-2.2
Excess	-0.8%	0.4%	-3.7	1.9	-1.6

This page intentionally left blank.



Fixed Income

March 31, 2019



	<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>
Total Fixed Income										
ACTIVE FIXED INCOME AGGREGATE	\$4,134,827,764	50.1%	3.6%	5.0%	4.9%	3.3%	3.5%	5.8%		
BBG BARC Agg (Dly)			2.9	4.6	4.5	2.0	2.7	3.8		
Excess			0.7	0.3	0.4	1.3	0.7	2.0		
SEMI PASSIVE FIXED INCOME AGGREGATE	4,115,184,387	49.9	3.2	4.7	4.7	2.2	2.9	4.7		
BBG BARC Agg (Dly)			2.9	4.6	4.5	2.0	2.7	3.8		
Excess			0.3	0.1	0.2	0.2	0.2	0.9		
TRANSITION AGGREGATE FIXED INCOME (1)	18,036	0.0								
TOTAL FIXED INCOME (2)	8,250,030,187	100.0	3.4	4.9	4.8	2.7	3.2	5.2	7.5	07/1984
Fixed Income Benchmark			2.9	4.6	4.5	2.0	2.7	3.8	7.1	07/1984
Excess			0.5	0.2	0.3	0.7	0.4	1.4	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>2018 Calendar Return</u>	<u>2017 Calendar Return</u>	<u>2016 Calendar Return</u>	<u>2015 Calendar Return</u>	<u>2014 Calendar Return</u>
Total Fixed Income					
ACTIVE FIXED INCOME AGGREGATE	0.0%	4.7%	4.4%	0.6%	6.2%
BBG BARC Agg (Dly)	0.0	3.5	2.6	0.5	6.0
Excess	-0.0	1.2	1.7	0.0	0.2
SEMI PASSIVE FIXED INCOME AGGREGATE	-0.1	3.7	2.8	0.8	6.1
BBG BARC Agg (Dly)	0.0	3.5	2.6	0.5	6.0
Excess	-0.1	0.2	0.2	0.2	0.1
TRANSITION AGGREGATE FIXED INCOME (1)					
TOTAL FIXED INCOME (2)	-0.0%	4.2%	3.6	0.7	6.1
Fixed Income Benchmark	0.0%	3.5%	2.6	0.5	6.0
Excess	-0.1%	0.7%	0.9	0.1	0.2

(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>
Active Fixed Income Managers										
COLUMBIA	\$1,025,008,670	12.4%	3.8%	5.1%	5.3%	3.5%	3.6%	5.3%	5.4%	07/1993
BBG BARC Agg (Dly)			2.9	4.6	4.5	2.0	2.7	3.8	5.2	07/1993
Excess			0.9	0.5	0.8	1.5	0.8	1.5	0.2	
DODGE & COX	1,120,130,662	13.6	3.5	4.6	4.4	3.3	3.3	5.7	5.9	02/2000
BBG BARC Agg (Dly)			2.9	4.6	4.5	2.0	2.7	3.8	5.0	02/2000
Excess			0.6	-0.0	-0.1	1.3	0.5	1.9	1.0	
PIMCO	926,027,515	11.2	3.3	5.0	5.0	2.7	3.1	5.6	5.4	10/2008
BBG BARC Agg (Dly)			2.9	4.6	4.5	2.0	2.7	3.8	4.0	10/2008
Excess			0.3	0.3	0.6	0.7	0.4	1.8	1.4	
WESTERN	1,063,660,917	12.9	3.9	5.2	4.9	3.7	3.8	6.1	8.3	07/1984
BBG BARC Agg (Dly)			2.9	4.6	4.5	2.0	2.7	3.8	7.2	07/1984
Excess			0.9	0.6	0.4	1.6	1.1	2.3	1.1	
ACTIVE FIXED INCOME AGGREGATE	4,134,827,764	50.1	3.6	5.0	4.9	3.3	3.5	5.8		
BBG BARC Agg (Dly)			2.9	4.6	4.5	2.0	2.7	3.8		
Excess			0.7	0.3	0.4	1.3	0.7	2.0		



	<u>2018 Calendar Return</u>	<u>2017 Calendar Return</u>	<u>2016 Calendar Return</u>	<u>2015 Calendar Return</u>	<u>2014 Calendar Return</u>
Active Fixed Income Managers					
COLUMBIA	0.2%	4.8%	5.2%	0.2%	5.8%
BBG BARC Agg (Dly)	0.0	3.5	2.6	0.5	6.0
Excess	0.2	1.2	2.6	-0.4	-0.2
DODGE & COX	-0.0	4.2	4.8	0.3	6.0
BBG BARC Agg (Dly)	0.0	3.5	2.6	0.5	6.0
Excess	-0.1	0.7	2.2	-0.3	0.0
PIMCO	0.4	4.4	2.8	1.0	5.5
BBG BARC Agg (Dly)	0.0	3.5	2.6	0.5	6.0
Excess	0.4	0.8	0.2	0.4	-0.4
WESTERN	-0.2	5.6	4.9	0.7	7.0
BBG BARC Agg (Dly)	0.0	3.5	2.6	0.5	6.0
Excess	-0.3	2.1	2.2	0.1	1.0
ACTIVE FIXED INCOME AGGREGATE	0.0%	4.7%	4.4	0.6	6.2
BBG BARC Agg (Dly)	0.0%	3.5%	2.6	0.5	6.0
Excess	-0.0%	1.2%	1.7	0.0	0.2



	<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>
Semi Passive Fixed Income Managers										
BLACKROCK	\$1,324,247,708	16.1%	3.3%	4.8%	4.7%	2.2%	2.9%	4.3%	5.2%	04/1996
BBG BARC Agg (Dly)			2.9	4.6	4.5	2.0	2.7	3.8	5.1	04/1996
Excess			0.4	0.2	0.2	0.2	0.2	0.5	0.1	
GOLDMAN SACHS	1,426,181,715	17.3	3.3	4.6	4.7	2.4	3.0	4.7	5.5	07/1993
BBG BARC Agg (Dly)			2.9	4.6	4.5	2.0	2.7	3.8	5.2	07/1993
Excess			0.3	-0.0	0.2	0.3	0.2	1.0	0.3	
NEUBERGER	1,364,754,964	16.5	3.1	4.7	4.6	2.1	2.9	5.0	6.3	07/1988
BBG BARC Agg (Dly)			2.9	4.6	4.5	2.0	2.7	3.8	6.1	07/1988
Excess			0.2	0.1	0.1	0.0	0.1	1.2	0.2	
SEMI PASSIVE FIXED INCOME	4,115,184,387	49.9	3.2	4.7	4.7	2.2	2.9	4.7		
BBG BARC Agg (Dly)			2.9	4.6	4.5	2.0	2.7	3.8		
Excess			0.3	0.1	0.2	0.2	0.2	0.9		



	<u>2018 Calendar Return</u>	<u>2017 Calendar Return</u>	<u>2016 Calendar Return</u>	<u>2015 Calendar Return</u>	<u>2014 Calendar Return</u>
Semi Passive Fixed Income Managers					
BLACKROCK	-0.1%	3.7%	2.8%	0.9%	6.0%
BBG BARC Agg (Dly)	0.0	3.5	2.6	0.5	6.0
Excess	-0.2	0.1	0.1	0.3	0.0
GOLDMAN SACHS	-0.0	3.9	3.0	0.8	6.1
BBG BARC Agg (Dly)	0.0	3.5	2.6	0.5	6.0
Excess	-0.0	0.4	0.3	0.2	0.1
NEUBERGER	-0.1	3.6	2.7	0.7	6.1
BBG BARC Agg (Dly)	0.0	3.5	2.6	0.5	6.0
Excess	-0.1	0.0	0.1	0.2	0.2
SEMI PASSIVE FIXED INCOME	-0.1%	3.7%	2.8	0.8	6.1
BBG BARC Agg (Dly)	0.0%	3.5%	2.6	0.5	6.0
Excess	-0.1%	0.2%	0.2	0.2	0.1

This page intentionally left blank.



Treasuries

March 31, 2019



	<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>
Treasuries Managers										
BLACKROCK	\$2,069,748,270	33.4%	3.3%	5.5%	5.6%				4.9%	02/2018
BBG BARC 5Y + Us Tsy Idx			3.3	5.6	5.7				5.0	02/2018
Excess			0.0	-0.1	-0.1				-0.1	
GOLDMAN SACHS	2,054,980,361	33.1	3.4	5.4	5.6				4.9	02/2018
BBG BARC 5Y + Us Tsy Idx			3.3	5.6	5.7				5.0	02/2018
Excess			0.0	-0.2	-0.1				-0.1	
NEUBERGER	2,078,281,552	33.5	3.3	5.5	5.6				4.9	02/2018
BBG BARC 5Y + Us Tsy Idx			3.3	5.6	5.7				5.0	02/2018
Excess			0.0	-0.1	-0.1				-0.2	
TREASURIES TRANSITION ACCOUNT	306	0.0								03/2018
TOTAL TREASURIES	6,203,010,488	100.0	3.4	5.5	5.8				4.9%	02/2018
BBG BARC 5Y + Us Tsy Idx			3.3	5.6	5.7				5.0%	02/2018
Excess			0.0	-0.1	0.1				-0.1%	



2018 Calendar Return

2017 Calendar Return

2016 Calendar Return

2015 Calendar Return

2014 Calendar Return

Treasuries Managers

BLACKROCK

BBG BARC 5Y + Us Tsy Idx

Excess

GOLDMAN SACHS

BBG BARC 5Y + Us Tsy Idx

Excess

NEUBERGER

BBG BARC 5Y + Us Tsy Idx

Excess

TOTAL TREASURIES

BBG BARC 5Y + Us Tsy Idx

Excess

This page intentionally left blank.



Private Markets

March 31, 2019



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	-0.6%	7.4%	9.9%	13.7%	10.8%	11.3%	12.7%	13.4%	12.1%
Private Equity	0.0%	9.0%	11.7%	16.2%	14.3%	14.8%	13.5%	15.0%	
Private Credit	1.7	8.6	13.3	15.0	13.4	12.5	12.6		
Resources	-3.8	3.5	4.3	7.9	-0.5	5.1	16.3	14.8	
Real Estate	0.7	5.8	8.6	9.4	12.1	6.5	8.8	9.4	

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, 2019

Investment	Total Commitment	Total Contribution	MarketValue	Distributions	Unfunded Commitment	IRR %	NET MOIC*	Period Years
I. PRIVATE EQUITY								
Adams Street Partners								
<i>Adams Street Global Secondary Fund 5</i>	100,000,000	76,529,750	55,959,571	35,323,971	23,470,250	5.95	1.19	6.53
<i>Adams Street Global Secondary Fund 6</i>	100,000,000	6,200,000	6,063,155	1,214,007	93,800,000	21.73	1.17	1.75
Advent International								
<i>Advent International GPE VI</i>	50,000,000	52,993,313	9,704,411	99,117,913	0	17.01	2.05	10.75
<i>Advent International GPE VII</i>	90,000,000	84,690,641	79,402,084	66,872,078	5,400,000	15.85	1.73	6.29
<i>Advent International GPE VIII</i>	100,000,000	80,000,000	87,270,240	0	20,000,000	7.43	1.09	2.90
Affinity Ventures								
<i>Affinity Ventures IV</i>	4,000,000	4,000,000	581,616	1,541,970	0	-11.88	0.53	14.51
<i>Affinity Ventures V</i>	5,000,000	5,000,000	2,269,355	1,706,245	0	-4.16	0.80	10.50
APAX Partners								
<i>Apax VIII - USD</i>	200,000,000	222,011,295	196,294,438	128,629,531	14,644,515	12.92	1.46	5.82
<i>Apax IX - USD</i>	150,000,000	67,917,205	79,623,530	1,422,626	83,505,421	13.18	1.19	2.61
Asia Alternatives								
<i>Asia Alternatives Capital Partners V</i>	99,000,000	11,743,258	8,793,633	236,072	87,489,919	-32.91	0.77	1.50
Banc Fund								
<i>Banc Fund VIII</i>	98,250,000	98,250,000	75,691,000	131,849,973	0	13.28	2.11	10.69
<i>Banc Fund IX</i>	107,205,932	107,205,932	110,058,253	15,797,530	0	6.33	1.17	4.56
<i>Banc Fund X</i>	70,254,545	16,888,364	15,805,448	0	53,366,182	-15.21	0.94	0.66
BlackRock								
<i>BlackRock Long Term Capital</i>	250,000,000	0	0	0	250,000,000	0.00	0.00	0.01
Blackstone Capital Partners								
<i>Blackstone Capital Partners IV</i>	70,000,000	84,429,831	2,206,771	198,448,669	1,862,355	37.02	2.38	16.48
<i>Blackstone Capital Partners V</i>	140,000,000	152,162,719	6,521,345	237,135,663	7,027,560	7.96	1.60	12.92
<i>Blackstone Capital Partners VI</i>	100,000,000	102,009,930	83,531,632	77,611,188	14,625,966	12.94	1.58	10.44
<i>Blackstone Capital Partners VII</i>	130,000,000	75,004,297	83,692,242	3,128,886	62,623,368	15.87	1.16	3.50
<i>Blackstone Capital Partners VIII</i>	150,000,000	0	0	0	150,000,000	0.00	0.00	0.01
Blackstone Strategic Partners (CSFB/ DLJ)								
<i>Strategic Partners III VC</i>	25,000,000	24,998,952	4,056,121	30,730,341	1,067,943	6.34	1.39	13.59
<i>Strategic Partners III-B</i>	100,000,000	79,488,031	6,973,595	113,709,086	14,934,308	6.58	1.52	13.59
<i>Strategic Partners IV VC</i>	40,500,000	41,033,721	11,404,029	52,855,773	2,464,627	9.72	1.57	10.77
<i>Strategic Partners IV-B</i>	100,000,000	98,968,390	13,137,748	142,617,771	17,847,245	12.49	1.57	10.54
<i>Strategic Partners V</i>	100,000,000	83,702,476	22,321,683	113,608,228	38,373,062	19.43	1.62	7.37
<i>Strategic Partners VI</i>	150,000,000	93,008,822	59,268,579	83,025,710	62,908,442	18.91	1.53	4.71
<i>Strategic Partners VII</i>	150,000,000	94,176,314	115,791,077	14,618,810	68,912,171	35.24	1.38	2.02
<i>Strategic Partners VIII</i>	150,000,000	0	0	0	150,000,000	0.00	0.00	0.25

Investment	Total Commitment	Total Contribution	Market Value	Distributions	Unfunded Commitment	IRR %	NET MOIC*	Period Years
Bridgepoint								
<i>Bridgepoint Europe VI</i>	168,439,238	9,854,501	-1,492,910	0	158,584,737	0.00	-0.15	0.78
Brookfield Asset Management								
<i>Brookfield Capital Partners Fund IV</i>	100,000,000	90,158,299	102,305,186	94,413,183	26,011,713	62.70	2.18	3.30
<i>Brookfield Capital Partners V</i>	250,000,000	0	0	0	250,000,000	0.00	0.00	0.43
Cardinal Partners								
<i>DSV Partners IV</i>	10,000,000	10,000,000	30,883	39,196,082	0	10.61	3.92	34.01
Carlyle Group								
<i>Carlyle Partners VII</i>	150,000,000	20,519,056	16,818,301	0	129,480,944	-27.34	0.82	1.04
Chicago Growth Partners (William Blair)								
<i>William Blair Capital Partners VII</i>	50,000,000	48,150,000	963,361	69,201,191	1,650,000	8.59	1.46	17.82
<i>Chicago Growth Partners I</i>	50,000,000	52,441,998	1,910,119	54,532,745	300,000	1.72	1.08	13.44
<i>Chicago Growth Partners II</i>	60,000,000	58,347,626	4,396,924	120,959,703	1,652,374	19.78	2.15	10.81
Court Square Capital Partners								
<i>Court Square Capital Partners</i>	100,000,000	80,979,104	0	182,589,856	0	28.92	2.25	17.06
<i>Court Square Capital Partners II</i>	175,000,000	169,619,122	18,430,085	292,733,020	16,743,084	12.95	1.83	12.32
<i>Court Square Capital Partners III</i>	175,000,000	169,868,435	161,923,135	74,721,696	21,873,196	16.45	1.39	6.58
<i>Court Square Capital Partners IV</i>	150,000,000	0	0	0	150,000,000	0.00	0.00	0.64
Crescendo								
<i>Crescendo IV</i>	101,500,000	103,101,226	2,193,945	53,333,662	0	-5.11	0.54	18.82
CVC Capital Partners								
<i>CVC European Equity Partners V</i>	133,919,960	153,756,444	39,421,920	245,961,796	1,603,698	16.38	1.86	10.77
<i>CVC Capital Partners VI</i>	257,629,368	255,517,001	255,992,746	71,239,674	5,980,427	12.41	1.28	5.48
Elevation Partners								
<i>Elevation Partners</i>	75,000,000	73,237,580	150,601	113,492,106	799,634	11.81	1.55	13.63
Fox Paine & Company								
<i>Fox Paine Capital Fund II</i>	50,000,000	46,541,161	0	90,994,335	0	18.88	1.96	18.51
GHJM								
<i>TrailHead Fund</i>	20,000,000	16,070,803	27,711,903	6,406,955	3,935,813	16.38	2.12	6.85
Glouston Capital Partners**								
<i>Glouston Private Equity Opportunities Fund IV</i>	5,337,098	4,376,198	1,307,360	3,457,751	1,090,000	3.90	1.09	4.00
GS Capital Partners								
<i>GS Capital Partners V</i>	100,000,000	74,319,006	994,754	191,435,136	1,041,099	18.26	2.59	13.75
<i>GS Capital Partners VI</i>	100,000,000	109,807,690	13,006,862	130,385,768	2,801,717	7.27	1.31	11.92
<i>GS Vintage VII</i>	100,000,000	68,395,888	68,393,494	11,282,171	37,822,233	20.82	1.16	2.50
<i>West Street Capital Partners VII</i>	150,000,000	50,208,011	42,655,797	10,466,036	110,258,025	4.74	1.06	2.02
<i>GS China-US Cooperation Fund</i>	99,800,000	10,154,445	9,980,000	0	89,820,000	-1.74	0.98	0.62
GTCR								
<i>GTCR IX</i>	75,000,000	71,414,933	164,722	128,764,150	3,585,067	13.77	1.81	12.50
<i>GTCR X</i>	100,000,000	103,907,821	18,979,779	188,348,914	6,751,396	21.45	2.00	8.06
<i>GTCR XI</i>	110,000,000	96,620,726	86,570,466	63,593,531	14,541,556	21.47	1.55	5.12

Investment	Total Commitment	Total Contribution	Market Value	Distributions	Unfunded Commitment	IRR %	NET MOIC*	Period Years
HarbourVest**								
<i>Dover Street VII Cayman Fund</i>	2,198,112	2,072,048	382,359	1,552,382	132,416	-3.39	0.93	4.00
<i>HarbourVest Intl PE Partners V-Cayman US</i>	3,520,261	3,344,847	885,288	3,517,949	179,656	14.19	1.32	4.00
<i>Harbourvest Intl PE Partners VI-Cayman</i>	4,233,804	3,999,555	3,637,448	2,223,277	235,798	14.44	1.47	4.00
<i>HarbourVest Partners VIII Cayman Buyout</i>	4,506,711	4,298,488	1,606,924	4,177,128	234,000	14.15	1.35	4.00
<i>HarbourVest Partners VIII-Cayman Venture</i>	7,190,898	7,079,986	3,574,001	5,232,582	140,000	8.02	1.24	4.00
Hellman & Friedman								
<i>Hellman & Friedman Capital Partners VI</i>	175,000,000	171,037,755	11,332,376	307,986,481	5,084,864	13.01	1.87	11.76
<i>Hellman & Friedman Capital Partners VII</i>	50,000,000	49,709,416	65,454,995	58,492,315	2,392,939	24.11	2.49	9.70
<i>Hellman & Friedman Investors IX</i>	175,000,000	0	0	0	175,000,000	0.00	0.00	0.50
IK Investment Partners								
<i>IK Fund VII</i>	180,223,914	177,717,768	166,822,507	104,167,821	8,014,992	12.65	1.52	5.30
<i>IK Fund VIII</i>	171,427,753	117,004,605	123,154,123	2,213,957	56,569,051	5.66	1.07	2.44
Kohlberg Kravis Roberts								
<i>KKR Millennium Fund</i>	200,000,000	205,167,570	176,152	424,946,028	0	16.37	2.07	16.07
<i>KKR 2006 Fund</i>	200,000,000	218,952,911	46,106,584	315,231,419	3,360,223	8.49	1.65	12.26
<i>KKR Americas Fund XII</i>	150,000,000	59,434,708	58,166,664	988,851	91,168,064	-0.73	1.00	2.82
<i>KKR Asian Fund III</i>	100,000,000	26,162,197	27,830,743	0	73,837,803	10.98	1.06	1.75
Leonard Green & Partners								
<i>Green Equity Investors VI</i>	200,000,000	215,919,566	211,916,844	134,256,374	20,574,386	15.32	1.60	6.79
Lexington Capital Partners								
<i>Lexington Capital Partners VI</i>	100,000,000	98,374,022	10,046,067	135,961,751	1,634,703	8.00	1.48	13.02
<i>Lexington Capital Partners VII</i>	200,000,000	172,466,709	58,581,672	214,537,493	38,059,995	14.90	1.58	9.97
<i>Lexington Capital Partners VIII</i>	150,000,000	127,263,490	117,884,014	47,346,361	35,502,201	21.15	1.30	4.83
<i>Lexington Co-Investment Partners IV</i>	200,000,000	120,067,524	123,257,043	6,715,339	86,647,815	11.88	1.08	2.41
<i>Lexington Middle Market Investors IV</i>	100,000,000	6,124,133	5,510,288	1,458,011	93,875,867	0.00	1.14	2.02
<i>Lexington Capital Partners IX</i>	150,000,000	0	0	0	150,000,000	0.00	0.00	0.48
Madison Dearborn Capital Partners								
<i>Madison Dearborn Capital Partners VII</i>	100,000,000	60,172,495	61,682,330	5,817,652	45,617,359	7.83	1.12	3.03
Neuberger Berman								
<i>Dyal Capital Partners III</i>	175,000,000	148,823,236	95,710,277	90,871,490	114,705,661	27.28	1.25	3.70
<i>Dyal Capital Partners IV</i>	250,000,000	12,460,108	11,771,838	3,803,147	241,250,918	25.63	1.25	0.73
Nordic Capital								
<i>Nordic Capital Fund VIII</i>	177,013,081	190,003,473	144,959,824	113,548,413	101,596,540	12.35	1.36	5.30
<i>Nordic Capital Fund IX Beta</i>	168,516,280	11,735,575	18,776,201	0	156,780,706	73.03	1.60	1.70
North Sky Capital**								
<i>North Sky Capital LBO Fund III</i>	1,070,259	720,259	379,543	677,229	350,000	16.14	1.47	4.00
<i>North Sky Capital Venture Fund III</i>	1,384,080	1,277,830	388,559	1,190,311	106,250	10.15	1.24	4.00
Oak Hill Capital Management, Inc.								
<i>Oak Hill Capital Partners IV</i>	150,000,000	85,289,571	72,813,918	28,267,962	86,506,865	34.64	1.19	2.05

Investment	Total Commitment	Total Contribution	Market Value	Distributions	Unfunded Commitment	IRR %	NET MOIC*	Period Years
Paine Schwartz								
<i>Paine Schwartz IV</i>	75,000,000	51,684,432	49,297,096	14,823,737	24,388,722	9.71	1.24	4.05
<i>Paine Schwartz V</i>	150,000,000	0	-1,167,585	0	150,000,000	0.00	0.00	0.66
Permira								
<i>Permira V</i>	177,193,451	168,845,099	187,432,306	83,631,687	27,345,097	14.29	1.61	5.00
<i>Permira VI</i>	136,324,369	85,207,031	90,715,185	0	51,117,338	6.42	1.06	2.43
Public Pension Capital Management								
<i>Public Pension Capital</i>	150,000,000	62,217,316	77,172,045	12,963,678	97,311,442	18.02	1.45	4.62
RWI Ventures								
<i>RWI Ventures I</i>	7,603,265	7,603,265	454,001	6,122,274	0	-4.11	0.86	12.51
Silver Lake Partners								
<i>Silver Lake Partners II</i>	100,000,000	90,200,747	891,465	171,246,452	11,771,953	11.04	1.91	14.50
<i>Silver Lake Partners III</i>	100,000,000	91,834,879	31,236,719	174,273,455	10,559,311	18.77	2.24	11.76
<i>Silver Lake Partners IV</i>	100,000,000	107,924,321	119,545,001	58,837,842	7,964,397	23.75	1.65	6.26
<i>Silver Lake Partners V</i>	135,000,000	54,186,798	52,465,175	0	59,298,933	-5.60	0.97	1.75
Split Rock Partners								
<i>Split Rock Partners</i>	50,000,000	47,890,906	6,073,628	56,816,177	2,109,094	3.37	1.31	13.67
<i>Split Rock Partners II</i>	60,000,000	59,165,000	29,593,746	47,174,545	835,000	5.73	1.30	10.68
Summit Partners								
<i>Summit Partners Growth Equity Fund VIII</i>	100,000,000	115,015,327	68,375,530	157,829,723	24,040,551	25.45	1.97	7.66
<i>Summit Partners Growth Equity Fund IX</i>	100,000,000	71,100,000	71,831,005	9,973,626	38,873,626	21.10	1.15	3.34
<i>Summit Partners Growth Equity Fund X</i>	150,000,000	0	0	0	150,000,000	0.00	0.00	0.07
Thoma Bravo								
<i>Thoma Bravo Fund XII</i>	75,000,000	72,161,313	76,736,965	2,298,018	5,207,940	6.49	1.10	2.31
<i>Thoma Bravo Fund XIII</i>	150,000,000	21,589,059	-148,172	0	128,410,941	0.00	-0.01	0.75
Thoma Cressey								
<i>Thoma Cressey Fund VII</i>	50,000,000	50,000,000	469,683	107,057,940	0	23.59	2.15	18.36
<i>Thoma Cressey Fund VIII</i>	70,000,000	69,577,712	459,963	202,471,763	770,000	18.27	2.92	12.67
Thomas H. Lee Partners								
<i>Thomas H. Lee Equity Fund VII</i>	100,000,000	88,480,318	89,589,137	30,607,993	20,286,044	23.05	1.36	3.31
<i>Thomas H. Lee Equity Fund VIII</i>	150,000,000	3,908,094	3,908,094	0	146,091,906	0.00	1.00	0.75
Thomas, McNerney & Partners								
<i>Thomas, McNerney & Partners I</i>	30,000,000	30,000,000	3,431,213	15,087,143	0	-7.61	0.62	16.16
<i>Thomas, McNerney & Partners II</i>	50,000,000	48,125,000	8,849,102	99,448,037	1,875,000	16.33	2.25	12.50
TPG Capital								
<i>TPG Partners VII</i>	100,000,000	86,937,891	92,337,951	12,416,379	19,674,307	13.54	1.20	3.31
Vestar Capital Partners								
<i>Vestar Capital Partners IV</i>	55,000,000	55,652,024	922,094	102,273,825	57,313	14.66	1.85	19.05
<i>Vestar Capital Partners V</i>	75,000,000	76,456,520	9,022,583	90,693,238	0	3.84	1.30	13.04
<i>Vestar Capital Partners VI</i>	100,000,000	106,195,246	73,867,249	118,359,663	1,821,992	28.64	1.81	7.27
<i>Vestar Capital Partners VII</i>	150,000,000	26,562,663	24,737,197	0	123,437,337	-16.56	0.93	1.04

Investment	Total Commitment	Total Contribution	Market Value	Distributions	Unfunded Commitment	IRR %	NET MOIC*	Period Years
Warburg Pincus								
<i>Warburg Pincus Equity Partners</i>	100,000,000	100,000,000	386,620	163,542,253	0	10.03	1.64	20.52
<i>Warburg Pincus Private Equity VIII</i>	100,000,000	100,373,266	3,310,281	224,974,951	0	14.72	2.27	16.72
<i>Warburg Pincus Private Equity IX</i>	100,000,000	100,000,000	5,913,937	168,124,301	0	9.76	1.74	13.44
<i>Warburg Pincus Private Equity X</i>	150,000,000	150,000,000	55,144,458	177,979,250	0	7.94	1.55	11.19
<i>Warburg Pincus Private Equity XI</i>	200,000,000	200,299,952	182,540,613	132,163,726	0	13.50	1.57	6.02
<i>Warburg Pincus Private Equity XII</i>	131,000,000	95,302,500	104,752,333	5,740,813	35,697,500	9.92	1.16	3.11
<i>Warburg Pincus China</i>	45,000,000	33,615,000	36,378,753	3,899,250	13,320,000	17.45	1.20	2.05
<i>Warburg Pincus Financial Sector</i>	90,000,000	23,553,308	16,050,594	4,590,000	70,920,000	-17.45	0.88	1.04
<i>Warburg Pincus Global Growth</i>	250,000,000	2,959,589	3,000,000	0	247,000,000	1.63	1.01	0.36
Wellspring Capital Partners								
<i>Wellspring Capital Partners VI</i>	125,000,000	15,256,864	13,453,259	0	109,743,136	-27.47	0.88	2.30
Welsh, Carson, Anderson & Stowe								
<i>Welsh, Carson, Anderson & Stowe XI</i>	100,000,000	100,000,000	36,763,181	129,502,945	0	12.66	1.66	10.45
<i>Welsh, Carson, Anderson & Stowe XII</i>	150,000,000	105,391,079	140,099,634	20,884,569	44,608,921	22.67	1.53	4.03
<i>Welsh, Carson, Anderson & Stowe XIII</i>	250,000,000	1,833,825	1,833,825	0	248,166,175	0.00	1.00	0.76
Windjammer Capital Investors								
<i>Windjammer Mezzanine & Equity Fund II</i>	66,708,861	55,215,684	64,128	84,876,800	10,139,363	8.94	1.54	18.76
<i>Windjammer Senior Equity Fund III</i>	75,000,000	62,684,411	270,605	154,618,016	13,380,380	19.54	2.47	12.99
<i>Windjammer Senior Equity Fund IV</i>	100,000,000	89,524,405	105,689,297	19,278,060	18,397,478	10.37	1.40	6.85
<i>Windjammer Senior Equity Fund V</i>	100,000,000	1,606,426	-140,032	0	98,393,574	0.00	-0.09	1.12
<i>Private Equity Total</i>	14,170,951,240	8,992,597,431	5,325,649,430	8,668,475,356	5,863,223,888	12.51	1.56	
II. PRIVATE CREDIT								
Audax Group								
<i>Audax Mezzanine Fund III</i>	100,000,000	94,508,254	20,449,134	99,967,596	7,129,087	8.94	1.27	8.74
<i>Audax Mezzanine Fund IV</i>	100,000,000	41,758,218	33,292,861	12,049,323	58,888,732	9.74	1.09	3.73
BlackRock								
<i>BlackRock Middle Market Senior Fund</i>	250,000,000	28,682,443	28,682,443	0	221,317,557	0.00	1.00	0.71
Crescent Capital Group								
<i>TCW/Crescent Mezzanine Partners III</i>	75,000,000	79,161,593	227,398	159,230,122	29,733,852	35.87	2.01	17.76
Energy Capital Partners								
<i>Energy Capital Credit Solutions II</i>	100,000,000	0	0	0	100,000,000	0.00	0.00	0.25
GS Mezzanine Partners								
<i>GS Mezzanine Partners 2006</i>	100,000,000	113,445,143	912,430	134,654,263	9,858,563	5.00	1.19	12.74
<i>GS Mezzanine Partners V</i>	150,000,000	147,691,560	1,544,626	178,674,923	37,594,230	8.95	1.22	11.19
Gold Hill Venture Lending								
<i>Gold Hill Venture Lending</i>	40,000,000	40,000,000	338,870	65,077,862	0	10.69	1.64	14.26
<i>Gold Hill 2008</i>	25,852,584	25,852,584	4,482,755	44,745,145	0	14.48	1.90	10.50

Investment	Total Commitment	Total Contribution	Market Value	Distributions	Unfunded Commitment	IRR %	NET MOIC*	Period Years
Kohlberg Kravis Roberts								
<i>KKR Lending Partners II</i>	75,000,000	85,873,107	26,781,075	74,603,415	8,802,924	9.77	1.18	3.82
<i>KKR Lending Partners III</i>	199,000,000	61,121,183	63,609,390	8,990,663	141,578,676	22.63	1.19	1.73
LBC Credit Partners								
<i>LBC Credit Partners IV</i>	100,000,000	69,918,306	59,663,921	19,473,952	42,079,665	12.23	1.13	2.67
Merit Capital Partners								
<i>Merit Mezzanine Fund IV</i>	75,000,000	70,178,571	6,617,548	130,432,658	4,821,429	11.40	1.95	14.05
<i>Merit Mezzanine Fund V</i>	75,000,000	70,665,306	42,702,483	59,171,899	4,334,694	9.28	1.44	9.04
<i>Merit Mezzanine Fund VI</i>	100,000,000	43,216,782	46,986,461	1,865,672	56,716,418	8.57	1.13	2.77
Portfolio Advisors								
<i>DLJ Investment Partners II</i>	27,375,168	24,490,887	731	34,915,513	0	10.37	1.43	19.01
<i>DLJ Investment Partners III</i>	100,000,000	82,719,050	658,231	96,478,980	509,988	6.85	1.17	12.53
Prudential Capital Partners								
<i>Prudential Capital Partners II</i>	100,000,000	97,354,846	6,142,471	136,363,957	10,730,141	8.90	1.46	13.51
<i>Prudential Capital Partners III</i>	100,000,000	100,079,961	15,303,200	152,022,692	14,973,938	13.56	1.67	9.71
<i>Prudential Capital Partners IV</i>	100,000,000	104,961,436	63,650,807	68,819,926	5,659,203	9.40	1.26	6.95
<i>Prudential Capital Partners V</i>	150,000,000	75,568,478	78,475,791	10,314,967	76,516,927	17.07	1.17	2.37
Summit Partners								
<i>Summit Subordinated Debt Fund III</i>	45,000,000	44,088,494	3,667,253	60,443,093	2,250,000	8.95	1.45	14.88
<i>Summit Subordinated Debt Fund IV</i>	50,000,000	55,837,807	4,505,008	72,207,729	19,926,328	10.42	1.37	10.76
TCW Asset Management								
<i>TCW Direct Lending VI</i>	100,000,000	83,599,652	41,299,009	55,179,329	25,329,409	7.47	1.15	4.28
<i>TCW Direct Lending VII</i>	100,000,000	29,877,985	30,302,961	609,056	69,697,039	3.94	1.03	0.96
<i>Private Credit Total</i>	2,437,227,752	1,670,651,645	580,296,857	1,676,292,734	948,448,800	12.02	1.35	

III. REAL ASSETS

BlackRock

<i>BlackRock Global Renewable Power Fund II</i>	98,500,000	65,505,964	62,000,999	5,541,024	36,249,999	2.63	1.03	3.10
---	------------	------------	------------	-----------	------------	------	------	-------------

EIG Global Energy Partners

<i>EIG Energy Fund XIV</i>	100,000,000	113,177,137	11,216,944	94,745,253	2,761,129	-2.25	0.94	11.70
<i>EIG Energy Fund XV</i>	150,000,000	158,255,504	73,122,815	112,818,096	22,871,323	4.40	1.17	8.57
<i>EIG Energy Fund XVI</i>	200,000,000	175,065,404	140,376,722	70,267,670	61,284,878	7.96	1.20	5.30

EnCap Energy

<i>EnCap Energy Capital Fund VII</i>	100,000,000	105,357,255	7,320,987	134,445,165	0	14.86	1.35	11.50
<i>EnCap Energy Capital Fund VIII</i>	100,000,000	99,003,512	32,625,046	53,232,225	4,802,299	-4.25	0.87	8.25
<i>Encap Energy Capital Fund IX</i>	100,000,000	110,103,265	70,151,566	76,616,989	6,308,991	12.80	1.33	6.06
<i>EnCap Energy Capital Fund X</i>	100,000,000	84,943,785	79,155,149	17,605,463	22,842,958	8.13	1.14	3.82

Investment	Total Commitment	Total Contribution	Market Value	Distributions	Unfunded Commitment	IRR %	NET MOIC*	Period Years
EnerVest Energy								
<i>EnerVest Energy Institutional Fund XIV</i>	100,000,000	94,238,649	101,444,708	39,158,126	13,854,417	17.58	1.49	3.56
Energy Capital Partners								
<i>Energy Capital Partners II</i>	100,000,000	85,329,367	15,413,266	110,405,699	29,749,110	10.74	1.47	8.45
<i>Energy Capital Partners III</i>	200,000,000	193,289,603	161,444,149	67,597,129	37,144,759	8.34	1.18	5.03
<i>Energy Capital Partners IV</i>	109,949,911	39,699,839	40,546,785	2,378,600	72,879,717	10.21	1.08	1.00
Energy & Minerals Group								
<i>NGP Midstream & Resources</i>	100,000,000	103,487,404	57,520,903	136,472,561	17,857	14.20	1.87	11.76
<i>The Energy & Minerals Group Fund II</i>	100,000,000	104,416,448	98,988,054	96,275,882	1,493,384	15.42	1.87	7.27
<i>The Energy & Minerals Group Fund III</i>	200,000,000	191,827,293	165,742,209	14,950,783	10,201,003	-1.55	0.94	4.82
<i>The Energy & Minerals Group Fund IV</i>	150,000,000	128,156,235	167,116,615	28,347,951	42,529,506	21.69	1.53	3.17
First Reserve								
<i>First Reserve Fund X</i>	100,000,000	100,000,000	355,449	182,429,002	0	31.05	1.83	14.17
<i>First Reserve Fund XI</i>	150,000,000	150,292,121	10,304,450	97,058,084	0	-6.79	0.71	12.03
<i>First Reserve Fund XII</i>	150,000,000	165,617,044	31,521,274	81,001,567	0	-8.65	0.68	10.17
<i>First Reserve Fund XIII</i>	200,000,000	151,737,042	119,682,366	60,693,925	70,933,826	11.90	1.19	5.16
Kohlberg, Kravis, Roberts & Co.								
<i>KKR Global Infrastructure Investors III</i>	149,850,000	10,382,858	10,382,858	0	139,467,142	0.00	1.00	0.76
Merit Energy Partners								
<i>Merit Energy Partners B</i>	24,000,000	24,000,000	3,486,992	187,926,750	0	24.28	7.98	21.95
<i>Merit Energy Partners C</i>	50,000,000	50,000,000	7,655,261	511,493,324	0	30.96	10.38	20.18
<i>Merit Energy Partners D</i>	88,000,000	70,938,303	13,747,497	331,762,805	0	22.58	4.87	17.61
<i>Merit Energy Partners E</i>	100,000,000	39,983,197	6,110,549	78,596,054	0	11.37	2.12	14.25
<i>Merit Energy Partners F</i>	100,000,000	59,522,861	10,647,970	28,351,202	0	-7.21	0.66	12.78
<i>Merit Energy Partners H</i>	100,000,000	100,000,000	66,049,194	29,668,582	0	-0.97	0.96	7.91
<i>Merit Energy Partners I</i>	169,721,518	169,721,518	195,634,429	35,839,059	0	14.56	1.36	4.20
<i>Merit Energy Partners K</i>	150,000,000	0	0	0	150,000,000	0.00	0.00	0.01
NGP								
<i>Natural Gas Partners IX</i>	150,000,000	173,372,658	3,580,589	244,359,789	1,153,855	12.05	1.43	11.19
<i>NGP Natural Resources X</i>	150,000,000	143,027,285	55,045,758	105,041,058	6,972,715	3.47	1.12	7.22
<i>Natural Gas Capital Resources XI</i>	150,000,000	136,035,482	143,276,305	29,131,205	20,159,854	13.31	1.27	4.06
<i>NGP Natural Resources XII</i>	149,500,000	44,656,023	44,218,294	0	104,587,858	-1.14	0.99	1.41
Sheridan								
<i>Sheridan Production Partners I</i>	100,000,000	116,552,260	69,498,019	82,750,000	0	5.60	1.31	11.76
<i>Sheridan Production Partners II</i>	100,000,000	103,500,000	46,914,959	7,000,000	3,500,000	-11.23	0.52	8.25
<i>Sheridan Production Partners III</i>	100,000,000	34,353,005	36,012,991	16,800,000	65,650,000	20.92	1.54	4.06
Real Assets Total	4,439,521,429	3,695,548,321	2,158,312,119	3,170,761,021	927,416,579	14.93	1.44	

Investment	Total Commitment	Total Contribution	Market Value	Distributions	Unfunded Commitment	IRR %	NET MOIC*	Period Years
IV. REAL ESTATE								
Angelo, Gordon & Co.								
<i>AG Realty Fund IX</i>	100,000,000	85,141,582	90,735,744	13,500,000	18,650,000	11.14	1.22	4.06
<i>AG Asia Realty Fund III</i>	50,000,000	47,587,261	42,757,424	14,875,000	6,196,250	14.27	1.21	2.25
<i>AG Europe Realty Fund II</i>	75,000,000	37,144,581	36,786,975	28,384	37,500,000	-1.43	0.99	1.53
<i>AG Realty Fund X</i>	150,000,000	0	0	0	150,000,000	0.00	0.00	0.66
<i>AG Asia Realty Fund IV</i>	100,000,000	0	0	0	100,000,000	0.00	0.00	0.56
Blackstone Real Estate Partners								
<i>Blackstone Real Estate Partners V</i>	100,000,000	104,213,007	8,687,389	197,341,164	4,174,052	10.77	1.98	12.68
<i>Blackstone Real Estate Partners VI</i>	100,000,000	109,477,567	8,966,392	209,759,596	4,907,906	13.10	2.00	11.76
<i>Blackstone Real Estate Partners VII</i>	100,000,000	106,785,597	64,015,907	119,249,527	14,684,232	16.40	1.72	7.09
<i>Blackstone Real Estate Partners VIII</i>	150,000,000	131,604,185	121,079,410	43,801,037	54,773,950	14.43	1.25	3.76
<i>Blackstone Real Estate Partners Asia II</i>	74,500,000	9,911,135	9,009,520	20,015	65,236,779	-18.40	0.91	1.27
<i>Blackstone Real Estate Partners IX</i>	300,000,000	0	0	0	300,000,000	0.00	0.00	0.27
Blackstone Strategic Partners (CSFB)								
<i>Strategic Partners III RE</i>	25,000,000	25,988,048	1,820,166	13,806,432	9,006	-6.26	0.60	13.50
<i>Strategic Partners IV RE</i>	50,000,000	51,395,842	6,634,654	45,032,929	1,160,972	0.09	1.01	10.54
Carlyle Group								
<i>Carlyle Realty Partners VIII</i>	150,000,000	14,847,362	12,103,478	13,748	135,175,253	-33.33	0.82	1.65
Colony Capital								
<i>Colony Investors III</i>	100,000,000	99,660,860	3,265,600	173,372,105	0	14.51	1.77	21.01
Landmark Partners								
<i>Landmark Real Estate Partners VIII</i>	149,500,000	39,820,779	30,213,553	15,994,015	109,966,051	28.44	1.16	2.04
Lubert Adler								
<i>Lubert-Adler Real Estate Fund VII-B</i>	74,147,868	39,779,763	40,949,921	1,731,088	35,220,237	7.66	1.07	2.23
Rockpoint								
<i>Rockpoint Real Estate Fund V</i>	100,000,000	73,596,389	69,230,408	15,484,440	46,169,343	9.70	1.15	3.97
<i>Rockpoint Real Estate Fund VI</i>	100,000,000	0	0	0	100,000,000	0.00	0.00	0.03
Rockwood								
<i>Rockwood Capital RE Partners X</i>	100,000,000	58,431,492	59,934,934	1,954,546	41,475,304	4.12	1.06	3.46
Silverpeak Real Estate Partners								
<i>Silverpeak Legacy Pension Partners II</i>	75,000,000	72,965,488	1,803,582	90,801,977	7,599,582	4.23	1.27	13.42
<i>Silverpeak Legacy Pension Partners III</i>	150,000,000	70,415,683	13,418,813	12,176,279	79,588,867	-11.24	0.36	10.67
T.A. Associates Realty								
<i>Realty Associates Fund VIII</i>	100,000,000	100,000,000	257,050	99,064,669	0	-0.08	0.99	12.50
<i>Realty Associates Fund IX</i>	100,000,000	100,000,000	53,973	160,200,687	0	10.43	1.60	10.35
<i>Realty Associates Fund X</i>	100,000,000	100,000,000	51,953,121	101,840,501	0	12.20	1.54	6.83
<i>Realty Associates Fund XI</i>	100,000,000	100,000,000	104,934,999	9,181,088	0	7.83	1.14	3.50
<i>Realty Associates Fund XII</i>	100,000,000	0	0	0	100,000,000	0.00	0.00	0.75
<i>Real Estate Total</i>	2,873,147,868	1,578,766,620	778,613,013	1,339,229,226	1,412,487,784	7.95	1.34	

Investment	Total Commitment	Total Contribution	Market Value	Distributions	Unfunded Commitment	IRR %	NET MOIC*	Period Years
V. DISTRESSED/ OPPORTUNISTIC								
Avenue Capital Partners								
<i>Avenue Energy Opportunities Fund</i>	100,000,000	100,977,328	123,658,470	10,934,495	0	8.97	1.33	4.50
<i>Avenue Energy Opportunities Fund II</i>	100,000,000	100,000,000	107,140,600	417,420	0	8.97	1.08	1.65
BlackRock**								
<i>BlackRock Tempus Fund</i>	1,774,870	1,774,870	470,560	1,485,160	0	6.24	1.10	3.55
Carlyle Group								
<i>Carlyle Strategic Partners IV</i>	100,000,000	37,940,161	22,248,675	19,580,627	81,598,575	12.42	1.10	2.75
Carval Investors								
<i>CVI Global Value Fund</i>	200,000,000	190,000,000	9,210,230	311,161,915	10,000,000	9.54	1.69	11.97
<i>CVI Credit Value Fund I</i>	100,000,000	95,000,000	6,481,213	206,151,330	5,000,000	18.73	2.24	8.25
<i>CVI Credit Value Fund A II</i>	150,000,000	142,500,000	31,357,986	174,056,736	7,500,000	8.78	1.44	6.17
<i>CVI Credit Value Fund A III</i>	150,000,000	142,500,000	141,320,528	34,867,554	7,500,000	9.32	1.24	3.58
<i>CVI Credit Value Fund IV</i>	150,000,000	60,203,333	61,191,780	60	90,000,000	2.66	1.02	1.24
Merced Capital								
<i>Merced Partners II</i>	75,000,000	63,768,881	6,408	130,505,918	0	23.96	2.05	11.75
<i>Merced Partners III</i>	100,000,000	100,000,000	35,771,508	99,997,107	0	6.31	1.36	8.65
<i>Merced Partners IV</i>	125,000,000	124,968,390	89,376,275	66,852,033	0	6.04	1.25	5.47
<i>Merced Partners V</i>	53,737,500	53,915,358	53,579,780	0	0	-0.38	0.99	1.50
MHR Institutional Partners								
<i>MHR Institutional Partners IV</i>	75,000,000	34,871,892	30,778,131	3,343,007	43,412,535	-1.06	0.98	4.53
Oaktree Capital Management								
<i>Oaktree Principal Fund VI</i>	100,000,000	84,341,613	79,600,545	14,037,147	28,293,967	8.08	1.11	4.00
<i>Oaktree Opportunities Fund X</i>	50,000,000	46,500,000	49,164,414	8,119,660	8,500,000	14.25	1.23	3.88
<i>Oaktree Opportunities Fund Xb</i>	100,000,000	12,500,000	11,757,713	0	87,500,000	-9.41	0.94	3.88
<i>Oaktree Special Situations Fund II</i>	100,000,000	-10,149	0	0	100,000,000	0.00	0.00	0.68
Pimco Bravo**								
<i>Pimco Bravo Fund OnShore Feeder I</i>	3,958,027	3,958,027	130,803	3,978,735	2,348,173	3.61	1.04	4.00
<i>Pimco Bravo Fund OnShore Feeder II</i>	5,243,670	4,670,656	2,798,575	3,037,413	3,605,239	5.73	1.25	4.00
TSSP								
<i>TSSP Adjacent Opportunities Partner</i>	50,000,000	12,599,871	12,883,621	0	37,400,129	2.63	1.02	0.74
<i>TSSP Adjacent Opportunities Contingent</i>	100,000,000	70,318	70,318	0	99,929,682	0.00	1.00	0.82
<i>TSSP Opportunities Partners IV</i>	50,000,000	2,569,272	2,569,272	0	47,430,728	0.00	1.00	0.64
Varde Fund								
<i>Varde Fund IX</i>	100,000,000	100,000,000	874,597	215,051,276	0	15.00	2.16	10.52
<i>Varde Fund X</i>	150,000,000	150,000,000	50,316,999	236,984,272	0	11.76	1.92	8.70
<i>Varde Fund XI</i>	200,000,000	200,000,000	210,861,512	80,767,754	0	7.96	1.46	5.47
<i>Varde Fund XIII</i>	150,000,000	0	0	0	150,000,000	0.00	0.00	0.48

Investment	Total Commitment	Total Contribution	Market Value	Distributions	Unfunded Commitment	IRR %	NET MOIC*	Period Years
Wayzata								
<i>Wayzata Opportunities Fund II</i>	150,000,000	174,750,000	6,051,672	322,403,595	30,000,000	16.45	1.88	11.19
<i>Wayzata Opportunities Fund III</i>	150,000,000	68,415,000	32,489,398	34,378,882	15,000,000	-0.75	0.98	6.54
<i>Distressed/Opportunistic Total</i>	2,939,714,067	2,108,784,821	1,172,161,583	1,978,112,095	855,019,028		1.50	
<i>Private Markets Total</i>	26,860,562,356	18,046,348,838	10,015,033,002	16,832,870,431	10,006,596,080	12.26	1.50	

<i>Private Markets Portfolio Status</i>	Investment Manager Count	Investments Count
PRIVATE EQUITY	50	129
PRIVATE CREDIT	12	25
REAL ASSETS	11	36
REAL ESTATE	11	27
DISTRESSED/ OPPORTUNISTIC	12	28
Total	96	245

Notes

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

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

* MOIC: Multiple of Invested Capital

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



Quarterly Report

Participant Directed Investment Program

March 31, 2019

This page intentionally left blank.



Quarterly Report

Participant Directed Investment Program

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

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

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



Supplemental Investment Fund Summary

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

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

Investment Option Descriptions

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

	<u>Ending Market Value</u>	<u>Last Qtr</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Option Since</u>
BALANCED FUND	\$456,477,419	9.7%	7.4%	9.2%	7.5%	11.4%	01/1980
U.S. ACTIVELY MANAGED FUND	266,745,336	15.5	9.5	14.6	10.5	16.3	07/1986
U.S. STOCK INDEX FUND	631,067,529	14.1	8.8	13.5	10.4	16.0	07/1986
BROAD INTERNATIONAL STOCK FUND	189,220,953	10.5	-4.4	7.9	2.9	9.3	09/1994
BOND FUND	173,925,697	3.4	4.9	2.7	3.2	5.2	07/1986
MONEY MARKET FUND	451,508,197	0.7	2.3	1.4	0.9	0.6	07/1986
STABLE VALUE FUND	1,582,227,982	0.6	2.5	2.2	2.1	2.7	11/1994
VOLUNTEER FIREFIGHTER ACCOUNT	104,961,884	7.8	4.8	7.4	5.7		01/2010
TOTAL SUPPLEMENTAL INVESTMENT FUND	3,856,134,997						

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>
BALANCED FUND	\$456,477,419	9.7%	7.4%	9.2%	7.5%	11.4%
SIF BALANCED FUND BENCHMARK		9.4	7.3	8.9	7.3	11.0
Excess		0.2	0.2	0.3	0.1	0.4

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>
U.S. ACTIVELY MANAGED FUND	266,745,336	15.5	9.5	14.6	10.5	16.3
Russell 3000		14.0	8.8	13.5	10.4	16.0
Excess		1.5	0.7	1.2	0.2	0.3



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>
U.S. STOCK INDEX FUND	\$631,067,529	14.1%	8.8%	13.5%	10.4%	16.0%
Russell 3000		14.0	8.8	13.5	10.4	16.0
Excess		0.0	0.0	0.0	0.0	0.0

Broad International Stock Fund

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

	<u>Ending Market Value</u>	<u>Last Qtr</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>
BROAD INTERNATIONAL STOCK FUND	189,220,953	10.5	-4.4	7.9	2.9	9.3
International Equity Benchmark		10.3	-4.2	8.1	2.6	8.9
Excess		0.2	-0.2	-0.2	0.3	0.4



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>
BOND FUND	\$173,925,697	3.4%	4.9%	2.7%	3.2%	5.2%
BBG BARC US Agg		2.9	4.5	2.0	2.7	3.8
Excess		0.5	0.4	0.7	0.4	1.5

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>
MONEY MARKET FUND	451,508,197	0.7	2.3	1.4	0.9	0.6
90 DAY T-BILL		0.6	2.1	1.2	0.7	0.4
Excess		0.1	0.2	0.2	0.2	0.1



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>
STABLE VALUE FUND	\$1,582,227,982	0.6%	2.5%	2.2%	2.1%	2.7%
Fixed Interest Blended Benchmark		0.7	3.1	2.3	1.9	1.6
Excess		-0.1	-0.6	-0.0	0.2	1.1

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>
VOLUNTEER FIREFIGHTER ACCOUNT	104,961,884	7.8	4.8	7.4	5.7	
SIF Volunteer Firefighter Account BM		7.8	4.8	7.0	5.4	
Excess		0.1	0.0	0.4	0.2	



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	\$1,290,144,640	13.7%	9.5%	13.5%	10.9%	15.9%	07/1999
VANGUARD DIVIDEND GROWTH	672,051,942	13.8	15.3				10/2016
VANGUARD MID CAP INDEX	551,904,976	16.8	6.0	11.6	8.9	16.7	01/2004
T. ROWE PRICE SMALL-CAP STOCK	754,142,629	17.6	11.8	16.2	9.8	18.7	04/2000
FIDELITY DIVERSIFIED INTERNATIONAL	283,964,619	11.2	-4.1	5.8	3.0	9.3	07/1999
VANGUARD TOTAL INTERNATIONAL STOCK INDEX	199,816,077	10.3	-5.2	8.1	2.8		07/2011
VANGUARD BALANCED INDEX	798,739,423	9.6	7.4	9.0	7.4	11.2	12/2003
DODGE & COX INCOME	245,393,364	3.7	4.3	3.6	3.2	5.4	07/1999
VANGUARD TOTAL BOND MARKET INDEX	221,074,147	2.9	4.4	2.0	2.7	3.7	12/2003
2020 FUND	128,949,667	6.4	4.1	5.7	4.1		07/2011
2025 FUND	138,365,804	7.9	4.1	7.0	4.9		07/2011
2030 FUND	99,161,763	9.2	3.9	8.2	5.7		07/2011
2035 FUND	79,099,063	9.9	3.6	8.8	6.0		07/2011
2040 FUND	61,080,669	10.5	3.4	9.3	6.2		07/2011
2045 FUND	50,015,210	11.0	3.2	9.8	6.4		07/2011
2050 FUND	38,083,436	11.5	3.0	10.2	6.5		07/2011
2055 FUND	21,402,458	11.7	3.0	10.2	6.5		07/2011
2060 FUND	18,171,841	11.6	3.0	10.2	6.5		07/2011
INCOME FUND	90,824,539	6.1	4.1	5.0	3.5		07/2011
TD Ameritrade SDB	75,129,531						
TD Ameritrade SDB Roth	886,127						
Total Deferred Compensation Plan	5,818,401,921						



Deferred Compensation Plan Options

LARGE CAP EQUITY

Vanguard Index Institutional Plus (passive)

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

Vanguard Dividend Growth (active) (1)

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

MID CAP EQUITY

Vanguard Mid Cap Index (passive) (2)

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

SMALL CAP EQUITY

T Rowe Price Small Cap (active)

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

INTERNATIONAL EQUITY

Fidelity Diversified International (active)

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

Vanguard Total International Stock Index (passive) (3)

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

	Ending Market Value	Last Qtr	1 Year	3 Year	5 Year	Option Since
Large Cap US Equity						
VANGUARD INSTITUTIONAL INDEX PLUS	\$1,290,144,640	13.7%	9.5%	13.5%	10.9%	07/1999
S&P 500		13.6	9.5	13.5	10.9	07/1999
Excess		0.0	-0.0	-0.0	-0.0	
VANGUARD DIVIDEND GROWTH	672,051,942	13.8	15.3			10/2016
NASDAQ US Dividend Achievers Select		12.5	10.8			10/2016
Excess		1.3	4.5			
Mid Cap US Equity						
VANGUARD MID CAP INDEX	551,904,976	16.8	6.0	11.6	8.9	01/2004
CRSP US Mid Cap Index		16.8	6.0	11.6	8.9	01/2004
Excess		-0.0	0.0	-0.0	-0.0	
Small Cap US Equity						
T. ROWE PRICE SMALL-CAP STOCK	754,142,629	17.6	11.8	16.2	9.8	04/2000
Russell 2000		14.6	2.0	12.9	7.1	04/2000
Excess		3.0	9.8	3.3	2.8	
International Equity						
FIDELITY DIVERSIFIED INTERNATIONAL	283,964,619	11.2	-4.1	5.8	3.0	07/1999
MSCI EAFE FREE (NET)		10.0	-3.7	7.3	2.3	07/1999
Excess		1.3	-0.3	-1.5	0.6	
VANGUARD TOTAL INTERNATIONAL STOCK INDEX	199,816,077	10.3	-5.2	8.1	2.8	07/2011
FTSE Global All Cap ex US Index Net		10.2	-5.0	7.8	2.7	07/2011
Excess		0.1	-0.2	0.3	0.1	



Deferred Compensation Options

BALANCED

Vanguard Balanced Index (passive) (4)

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

FIXED INCOME

Dodge & Cox Income Fund (active)

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

Vanguard Total Bond Market Index (passive)

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

SIF Money Market Fund (5)

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

STABLE VALUE

SIF Stable Value Fund (5)

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

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

Balanced Funds

	Ending Market Value	Last Qtr	1 Year	3 Year	5 Year	Option Since
VANGUARD BALANCED INDEX	\$798,739,423	9.6%	7.4%	9.0%	7.4%	12/2003
Vanguard Balanced Fund Benchmark		9.6	7.4	9.0	7.4	12/2003
Excess		0.0	0.0	-0.0	-0.0	

Fixed Income

	Ending Market Value	Last Qtr	1 Year	3 Year	5 Year	Option Since
DODGE & COX INCOME	245,393,364	3.7	4.3	3.6	3.2	07/1999
BBG BARC Agg Bd		2.9	4.5	2.0	2.7	07/1999
Excess		0.8	-0.2	1.6	0.4	

	Ending Market Value	Last Qtr	1 Year	3 Year	5 Year	Option Since
VANGUARD TOTAL BOND MARKET INDEX	221,074,147	2.9	4.4	2.0	2.7	12/2003
BBG BARC Agg Bd		2.9	4.5	2.0	2.7	12/2003
Excess		-0.0	-0.1	-0.1	-0.1	

	Ending Market Value	Last Qtr	1 Year	3 Year	5 Year	Option Since
MONEY MARKET FUND	451,508,197	0.7	2.3	1.4	0.9	07/1986
90 DAY T-BILL		0.6	2.1	1.2	0.7	07/1986
Excess		0.1	0.2	0.2	0.2	

Stable Value

	Ending Market Value	Last Qtr	1 Year	3 Year	5 Year	Option Since
STABLE VALUE FUND	1,582,227,982	0.6	2.5	2.2	2.1	11/1994
Fixed Interest Blended Benchmark		0.7	3.1	2.3	1.9	11/1994
Excess		-0.1	-0.6	-0.0	0.2	

- (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	\$128,949,667	6.4%	4.1%	5.7%	4.1%	07/2011	2045 FUND	\$50,015,210	11.0%	3.2%	9.8%	6.4%	07/2011
2020 FUND BENCHMARK		6.4	4.1	5.7	4.1	07/2011	2045 FUND BENCHMARK		11.1	3.3	9.8	6.4	07/2011
Excess		-0.0	-0.0	-0.0	-0.0		Excess		-0.0	-0.1	-0.0	-0.0	
2025 FUND	138,365,804	7.9	4.1	7.0	4.9	07/2011	2050 FUND	38,083,436	11.5	3.0	10.2	6.5	07/2011
2025 FUND BENCHMARK		7.9	4.2	7.0	4.9	07/2011	2050 FUND BENCHMARK		11.6	3.1	10.2	6.6	07/2011
Excess		-0.0	-0.0	-0.0	-0.0		Excess		-0.0	-0.1	-0.0	-0.0	
2030 FUND	99,161,763	9.2	3.9	8.2	5.7	07/2011	2055 FUND	21,402,458	11.7	3.0	10.2	6.5	07/2011
2030 FUND BENCHMARK		9.2	3.9	8.3	5.7	07/2011	2055 FUND BENCHMARK		11.7	3.1	10.2	6.5	07/2011
Excess		-0.0	-0.1	-0.0	-0.0		Excess		-0.0	-0.1	-0.0	-0.0	
2035 FUND	79,099,063	9.9	3.6	8.8	6.0	07/2011	2060 FUND	18,171,841	11.6	3.0	10.2	6.5	07/2011
2035 FUND BENCHMARK		9.9	3.7	8.8	6.0	07/2011	2060 FUND BENCHMARK		11.7	3.1	10.2	6.5	07/2011
Excess		-0.0	-0.1	-0.0	-0.0		Excess		-0.0	-0.1	-0.0	-0.0	
2040 FUND	61,080,669	10.5	3.4	9.3	6.2	07/2011	INCOME FUND	90,824,539	6.1	4.1	5.0	3.5	07/2011
2040 FUND BENCHMARK		10.5	3.5	9.4	6.2	07/2011	INCOME FUND BENCHMARK		6.1	4.1	5.0	3.5	07/2011
Excess		-0.0	-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

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

Total Market Value = \$1.4 billion

Performance Statistics for the Period Ending: March 29, 2019

Fund Name	Ending Market	3 Months	1 Year	Annualized			Since Inception	Inception Date
				3 Years	5 Years	10 Years		
Managed Ages 0-4 BM: Managed Ages 0-4	\$35,601,111	11.19% 11.14%	5.34% 5.71%	9.52% 9.63%			6.88% 6.98%	8/12/2014
Managed Ages 5-8 BM: Managed Ages 5-8	\$70,063,654	10.21% 10.15%	5.40% 5.61%	8.66% 8.75%			6.31% 6.44%	8/12/2014
Managed Ages 9-10 BM: Managed Ages 9-10	\$62,942,990	9.19% 9.16%	5.20% 5.49%	7.76% 7.87%			5.74% 5.89%	8/12/2014
Managed Ages 11-12 BM: Managed Ages 11-12	\$94,538,784	8.16% 8.04%	4.83% 5.23%	6.82% 6.91%			5.10% 5.25%	8/12/2014
Managed Ages 13-14 BM: Managed Ages 13-14	\$130,763,405	7.07% 6.92%	4.61% 4.96%	5.91% 5.96%			4.50% 4.60%	8/12/2014
Managed Age 15 BM: Managed Age 15	\$83,805,808	5.41% 5.52%	4.03% 4.44%	4.87% 4.86%			3.79% 3.78%	8/12/2014
Managed Age 16 BM: Managed Age 16	\$84,995,205	4.76% 4.76%	3.73% 4.12%	4.32% 4.28%			3.39% 3.32%	8/12/2014
Managed Age 17 BM: Managed Age 17	\$84,310,977	4.08% 4.00%	3.42% 3.80%	3.81% 3.70%			3.04% 2.87%	8/12/2014
Managed Ages 18 & Over BM: Managed Ages 18 & Over	\$210,477,616	3.19% 3.25%	3.38% 3.47%	3.33% 3.12%			2.69% 2.41%	8/12/2014
U.S. and International Equity Option BM: U.S. and International Equity Option	\$293,836,145	13.20% 13.13%	5.72% 5.86%	11.24% 11.38%	7.96% 8.07%	14.00% 14.34%	6.93% 7.79%	10/ 1/2001



MINNESOTA COLLEGE SAVINGS PLAN

Performance Statistics for the Period Ending: March 29, 2019

Fund Name	Ending Market	3 Months	1 Year	Annualized				Inception Date
				3 Years	5 Years	10 Years	Since Inception	
Moderate Allocation Option BM: Moderate Allocation Option	\$69,877,116	9.21%	5.19%	7.73%	5.85%	9.66%	5.18%	8/ 2/2007
		9.16%	5.49%	7.87%	6.06%	10.21%	5.73%	
100% Fixed-Income Option BM: 100% Fixed-Income Option	\$15,823,666	3.40%	4.27%	2.22%	2.47%	3.37%	3.50%	8/16/2007
		3.31%	4.33%	2.50%	2.77%	3.80%	4.13%	
International Equity Index Option BM: International Equity Index Option	\$4,816,188	10.09%	-4.81%	8.04%	2.55%		4.16%	6/18/2013
		9.97%	-4.42%	8.00%	2.67%		4.40%	
Money Market Option BM: Money Market Option	\$11,893,238	0.48%	1.83%	0.93%	0.56%	0.22%	0.47%	11/ 1/2007
		0.49%	1.67%	0.82%	0.50%	0.27%	0.48%	
Principal Plus Interest Option Citigroup 3-Month U.S. Treasury Bill	\$119,063,611	0.52%	1.85%	1.63%	1.48%	1.82%	2.51%	10/10/2001
		0.60%	2.11%	1.17%	0.72%	0.41%	1.31%	
Aggressive Allocation Option BM: Aggressive Allocation Option	\$27,641,094	11.11%	5.26%	9.57%			6.86%	8/12/2014
		11.14%	5.71%	9.63%			6.98%	
Conservative Allocation Option BM: Conservative Allocation Option	\$10,165,955	5.56%	3.97%	4.85%			3.61%	8/18/2014
		5.52%	4.44%	4.86%			3.63%	
Equity and Interest Accumulation Option BM: Equity and Interest Accumulation Option	\$3,946,231	6.71%	5.31%	7.42%			5.65%	8/18/2014
		7.21%	5.74%	7.33%			5.49%	
U.S. Large Cap Equity Option BM: U.S. Large Cap Equity Option	\$30,608,695	13.58%	9.31%	13.27%			10.63%	8/12/2014
		13.65%	9.50%	13.51%			10.87%	
Matching Grant Citigroup 3-Month U.S. Treasury Bill	\$2,381,376	0.52%	1.85%	1.63%	1.48%	1.82%	2.53%	3/22/2002
		0.60%	2.11%	1.17%	0.72%	0.41%	1.29%	

MINNESOTABLE *plan*

A member of The National ABLE Alliance

Performance as of
03/31/19

Total Market Value: \$ **5,388,651**

<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	\$ 538,348	9.99%	0.91	12.41	12.41	4.98				9.18	12/15/16
ABLE Aggressive Custom Benchmark			0.89	12.54	12.54	5.50				9.80	
Variance			0.02	(0.13)	(0.13)	(0.52)				(0.62)	
Moderately Aggressive Option	\$ 501,758	9.31%	1.02	10.66	10.66	4.74				8.04	12/15/16
ABLE Moderately Aggressive Custom Benchmark			0.94	10.81	10.81	5.39				8.67	
Variance			0.08	(0.15)	(0.15)	(0.65)				(0.63)	
Growth Option	\$ 714,645	13.26%	1.04	8.98	8.98	4.58				6.89	12/15/16
ABLE Growth Custom Benchmark			1.00	9.09	9.09	5.18				7.51	
Variance			0.04	(0.11)	(0.11)	(0.60)				(0.62)	
Moderate Option	\$ 626,598	11.63%	1.16	7.16	7.16	4.22				5.76	12/15/16
ABLE Moderate Custom Benchmark			1.07	7.37	7.37	4.88				6.31	
Variance			0.09	(0.21)	(0.21)	(0.66)				(0.55)	
Moderately Conservative Option	\$ 572,974	10.63%	0.92	5.05	5.05	3.57				4.33	12/15/16
ABLE Moderately Conservative Custom Benchmark			0.88	5.24	5.24	4.16				4.81	
Variance			0.04	(0.19)	(0.19)	(0.59)				(0.48)	
Conservative Option	\$ 792,733	14.71%	0.57	2.23	2.23	2.52				2.40	12/15/16
ABLE Conservative Custom Benchmark			0.59	2.39	2.39	3.04				2.75	
Variance			(0.02)	(0.16)	(0.16)	(0.52)				(0.35)	
Checking Option	\$ 1,641,595	30.46%									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, 2019



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

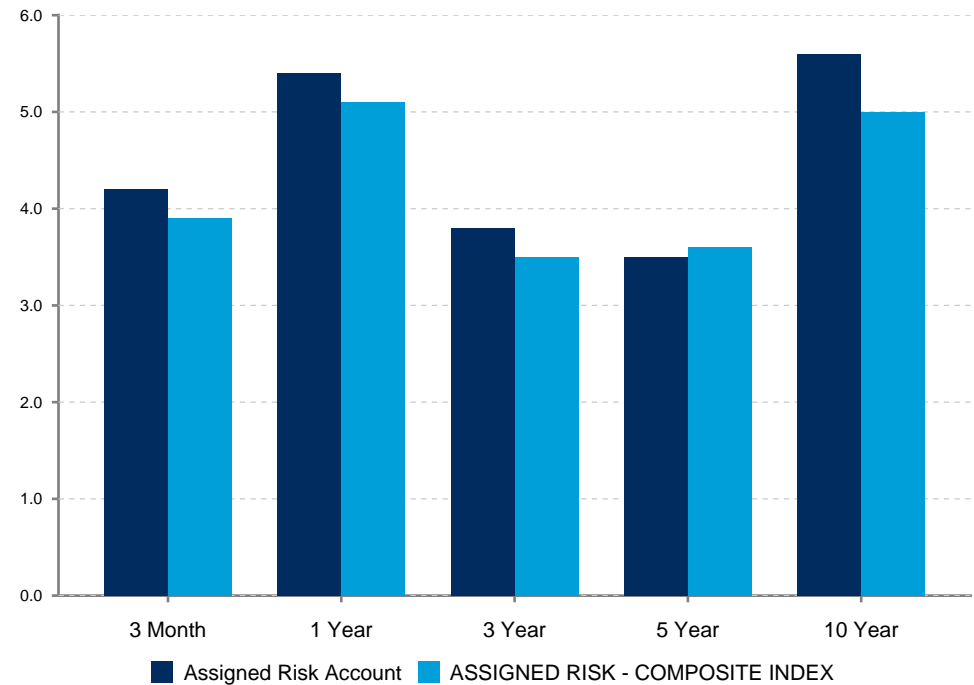
Assigned Risk Plan

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.

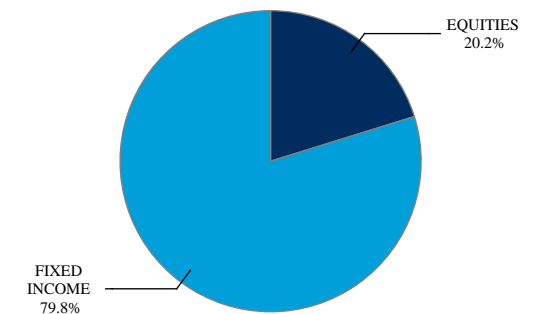
The Assigned Risk Plan is invested in a portfolio of common stocks and bonds

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	\$282,221,913	4.2%	5.4%	3.8%	3.5%	5.6%
EQUITIES	56,963,351	13.6	9.5	13.9	9.9	14.8
FIXED INCOME	225,258,562	1.6	3.7	1.0	1.7	3.2
ASSIGNED RISK - COMPOSITE INDEX		3.9	5.1	3.5	3.6	5.0
Excess		0.2	0.2	0.3	-0.0	0.7
S&P 500		13.6	9.5	13.5	10.9	15.9
BBG BARC US Gov: Int		1.6	3.8	1.0	1.7	2.0



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



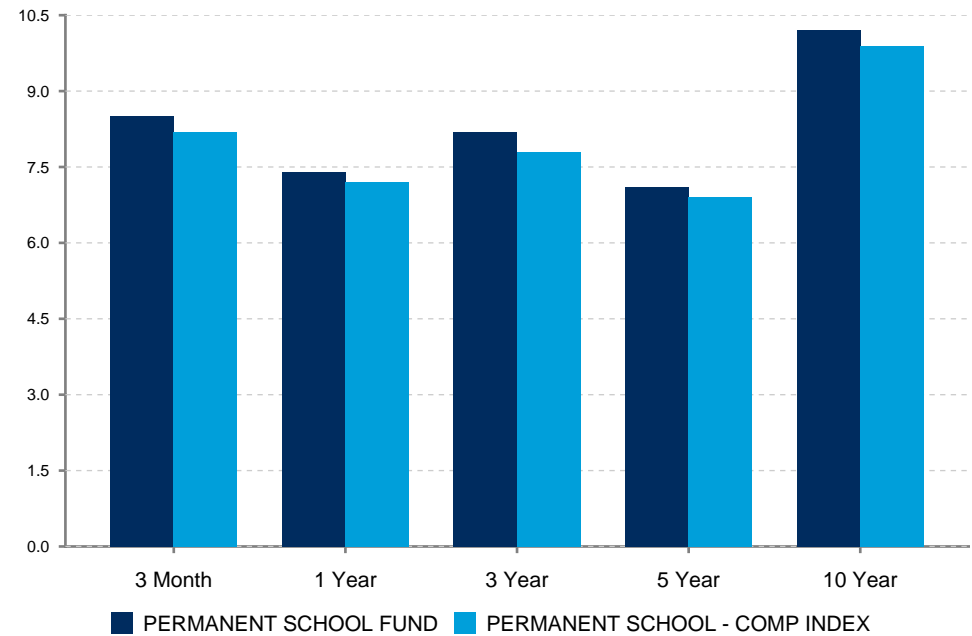
Non-Retirement

Permanent School Fund

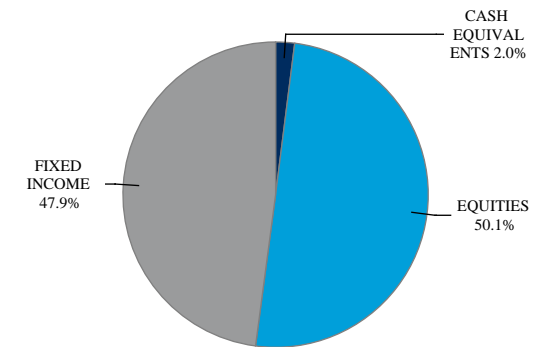
The investment objective of the Permanent School Fund is to produce a growing level of spendable income, within the constraints of maintaining adequate portfolio quality and liquidity. The income from the portfolio is transferred to the school endowment fund and distributed to Minnesota's public schools.

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

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



	<u>Ending Market Value</u>	<u>Last Qtr</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>
PERMANENT SCHOOL FUND	\$1,463,284,002	8.5%	7.4%	8.2%	7.1%	10.2%
CASH EQUIVALENTS	28,844,267	0.6	2.2	1.3	0.8	0.6
EQUITIES	733,253,930	13.6	9.5	13.5	10.9	15.9
FIXED INCOME	701,185,806	3.4	5.0	2.6	3.1	4.4
PERMANENT SCHOOL - COMP INDEX		8.2	7.2	7.8	6.9	9.9
Excess		0.3	0.2	0.4	0.2	0.3
S&P 500		13.6	9.5	13.5	10.9	15.9
BBG BARC US Agg		2.9	4.5	2.0	2.7	3.8



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.



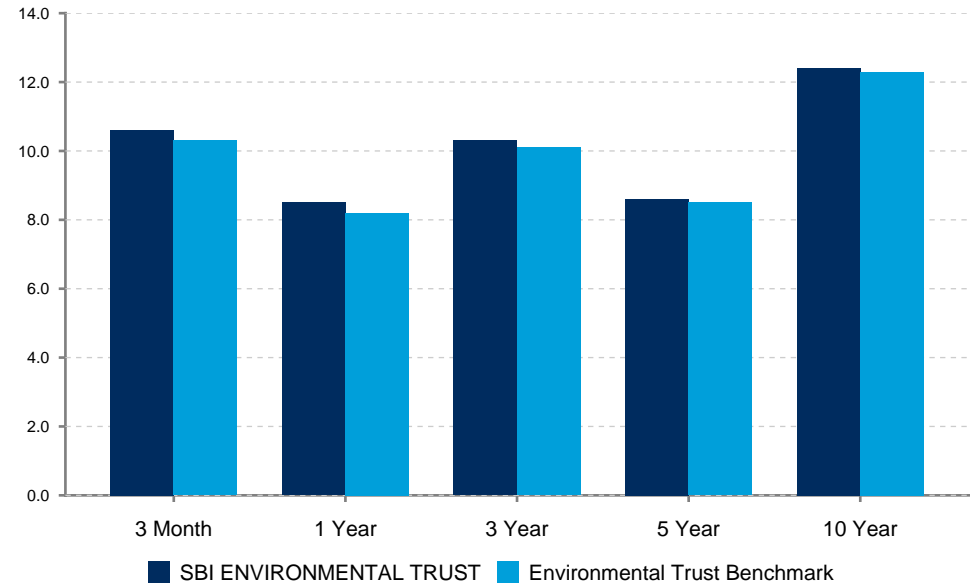
Non-Retirement

Environmental Trust Fund

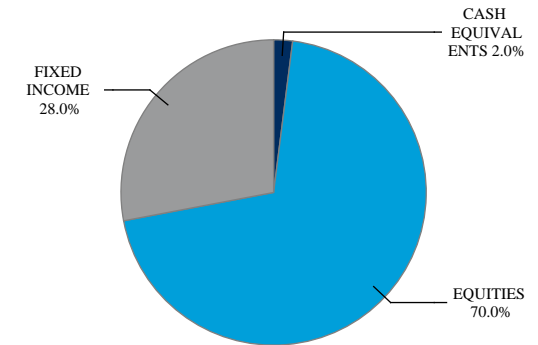
The objective of the Environmental Trust Fund is to increase the market value of the Fund over time in order to increase the annual amount made available for spending within the constraints of maintaining adequate portfolio quality and liquidity.

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	\$1,172,383,879	10.6%	8.5%	10.3%	8.6%	12.4%
CASH EQUIVALENTS	23,079,568	0.6	2.2	1.3	0.8	0.6
EQUITIES	821,598,006	13.6	9.5	13.5	10.9	15.9
FIXED INCOME	327,706,305	3.4	5.0	2.6	3.1	4.4
Environmental Trust Benchmark		10.3	8.2	10.1	8.5	12.3
Excess		0.2	0.2	0.2	0.1	0.2
S&P 500		13.6	9.5	13.5	10.9	15.9
BBG BARC US Agg		2.9	4.5	2.0	2.7	3.8



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

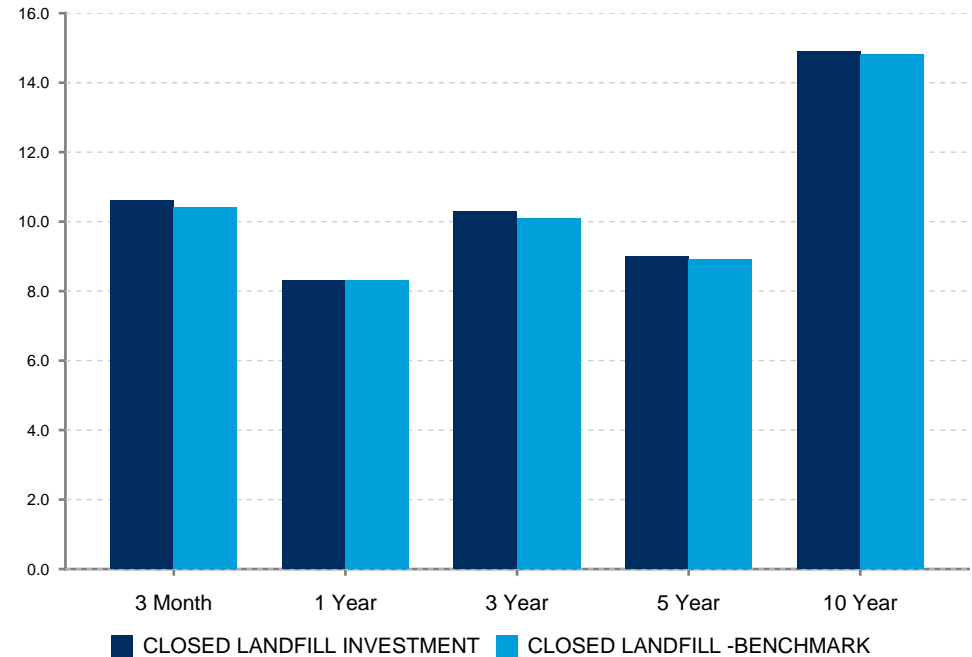


Non-Retirement

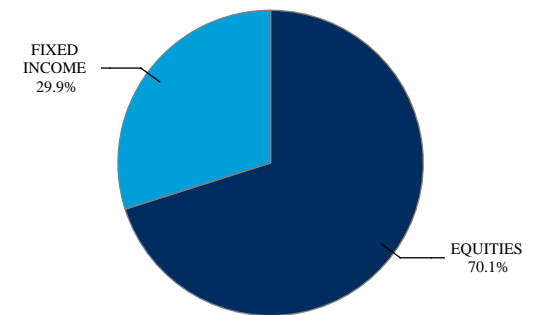
Closed Landfill Investment Fund

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

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



	<u>Ending Market Value</u>	<u>Last Qtr</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>
CLOSED LANDFILL INVESTMENT	\$93,092,970	10.6%	8.3%	10.3%	9.0%	14.9%
EQUITIES	65,251,361	13.6	9.5	13.5	10.9	15.9
FIXED INCOME	27,841,609	3.4	5.0	2.6		
CLOSED LANDFILL -BENCHMARK		10.4	8.3	10.1	8.9	14.8
Excess		0.3	0.1	0.2	0.1	0.0
S&P 500		13.6	9.5	13.5	10.9	15.9
BBG BARC US Agg		2.9	4.5	2.0	2.7	3.8



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>
NON RETIREMENT EQUITY INDEX - MELLON	2,289,575,726	13.6	5.9	9.5	13.5	10.9	15.9	9.6	07/1993
S&P 500 INDEX (DAILY)		13.6	5.9	9.5	13.5	10.9	15.9	9.5	07/1993
Excess		-0.0	-0.0	-0.0	-0.0	0.0	-0.0	0.1	
NON RETIREMENT FIXED INCOME - PRUDENTIAL	1,223,551,023	3.4	5.1	5.0	2.6	3.1	4.4	5.9	07/1994
BBG BARC Agg (Dly)		2.9	4.6	4.5	2.0	2.7	3.8	5.4	07/1994
Excess		0.5	0.4	0.5	0.6	0.4	0.7	0.5	
RBC	225,258,520	1.6	3.6	3.7	1.0	1.7	3.2	4.8	07/1991
RBC Custom Benchmark		1.6	3.7	3.8	1.0	1.7	2.1	4.9	07/1991
Excess		-0.0	-0.1	-0.1	0.1	0.1	1.2	-0.1	
MET COUNCIL OPEB BOND POOL	77,269,482	1.3	2.9	3.5					02/2009
NON RETIREMENT CASH	169,015,285	0.6	1.8	2.2	1.3	0.8	0.6	2.7	
iMoneyNet Money Fund Average- All Taxable		0.5	1.4	1.7	0.9	0.5	0.3		
Excess		0.1	0.4	0.5	0.4	0.3	0.3		

Note:

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

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

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

This page intentionally left blank.



State Cash

March 31, 2019



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	11,591,310,571	0.7	2.4	1.5	1.1	1.0
iMoneyNet Money Fund Average-All Taxable		0.5	1.7	0.9	0.5	0.3

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	99,210,826	2.1	4.6	2.2	2.7	
Housing Finance	145,773,756	0.7	2.6	1.3	1.8	
Public Facilities Authority	60,675,586	0.9	2.3	1.9	2.3	



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), including from 10/1/01 to 5/31/02 when it was the Provisional MSCI Emerging Markets Free (net). Prior to 1/1/01, it was the MSCI Emerging Markets Free (gross).

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. 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 1/1/2018-2/28/2019 the Transitional Policy Target was used to reflect the addition of Treasuries to the Fixed Income portfolio. 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:

Since 1/1/2019 the benchmark is 90% Russell 1000 and 10% Russell 2000. From 10/1/2003 to 12/31/2018 it was the Russell 3000. 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 1/1/2019 the benchmark is 75% MSCI World ex USA Index (net) and 25% MSCI Emerging Markets Index (net). From 6/1/08 to 12/31/2018 the International Equity asset class target was 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:

60.3% Russell 1000, 6.7% Russell 2000, 24.75% MSCI World Ex US (net), and 8.25% MSCI EM (net) effective 1/1/2019. From 7/1/2017 thru 12/31/2018 it was 67% Russell 3000 and 33% MSCI ACWI ex USA. 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 the 67% and 33% weighting.

Semi-Passive Domestic Equity Benchmark:

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