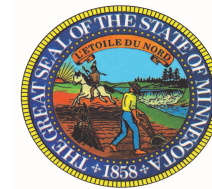


Comprehensive Performance Report

March 31, 2021



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.

Fire Plans + Other Retirement Plans

Fire Plans and Other Retirement Plans include assets from volunteer fire relief plans and other public retirement plans with authority to invest with the SBI, if they so choose. Fire Plans that are not eligible to be consolidated with Public Employees Retirement Association (PERA) or elect not to be administered by PERA may invest their assets with the SBI using the same asset pools as the Combined Funds. The Statewide Volunteer Firefighter Retirement Plan is administered by PERA and has its own investment vehicle called the Volunteer Firefighter Account.

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.

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.

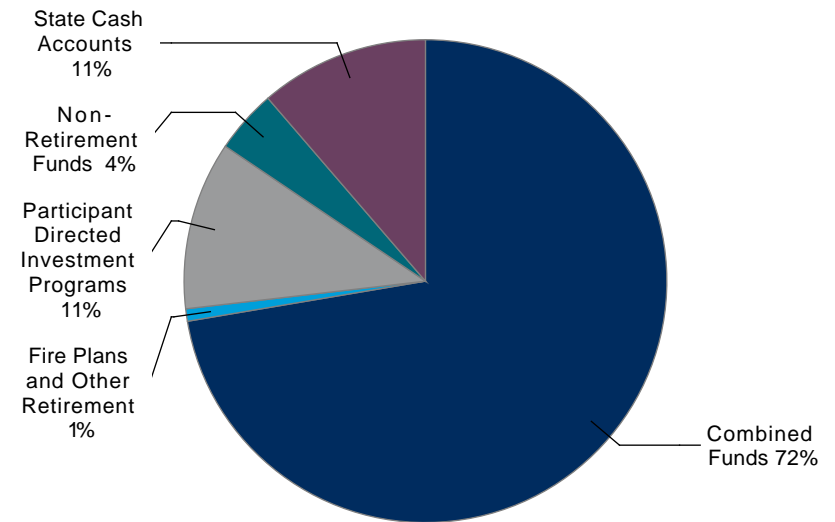
State Cash

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.

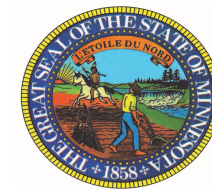


Funds Under Management

	<u>\$ Millions</u>
COMBINED FUNDS	\$84,538
FIRE PLANS + OTHER RETIREMENT	971
PARTICIPANT DIRECTED INVESTMENT PROGRAMS	13,171
State Deferred Compensation Plan	9,185
Health Care Savings Plan	1,551
Unclassified Employees Retirement Plan	382
Hennepin County Supplemental Retirement Plan	182
PERA Defined Contribution Plan	93
Minnesota College Savings Plan	1,759
Minnesota Achieve a Better Life Experience	19
NON-RETIREMENT FUNDS	4,957
Assigned Risk Plan	299
Permanent School Fund	1,837
Environmental Trust Fund	1,543
Closed Landfill Investment Fund	123
Miscellaneous Trust Funds	332
Other Postemployment Benefits Accounts	823
STATE CASH ACCOUNTS	13,226
Invested Treasurer's Cash	13,151
Other State Cash Accounts	75
TOTAL SBI AUM	116,863



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	 85
Supplemental Investment Fund	
Deferred Compensation Program	
Minnesota College Savings Plan	
Achieve a Better Life Experience	
 Non-Retirement Funds	 101
Assigned Risk Plan	
Permanent School Fund	
Environmental Trust Fund	
Closed Landfill Investment Fund	
Non-Retirement Managers	
 State Cash Accounts	 109
Invested Treasurer's Cash	
Other State Cash Accounts	
 Addendum	 111

Performance Reporting Legend

Manager Level Data

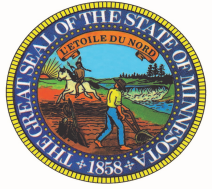
Aggregate Level Data

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, 2021



Combined Funds Summary

Combined Funds Change in Market Value (\$Millions)

	One Quarter
COMBINED FUNDS	
Beginning Market Value	\$82,140
Net Contributions	-705
Investment Return	3,102
Ending Market Value	84,538

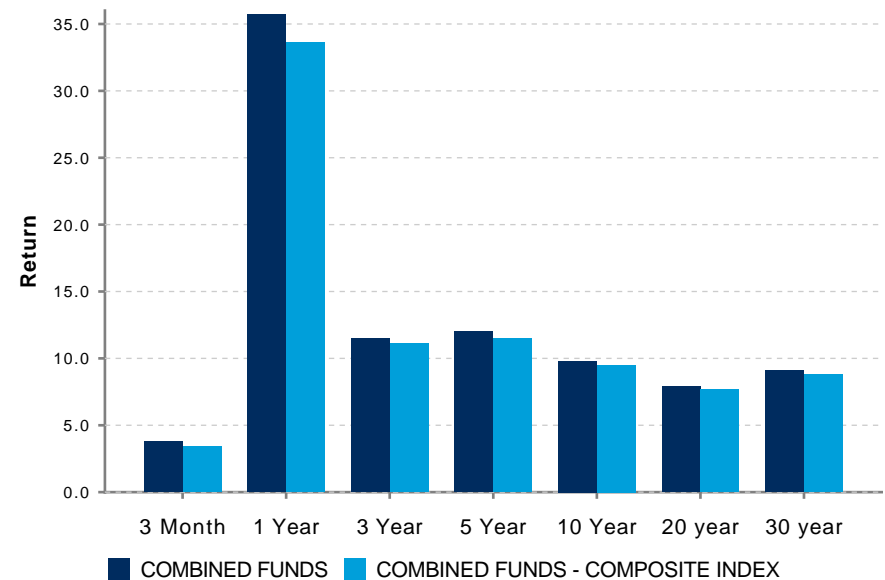
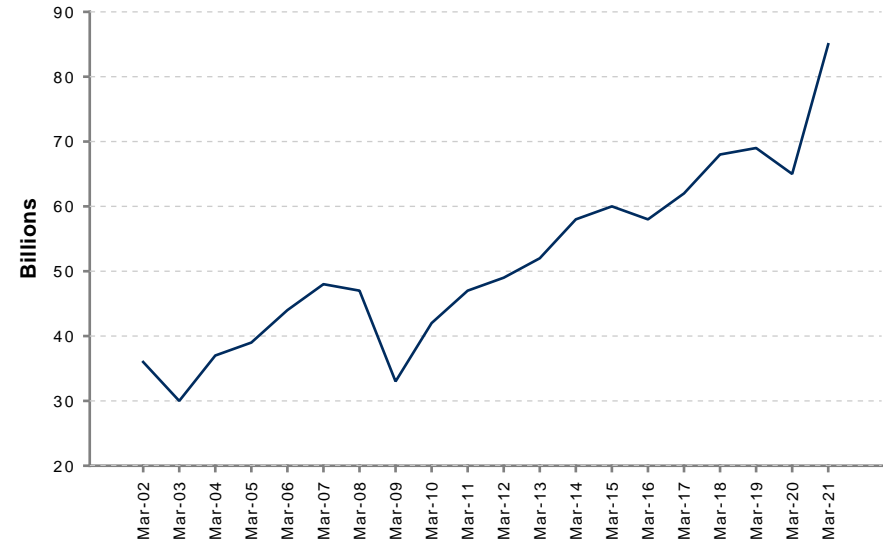
The change in market value of the Combined Funds since the end of last quarter is due to net contributions and investment returns.

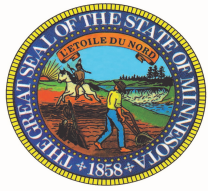
Performance (Net of Fees)

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.

	Qtr	FYTD	1 Yr	3 Yr	5 Yr	10 Yr	20 Yr	30 Yr
COMBINED FUNDS	3.8%	22.1%	35.7%	11.5%	12.0%	9.8%	7.9%	9.1%
COMBINED FUNDS - COMPOSITE INDEX	3.4	20.8	33.6	11.1	11.5	9.5	7.7	8.8
Excess	0.5	1.3	2.0	0.4	0.4	0.3	0.2	0.3

Asset Growth



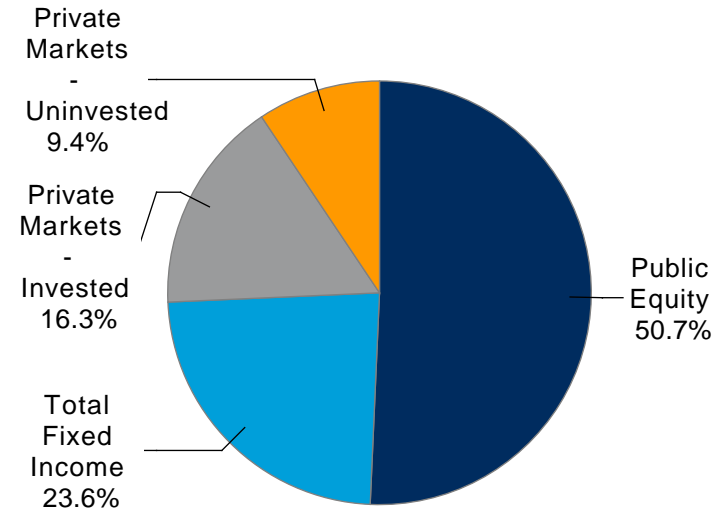


Combined Funds Summary

Asset Mix

The Combined Funds actual asset mix relative to the Strategic Asset Allocation Policy Target is shown below.

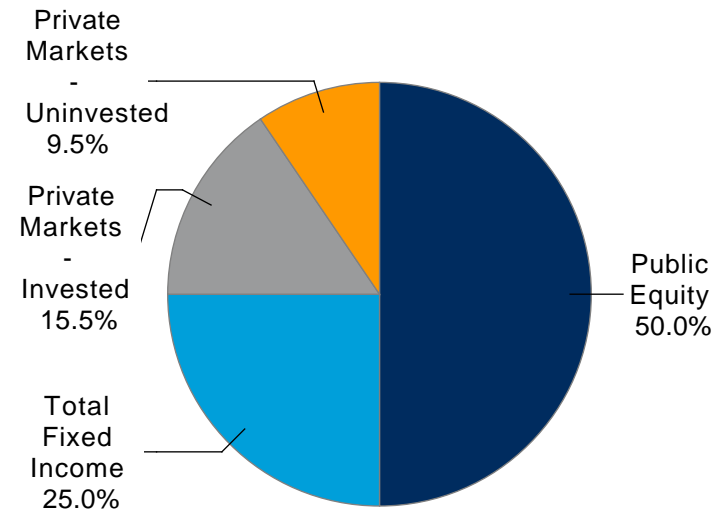
	<u>(Millions)</u>	<u>Actual Mix</u>	<u>Policy Target</u>
Public Equity	\$42,865	50.7%	50.0%
Total Fixed Income	19,933	23.6	25.0
Private Markets - Total	21,740	25.7	25.0
Private Markets - Invested	13,788	16.3	
Private Markets - Uninvested	7,952	9.4	
TOTAL	84,538	100.0	

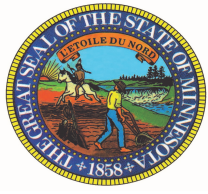


Composite Index Comparison

The Combined Funds Composite is set as the Strategic Asset Allocation Policy Target. Asset class weights for Private Markets - Invested and Private Markets - Uninvested are reset at the start of each month. The Combined Funds Composite weighting shown below is as of the first day of the quarter.

	<u>Policy Weight</u>	<u>Market Index</u>
Public Equity	50.0%	Public Equity Benchmark
Total Fixed Income	25.0	Total Fixed Income Benchmark
Private Markets - Invested	15.5	Private Markets
Private Markets - Uninvested	9.5	S&P 500





Combined Funds Asset Class Performance Summary

Public Equity

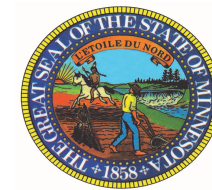
The Combined Funds Public Equity includes Domestic Equity, International Equity and Global Equity.

The Public Equity benchmark is 67% Russell 3000 and 33% MSCI ACWI ex US (net).

	<u>Market Value</u>	<u>Actual Weight</u>	<u>Policy Weight</u>	<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	\$42.9	50.7%	50.0%	5.6%	32.7%	60.4%	13.8%	14.7%	11.5%	8.1%	9.6%
Public Equity Benchmark				5.4	31.9	58.5	13.5				
Excess				0.2	0.8	1.9	0.3				
Domestic Equity	28.0	33.1	33.5	6.5	34.2	64.8	17.2	16.8	13.8	8.8	10.3
Domestic Equity Benchmark				6.3	33.6	63.2	17.0	16.6	13.8	8.9	10.4
Excess				0.2	0.7	1.6	0.2	0.2	0.0	-0.1	-0.1
International Equity	13.8	16.4	16.5	4.2	30.0	51.8	7.1	10.0	5.5	6.5	
International Equity Benchmark				3.5	28.5	49.2	6.5	9.7	4.9	6.1	
Excess				0.8	1.5	2.6	0.6	0.3	0.6	0.4	
Global Equity	1.1	1.3	0.0	0.3							
MSCI AC WORLD INDEX NET				4.6							
Excess				-4.2							

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

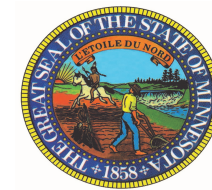
Total Fixed Income

The Combined Funds Fixed Income program includes Core/Core Plus, Return Seeking Fixed Income, Treasuries and Laddered Bond + Cash.

The Total Fixed Income benchmark is 40% Bloomberg Barclays U.S. Aggregate Index/ 40% Bloomberg Barclays Treasury 5+ Years Index/ 20% ICE BofA US 3-Month Treasury Bill.

	<u>Market Value</u>	<u>Actual Weight</u>	<u>Policy Weight</u>	<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>
Total Fixed Income	\$19.9	23.6%	25.0%	-4.4%	-3.6%	-0.8%	5.9%	4.3%	4.2%	5.0%	6.1%
Total Fixed Income Benchmark				-4.9	-5.0	-3.3	5.4				
Excess				0.5	1.4	2.5	0.6				
Core/Core Plus	4.4	5.2	5.0	-3.1	-0.0	5.4	5.7	4.1	4.2	5.0	6.1
Core Bonds Benchmark				-3.4	-2.1	0.7	4.7	3.1	3.4	4.5	5.7
Excess				0.2	2.1	4.7	1.1	1.0	0.7	0.5	0.4
Return Seeking Fixed Income	3.5	4.1	5.0	-1.5							
BBG BARC Agg Bd				-3.4							
Excess				1.9							
Treasury Protection	7.5	8.8	10.0	-8.5	-9.7	-9.4	5.2				
BBG BARC 5Y + Us Tsy Idx				-8.7	-10.2	-9.7	5.2				
Excess				0.3	0.6	0.3	-0.0				
Laddered Bond + Cash	4.6	5.4	5.0	0.0	0.1	0.2	1.5	1.3	0.8	1.7	3.3
ICE BofA US 3-Month Treasury Bill				0.0	0.1	0.1	1.5	1.2	0.6	1.4	2.6
Excess				0.0	0.0	0.1	-0.0	0.1	0.2	0.3	0.7

Note: Since 12/1/2020 the Total Fixed Income includes allocations to Core/Core Plus Bonds, Return Seeking Bonds, Treasuries and Laddered Bond + Cash. From 7/1/2020 to 11/30/2020 Total Fixed Income was Core Bonds, Treasuries and Cash. From 2/1/2018-6/30/20 Total Fixed Income was Core Bonds and Treasuries. Prior to 2/1/2018, Total Fixed Income was Core Bonds. 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 - Invested	8.7%	25.4%	14.1%	11.4%	13.1%	12.0%	12.0%	13.6%	12.6%
Private Markets - Uninvested (S&P 500)	6.1								
Private Equity	11.5%	34.9%	25.1%	17.9%	18.1%	15.4%	13.2%	15.6%	
Private Credit	3.7	9.7	2.1	8.3	11.3	12.0	11.6	12.2	
Resources	2.8	6.9	-14.0	-6.8	-0.5	1.8	11.4	12.7	
Real Estate	2.7	9.3	5.0	8.2	8.8	11.2	8.4	9.7	

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.

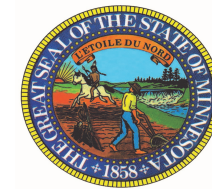
Resource Investments

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, 2021

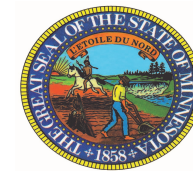
The assets of the Combined Funds are allocated to public equity, fixed income, private markets, and cash. Each asset class may be further differentiated by geography, management style, and/or strategy. Managers are hired to manage the assets accordingly. This diversification is intended to reduce wide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

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

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

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

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Domestic Equity

March 31, 2021



	<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)	\$4,079,464,287	14.2%	9.0%	47.3%	89.1%	17.5%	17.8%	13.4%		
Active Domestic Equity Benchmark			9.5	44.0	77.1	15.9	16.0	13.1		
Excess			-0.4	3.3	12.0	1.6	1.8	0.3		
SEMI PASSIVE DOMESTIC EQUITY AGGREGATE (2)	3,019,283,521	10.5	6.5	31.7	61.0	17.3	16.7	14.2		
Semi Passive Domestic Equity Benchmark			5.9	31.8	60.6	17.3	16.7	14.0		
Excess			0.6	-0.1	0.4	-0.0	0.0	0.3		
PASSIVE DOMESTIC EQUITY AGGREGATE (3)	21,540,927,122	75.2	6.0	32.2	61.1	17.2	16.7	13.8		
Passive Domestic Equity Benchmark			6.0	32.1	61.1	17.1	16.7	13.8		
Excess			0.0	0.1	0.0	0.0	-0.0	-0.0		
TRANSITION AGGREGATE DOMESTIC EQUITY (4)	38,296	0.0								
TOTAL DOMESTIC EQUITY (5)	28,639,713,225	100.0	6.5	34.2	64.8	17.2	16.8	13.8	11.0	01/1984
Domestic Equity Benchmark			6.3	33.6	63.2	17.0	16.6	13.8	11.1	01/1984
Excess			0.2	0.7	1.6	0.2	0.2	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 will periodically have residual Domestic Equity securities from transitions.

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

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



	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>	<u>2017 Calendar Return</u>	<u>2016 Calendar Return</u>
Total Domestic Equity					
ACTIVE DOMESTIC EQUITY AGGREGATE (1)	27.3%	27.6%	-6.5%	20.6%	10.9%
Active Domestic Equity Benchmark	19.8	28.2	-8.0	18.3	15.7
Excess	7.5	-0.6	1.4	2.3	-4.8
SEMI PASSIVE DOMESTIC EQUITY AGGREGATE (2)	21.0	30.9	-4.9	22.5	11.1
Semi Passive Domestic Equity Benchmark	21.0	31.4	-4.8	21.7	12.1
Excess	0.0	-0.5	-0.1	0.8	-1.0
PASSIVE DOMESTIC EQUITY AGGREGATE (3)	20.8	31.3	-5.0	21.3	12.6
Passive Domestic Equity Benchmark	20.8	31.3	-5.0	21.5	12.5
Excess	0.0	0.0	-0.0	-0.2	0.1
TRANSITION AGGREGATE DOMESTIC EQUITY (4)					
TOTAL DOMESTIC EQUITY (5)	21.7%	30.7%	-5.3%	21.4%	11.5
Domestic Equity Benchmark	20.8%	30.8%	-5.2%	21.1%	12.7
Excess	0.9%	-0.1%	-0.0%	0.2%	-1.3

(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 will periodically have residual Domestic Equity securities from transitions.

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

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



	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
Active Large Cap Growth										
SANDS	\$339,106,031	1.2%	-2.5%	32.9%	83.3%	29.5%	27.1%	19.3%	14.1%	01/2005
Russell 1000 Growth			0.9	27.3	62.7	22.8	21.0	16.6	11.9	01/2005
Excess			-3.4	5.6	20.6	6.8	6.1	2.7	2.2	
WINSLOW	213,539,434	0.7	0.8	23.7	58.1	22.2	21.8	15.9	12.5	01/2005
Russell 1000 Growth			0.9	27.3	62.7	22.8	21.0	16.6	11.9	01/2005
Excess			-0.2	-3.6	-4.6	-0.6	0.8	-0.8	0.6	
RUSSELL 1000 GROWTH AGGREGATE (1)	552,645,465	1.9	-1.3	36.5	93.0	33.2	29.4	19.7		
Russell 1000 Growth			0.9	27.3	62.7	22.8	21.0	16.6		
Excess			-2.2	9.2	30.3	10.4	8.4	3.1		

(1) Prior to 1/1/2021 the Russell 1000 Growth Aggregate included returns from Zevenbergen, which moved to the Russell 3000 Growth benchmark and is now reported separately.



	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>	<u>2017 Calendar Return</u>	<u>2016 Calendar Return</u>
Active Large Cap Growth					
SANDS	71.0%	33.5%	7.0%	35.3%	-6.9%
Russell 1000 Growth	38.5	36.4	-1.5	30.2	7.1
Excess	32.5	-2.8	8.6	5.1	-13.9
WINSLOW	37.6	34.2	4.2	33.2	-1.9
Russell 1000 Growth	38.5	36.4	-1.5	30.2	7.1
Excess	-0.9	-2.2	5.7	3.0	-9.0
RUSSELL 1000 GROWTH AGGREGATE (1)	81.3%	37.3%	4.7%	33.4%	1.0
Russell 1000 Growth	38.5%	36.4%	-1.5%	30.2%	7.1
Excess	42.8%	0.9%	6.2%	3.2%	-6.1

(1) Prior to 1/1/2021 the Russell 1000 Growth Aggregate included returns from Zevenbergen, which moved to the Russell 3000 Growth benchmark and is now reported separately.



	<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	\$1,521,112,358	5.3%	6.4%	30.9%	60.0%	16.9%	17.4%	14.8%	10.8%	01/1995
Semi Passive Domestic Equity Benchmark			5.9	31.8	60.6	17.3	16.7	14.0	10.4	01/1995
Excess			0.5	-0.9	-0.6	-0.4	0.7	0.8	0.4	
J.P. MORGAN	1,498,171,163	5.2	6.7	32.5	62.0	17.6	16.9	14.3	10.7	01/1995
Semi Passive Domestic Equity Benchmark			5.9	31.8	60.6	17.3	16.7	14.0	10.4	01/1995
Excess			0.8	0.7	1.4	0.3	0.2	0.4	0.3	
SEMI-PASSIVE DOMESTIC EQUITY AGGREGATE	3,019,283,521	10.5	6.5	31.7	61.0	17.3	16.7	14.2		
Semi Passive Domestic Equity Benchmark			5.9	31.8	60.6	17.3	16.7	14.0		
Excess			0.6	-0.1	0.4	-0.0	0.0	0.3		



	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>	<u>2017 Calendar Return</u>	<u>2016 Calendar Return</u>
Semi-Passive Large Cap					
BLACKROCK	20.7%	30.4%	-4.1%	24.6%	12.5%
Semi Passive Domestic Equity Benchmark	21.0	31.4	-4.8	21.7	12.1
Excess	-0.3	-1.0	0.7	2.9	0.5
J.P. MORGAN					
J.P. MORGAN	21.2	31.3	-5.4	21.8	12.3
Semi Passive Domestic Equity Benchmark	21.0	31.4	-4.8	21.7	12.1
Excess	0.3	-0.1	-0.6	0.1	0.2
SEMI-PASSIVE DOMESTIC EQUITY AGGREGATE					
SEMI-PASSIVE DOMESTIC EQUITY AGGREGATE	21.0%	30.9%	-4.9%	22.5%	11.1
Semi Passive Domestic Equity Benchmark	21.0%	31.4%	-4.8%	21.7%	12.1
Excess	0.0%	-0.5%	-0.1%	0.8%	-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 Large Cap Value										
BARROW HANLEY	\$407,062,313	1.4%	13.1%	40.6%	67.7%	12.6%	12.4%	11.4%	8.7%	04/2004
Russell 1000 Value			11.3	36.6	56.1	11.0	11.7	11.0	8.3	04/2004
Excess			1.9	4.0	11.6	1.6	0.6	0.4	0.4	
LSV	420,641,290	1.5	17.7	47.5	72.3	9.7	12.5	12.1	9.4	04/2004
Russell 1000 Value			11.3	36.6	56.1	11.0	11.7	11.0	8.3	04/2004
Excess			6.4	10.9	16.3	-1.3	0.8	1.1	1.1	
RUSSELL 1000 VALUE AGGREGATE	827,703,604	2.9	15.5	43.5	69.6	11.7	13.3	11.4		
Russell 1000 Value			11.3	36.6	56.1	11.0	11.7	11.0		
Excess			4.3	6.9	13.5	0.8	1.5	0.4		



	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>	<u>2017 Calendar Return</u>	<u>2016 Calendar Return</u>
Active Large Cap Value					
BARROW HANLEY	2.4%	26.9%	-5.9%	14.6%	12.8%
Russell 1000 Value	2.8	26.5	-8.3	13.7	17.3
Excess	-0.4	0.4	2.4	0.9	-4.5
LSV					
LSV	-1.3	26.9	-11.8	18.6	17.0
Russell 1000 Value	2.8	26.5	-8.3	13.7	17.3
Excess	-4.1	0.4	-3.6	4.9	-0.4
RUSSELL 1000 VALUE AGGREGATE					
RUSSELL 1000 VALUE AGGREGATE	1.6%	27.4%	-8.7%	17.3%	15.3
Russell 1000 Value	2.8%	26.5%	-8.3%	13.7%	17.3
Excess	-1.2%	0.9%	-0.4%	3.7%	-2.1



	<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>
Active Small Cap Growth										
ARROWMARK	\$232,888,302	0.8%	5.8%	45.6%	89.9%	14.9%			18.9%	11/2016
Russell 2000 Growth			4.9	45.7	90.2	17.2			19.8	11/2016
Excess			0.9	-0.1	-0.3	-2.2			-0.9	
HOOD RIVER	282,228,764	1.0	11.3	67.1	132.5	27.0			25.6	11/2016
Russell 2000 Growth			4.9	45.7	90.2	17.2			19.8	11/2016
Excess			6.5	21.5	42.3	9.8			5.8	
RICE HALL JAMES	240,935,811	0.8	8.2	37.9	89.3	11.2			18.4	11/2016
Russell 2000 Growth			4.9	45.7	90.2	17.2			19.8	11/2016
Excess			3.3	-7.7	-0.9	-6.0			-1.4	
WELLINGTON	301,912,036	1.1	1.9	42.3	84.4	16.6			19.6	11/2016
Russell 2000 Growth			4.9	45.7	90.2	17.2			19.8	11/2016
Excess			-2.9	-3.3	-5.8	-0.6			-0.2	
RUSSELL 2000 GROWTH AGGREGATE	1,057,964,914	3.7	6.7	48.7	99.1	17.7	18.0	11.4		
Russell 2000 Growth			4.9	45.7	90.2	17.2	18.6	13.0		
Excess			1.8	3.0	8.9	0.5	-0.6	-1.6		



	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>	<u>2017 Calendar Return</u>	<u>2016 Calendar Return</u>
Active Small Cap Growth					
ARROWMARK	21.9%	20.1%	0.9%	26.2%	
Russell 2000 Growth	34.6	28.5	-9.3	22.2	
Excess	-12.8	-8.4	10.3	4.1	
HOOD RIVER	61.7	24.3	-7.0	21.3	
Russell 2000 Growth	34.6	28.5	-9.3	22.2	
Excess	27.0	-4.2	2.3	-0.9	
RICE HALL JAMES	23.8	18.0	-6.9	27.9	
Russell 2000 Growth	34.6	28.5	-9.3	22.2	
Excess	-10.8	-10.5	2.4	5.8	
WELLINGTON	33.1	35.6	-11.6	22.6	
Russell 2000 Growth	34.6	28.5	-9.3	22.2	
Excess	-1.5	7.1	-2.3	0.4	
RUSSELL 2000 GROWTH AGGREGATE	35.4%	24.6%	-6.2%	22.0%	4.7
Russell 2000 Growth	34.6%	28.5%	-9.3%	22.2%	11.3
Excess	0.8%	-3.9%	3.2%	-0.1%	-6.6



	<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	\$404,790,943	1.4%	16.8%	58.1%	86.0%	9.2%	12.3%	10.8%	9.7%	01/2004
Russell 2000 Value			21.2	65.7	97.1	11.6	13.6	10.1	8.7	01/2004
Excess			-4.3	-7.7	-11.1	-2.4	-1.3	0.7	1.0	
HOTCHKIS AND WILEY	247,904,121	0.9	22.5	71.4	109.4	9.0	10.8	9.7	8.6	01/2004
Russell 2000 Value			21.2	65.7	97.1	11.6	13.6	10.1	8.7	01/2004
Excess			1.3	5.7	12.4	-2.6	-2.8	-0.4	-0.1	
MARTINGALE	242,334,073	0.8	24.0	59.5	93.1	7.5	11.1	10.4	8.2	01/2004
Russell 2000 Value			21.2	65.7	97.1	11.6	13.6	10.1	8.7	01/2004
Excess			2.8	-6.2	-3.9	-4.1	-2.4	0.4	-0.6	
PEREGRINE	358,536,311	1.3	19.2	67.4	106.8	9.6	13.0	10.1	10.5	07/2000
Russell 2000 Value			21.2	65.7	97.1	11.6	13.6	10.1	10.0	07/2000
Excess			-2.0	1.6	9.8	-2.0	-0.6	0.0	0.5	
RUSSELL 2000 VALUE AGGREGATE	1,253,565,447	4.4	19.8	63.4	97.6	8.7	11.8	10.1		
Russell 2000 Value			21.2	65.7	97.1	11.6	13.6	10.1		
Excess			-1.4	-2.3	0.6	-2.9	-1.8	0.1		



	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>	<u>2017 Calendar Return</u>	<u>2016 Calendar Return</u>
Active Small Cap Value					
GOLDMAN SACHS	2.4%	23.2%	-13.3%	12.6%	24.6%
Russell 2000 Value	4.6	22.4	-12.9	7.8	31.7
Excess	-2.3	0.8	-0.5	4.7	-7.1
HOTCHKIS AND WILEY	-0.2	19.7	-14.4	7.9	19.9
Russell 2000 Value	4.6	22.4	-12.9	7.8	31.7
Excess	-4.8	-2.7	-1.5	0.0	-11.8
MARTINGALE	-4.6	21.1	-15.0	6.9	34.3
Russell 2000 Value	4.6	22.4	-12.9	7.8	31.7
Excess	-9.2	-1.3	-2.1	-0.9	2.5
PEREGRINE	7.3	21.1	-16.1	12.5	27.8
Russell 2000 Value	4.6	22.4	-12.9	7.8	31.7
Excess	2.7	-1.3	-3.3	4.7	-3.9
RUSSELL 2000 VALUE AGGREGATE	1.5%	21.3%	-14.7%	10.2%	26.5
Russell 2000 Value	4.6%	22.4%	-12.9%	7.8%	31.7
Excess	-3.1%	-1.1%	-1.8%	2.3%	-5.2



	<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 All Cap										
ZEVENBERGEN (1)	\$387,584,858	1.4%	-8.2%	36.9%	110.7%	40.8%	34.6%	20.2%	13.7%	04/1994
Zevenbergen Benchmark			1.2	27.6	63.1	22.9	21.1	16.7	11.0	04/1994
Excess			-9.4	9.2	47.5	17.9	13.5	3.5	2.7	

ACTIVE RUSSELL 3000 GROWTH (2)	\$387,584,858		-8.2							
RUSSELL 3000 Growth			1.2							
Excess			-9.4							

(1) Effective January 1, 2021 the SBI changed the Zevenbergen Benchmark to the Russell 3000 Growth. Prior to this date it was the Russell 1000 Growth.

(2) Prior to 1/1/2021 Zevenbergen returns were reported as part of the Russell 1000 Growth Aggregate.



	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>	<u>2017 Calendar Return</u>	<u>2016 Calendar Return</u>
Active All Cap					
ZEVENBERGEN (1)	126.2%	43.0%	2.3%	35.1%	-2.8%
Zevenbergen Benchmark	38.5	36.4	-1.5	30.2	7.1
Excess	87.7	6.7	3.8	4.9	-9.9

ACTIVE RUSSELL 3000 GROWTH (2)

RUSSELL 3000 Growth
Excess

(1) Effective January 1, 2021 the SBI changed the Zevenbergen Benchmark to the Russell 3000 Growth. Prior to this date it was the Russell 1000 Growth.

(2) Prior to 1/1/2021 Zevenbergen returns were reported as part of the Russell 1000 Growth Aggregate.

Minnesota State Board of Investment
Quarter Ending March 31, 2021
Domestic Equity Managers



	<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	\$20,236,527,832	70.7%	5.9%	31.9%	60.5%	17.3%			17.8%	11/2016
RUSSELL 1000 (DAILY)			5.9	31.8	60.6	17.3			17.9	11/2016
Excess			0.0	0.0	-0.0	-0.0			-0.0	
BLACKROCK RUSSELL 2000	137,458,636	0.5	13.1	55.6	95.4				19.4	11/2018
RUSSELL 2000 (DAILY)			12.7	55.4	94.8				18.9	11/2018
Excess			0.4	0.2	0.6				0.5	
BLACKROCK RUSSELL 3000 (1)	1,166,940,653	4.1	6.4	33.4	62.9	17.3	16.7%	13.8%	10.2	07/1995
Passive Manager Benchmark			6.3	33.2	62.5	17.1	16.6	13.8	10.1	07/1995
Excess			0.1	0.2	0.3	0.1	0.1	0.0	0.1	
PASSIVE DOMESTIC EQUITY AGGREGATE (2)	21,540,927,122	75.2	6.0	32.2	61.1	17.2	16.7	13.8		
Passive Domestic Equity Benchmark			6.0	32.1	61.1	17.1	16.7	13.8		
Excess			0.0	0.1	0.0	0.0	-0.0	-0.0		

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

(2) The current Passive Domestic Equity Benchmark is a weighted average of the Russell 1000, Russell 2000 and Russell 3000.

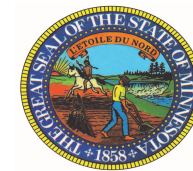


	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>	<u>2017 Calendar Return</u>	<u>2016 Calendar Return</u>
Total Passive Domestic Equity					
BLACKROCK RUSSELL 1000	20.9%	31.4%	-4.8%	21.7%	
RUSSELL 1000 (DAILY)	21.0	31.4	-4.8	21.7	
Excess	-0.0	0.0	-0.0	-0.0	
BLACKROCK RUSSELL 2000	20.8	25.2			
RUSSELL 2000 (DAILY)	20.0	25.5			
Excess	0.8	-0.3			
BLACKROCK RUSSELL 3000 (1)	21.2	31.1	-5.2	21.1	12.7%
Passive Manager Benchmark	20.9	31.0	-5.2	21.1	12.7
Excess	0.3	0.0	-0.0	0.0	0.0
PASSIVE DOMESTIC EQUITY AGGREGATE (2)	20.8%	31.3%	-5.0%	21.3%	12.6
Passive Domestic Equity Benchmark	20.8%	31.3%	-5.0%	21.5%	12.5
Excess	0.0%	0.0%	-0.0%	-0.2%	0.1

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

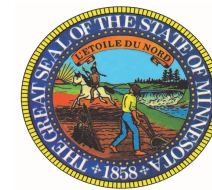
(2) The current Passive Domestic Equity Benchmark is a weighted average of the Russell 1000, Russell 2000 and Russell 3000.

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International Equity

March 31, 2021



	<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)	\$9,414,421,114	67.2%	4.1%	27.4%	47.7%	7.0%	9.3%	6.0%		
BENCHMARK DM			4.0	26.5	45.9	6.3	8.9	5.2		
Excess			0.1	0.9	1.9	0.7	0.4	0.8		
EMERGING MARKETS (2)(5)	3,953,679,723	28.2	3.3	36.6	62.5	7.1	12.0	3.7		
BENCHMARK EM			2.3	34.1	58.4	6.5	12.1	3.7		
Excess			1.0	2.4	4.1	0.6	-0.1	0.0		
ACWI EX-US AGGREGATE	394,104,635	2.8	3.9							
MSCI AC WORLD ex US (NET) - DAILY			3.5							
Excess			0.4							
CHINA ONLY AGGREGATE	196,516,065	1.4	-6.4							
MSCI China A			-4.2							
Excess			-2.2							
TRANSITION AGGREGATE INTERNATIONAL EQUITY (3)	996,819	0.0								
TOTAL INTERNATIONAL EQUITY (4)(5)	13,999,783,849	100.0	4.2	30.0	51.8	7.1	10.0	5.5	6.8	10/1992
International Equity Benchmark			3.5	28.5	49.2	6.5	9.7	4.9	6.3	10/1992
Excess			0.7	1.5	2.6	0.6	0.3	0.6	0.5	

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

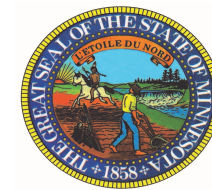
(2) The current benchmark for Emerging Markets, Benchmark EM, is the Standard (large + mid) MSCI Emerging Markets Free (net).

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

(4) The current International Equity Benchmark is the MSCI ACWI ex USA (net). Does not includes 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.

(5) See page 40 for details on a 4Q2020 performance revision.

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



	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>	<u>2017 Calendar Return</u>	<u>2016 Calendar Return</u>
Total International Equity					
DEVELOPED MARKETS (1)	9.1%	23.3%	-14.2%	24.9%	1.3%
BENCHMARK DM	7.6	22.5	-14.1	24.2	2.7
Excess	1.5	0.8	-0.1	0.7	-1.5
EMERGING MARKETS (2)(5)					
EMERGING MARKETS (2)(5)	17.9	20.3	-15.4	37.7	7.5
BENCHMARK EM	18.3	18.4	-14.6	37.3	11.2
Excess	-0.4	1.9	-0.8	0.4	-3.7
ACWI EX-US AGGREGATE					
MSCI AC WORLD ex US (NET) - DAILY					
Excess					
CHINA ONLY AGGREGATE					
MSCI China A					
TOTAL INTERNATIONAL EQUITY (4)(5)					
TOTAL INTERNATIONAL EQUITY (4)(5)	11.4%	22.4%	-14.5%	27.6%	2.6
International Equity Benchmark	10.5%	21.5%	-14.2%	27.2%	4.5
Excess	0.8%	0.9%	-0.3%	0.4%	-1.8

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

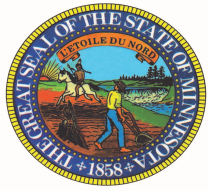
(2) The current benchmark for Emerging Markets, Benchmark EM, is the Standard (large + mid) MSCI Emerging Markets Free (net).

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

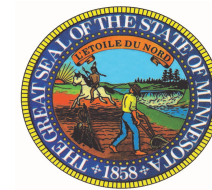
(4) The current International Equity Benchmark is the MSCI ACWI ex USA (net). Does not includes impact of currency overlay on the passive EAFE portfolio from 12/1/95-10/31/00. This impact is included in the return for the Combined Funds portion of the International Equity portfolio.

(5) See page 40 for details on a 4Q2020 performance revision.

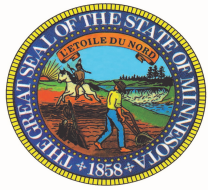
Note: All aggregates include the performance of terminated managers. For historical benchmark details please refer to the addendum of this report.



	<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	\$372,583,446	2.7%	5.7%	29.2%	52.0%	6.9%	12.5%	8.6%	7.2%	07/2005
BENCHMARK DM			4.0	26.5	45.9	6.3	8.9	5.2	5.5	07/2005
Excess			1.7	2.7	6.2	0.5	3.5	3.4	1.7	
COLUMBIA	414,602,344	3.0	3.8	30.3	50.8	9.7	11.5	7.5	4.0	03/2000
BENCHMARK DM			4.0	26.5	45.9	6.3	8.9	5.2	4.0	03/2000
Excess			-0.3	3.8	4.9	3.3	2.6	2.3	0.1	
FIDELITY	389,628,290	2.8	3.8	29.1	53.6	9.9	11.3	7.4	7.4	07/2005
BENCHMARK DM			4.0	26.5	45.9	6.3	8.9	5.2	5.5	07/2005
Excess			-0.2	2.6	7.7	3.5	2.3	2.2	1.9	
JP MORGAN	338,740,301	2.4	1.5	25.7	47.9	8.0	11.2	6.1	6.0	07/2005
BENCHMARK DM			4.0	26.5	45.9	6.3	8.9	5.2	5.5	07/2005
Excess			-2.6	-0.8	2.1	1.7	2.3	0.9	0.5	
MARATHON	393,398,598	2.8	6.0	33.2	52.4	7.5	8.9	7.3	8.2	11/1993
BENCHMARK DM			4.0	26.5	45.9	6.3	8.9	5.2	5.4	11/1993
Excess			2.0	6.7	6.5	1.2	0.0	2.1	2.9	
MCKINLEY	280,359,090	2.0	1.8	25.8	53.5	8.0	9.8	6.4	5.7	07/2005
BENCHMARK DM			4.0	26.5	45.9	6.3	8.9	5.2	5.5	07/2005
Excess			-2.2	-0.7	7.7	1.7	0.8	1.2	0.2	
AQR CAPITAL MANAGEMENT	392,901,254	2.8	6.5	30.4	52.8	4.4	7.7	5.4	5.7	07/2005
BENCHMARK DM			4.0	26.5	45.9	6.3	8.9	5.2	5.5	07/2005
Excess			2.4	4.0	7.0	-2.0	-1.2	0.2	0.2	



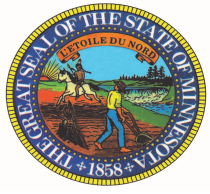
	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>	<u>2017 Calendar Return</u>	<u>2016 Calendar Return</u>
Active Developed Markets					
ACADIAN	11.7%	19.1%	-13.5%	37.0%	8.1%
BENCHMARK DM	7.6	22.5	-14.1	24.2	2.7
Excess	4.2	-3.4	0.6	12.8	5.4
COLUMBIA	15.0	28.9	-14.9	32.7	-5.6
BENCHMARK DM	7.6	22.5	-14.1	24.2	2.7
Excess	7.4	6.4	-0.8	8.5	-8.3
FIDELITY	15.4	27.1	-14.6	25.9	1.2
BENCHMARK DM	7.6	22.5	-14.1	24.2	2.7
Excess	7.8	4.6	-0.5	1.7	-1.5
JP MORGAN	14.2	28.5	-17.3	28.3	4.0
BENCHMARK DM	7.6	22.5	-14.1	24.2	2.7
Excess	6.6	6.0	-3.3	4.1	1.2
MARATHON	7.6	23.5	-13.4	23.1	-1.1
BENCHMARK DM	7.6	22.5	-14.1	24.2	2.7
Excess	0.1	1.0	0.7	-1.1	-3.8
MCKINLEY	16.4	25.6	-15.9	28.5	-7.5
BENCHMARK DM	7.6	22.5	-14.1	24.2	2.7
Excess	8.8	3.1	-1.9	4.3	-10.2
AQR CAPITAL MANAGEMENT	6.5	20.8	-18.2	25.1	0.8
BENCHMARK DM	7.6	22.5	-14.1	24.2	2.7
Excess	-1.1	-1.7	-4.1	0.9	-2.0



	<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>
Total Developed Markets										
ACTIVE DEVELOPED MARKETS AGGREGATE (1)	\$2,582,213,323		4.3%	29.3%	52.0%	7.9%	10.1%	6.7%		
BENCHMARK DM			4.0	26.5	45.9	6.3	8.9	5.2		
Excess			0.3	2.8	6.1	1.5	1.2	1.5		
SSgA DEVELOPED MARKETS PASSIVE	\$6,832,207,791	48.8%	4.1%	26.7%	46.5%	6.8%	9.3%	5.6%	6.5%	10/1992
BENCHMARK DM			4.0%	26.5%	45.9%	6.3%	8.9%	5.2%	6.1%	10/1992
Excess			0.1%	0.3%	0.6%	0.4%	0.4%	0.4%	0.3%	
RECORD CURRENCY (2)	\$40,065,493	0.3%	0.9%						0.6%	10/2020
DM PASSIVE EQUITY WITH CURRENCY MGMT	\$6,872,273,284	49.1%	5.0%	27.5%	47.4%	7.0%	9.3%	5.6%		10/1992
BENCHMARK DM			4.0%	26.5%	45.9%	6.3%	8.9%	5.2%		10/1992
Excess			0.9%	1.1%	1.6%	0.7%	0.4%	0.4%		
DEVELOPED MARKETS TOTAL	9,414,421,114	67.2	4.1	27.4	47.7	7.0	9.3	6.0		
BENCHMARK DM			4.0	26.5	45.9	6.3	8.9	5.2		
Excess			0.1	0.9	1.9	0.7	0.4	0.8		

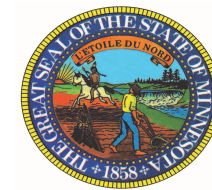
(1) Includes the historical returns of AQR and terminated managers previously classified as "Semi-Passive Developed Markets"

(2) Return for Record Currency is provided by the Manager



	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>	<u>2017 Calendar Return</u>	<u>2016 Calendar Return</u>
Total Developed Markets					
ACTIVE DEVELOPED MARKETS AGGREGATE (1)	12.2%	24.4%	-15.1%	26.8%	-0.3%
BENCHMARK DM	7.6	22.5	-14.1	24.2	2.7
Excess	4.6	1.9	-1.0	2.6	-3.0
SSgA DEVELOPED MARKETS PASSIVE	8.2%	23.0%	-13.9%	24.7%	3.2
BENCHMARK DM	7.6%	22.5%	-14.1%	24.2%	2.7
Excess	0.6%	0.5%	0.2%	0.5%	0.4
DM PASSIVE EQUITY WITH CURRENCY MGMT	8.0%	23.0%	-13.9%	23.8%	3.3
BENCHMARK DM	7.6%	22.5%	-14.1%	24.2%	2.7
Excess	0.4%	0.5%	0.2%	-0.4%	0.5
DEVELOPED MARKETS TOTAL	9.1%	23.3%	-14.2%	24.9%	1.3
BENCHMARK DM	7.6%	22.5%	-14.1%	24.2%	2.7
Excess	1.5%	0.8%	-0.1%	0.7%	-1.5

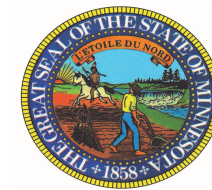
(1) Includes the historical returns of AQR and terminated managers previously classified as "Semi-Passive Developed Markets"



	<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										
MARTIN CURRIE	507,685,684	3.6	2.3	40.5	66.6	10.6			15.8	04/2017
BENCHMARK EM			2.3	34.1	58.4	6.5			10.8	04/2017
Excess			-0.0	6.3	8.2	4.2			5.0	
MACQUARIE	469,644,584	3.4	3.2	35.9	70.6	10.8			13.9	04/2017
BENCHMARK EM			2.3	34.1	58.4	6.5			10.8	04/2017
Excess			0.9	1.8	12.3	4.3			3.1	
MORGAN STANLEY	554,325,299	4.0	1.8	33.6	59.1	5.3	10.7%	4.4%	9.8	01/2001
BENCHMARK EM			2.3	34.1	58.4	6.5	12.1	3.7	9.6	01/2001
Excess			-0.5	-0.6	0.7	-1.2	-1.4	0.8	0.1	
NEUBERGER BERMAN	438,622,758	3.1	2.7	30.0	52.4	4.8			10.1	04/2017
BENCHMARK EM			2.3	34.1	58.4	6.5			10.8	04/2017
Excess			0.5	-4.2	-6.0	-1.6			-0.7	
PZENA	379,020,805	2.7	12.0	50.7	76.1	6.7			9.0	04/2017
BENCHMARK EM			2.3	34.1	58.4	6.5			10.8	04/2017
Excess			9.7	16.5	17.7	0.2			-1.8	
ROCK CREEK	464,509,207	3.3	2.9	36.3	64.9	7.8			10.8	04/2017
BENCHMARK EM			2.3	34.1	58.4	6.5			10.8	04/2017
Excess			0.6	2.2	6.5	1.3			0.0	



	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>	<u>2017 Calendar Return</u>	<u>2016 Calendar Return</u>
Active Emerging Markets					
MARTIN CURRIE	26.5	27.3	-16.6		
BENCHMARK EM	18.3	18.4	-14.6		
Excess	8.2	8.8	-2.0		
MACQUARIE	24.2	23.2	-13.3		
BENCHMARK EM	18.3	18.4	-14.6		
Excess	5.9	4.7	1.3		
MORGAN STANLEY	15.7	20.4	-16.7	37.9%	6.1%
BENCHMARK EM	18.3	18.4	-14.6	37.3	11.2
Excess	-2.6	1.9	-2.2	0.6	-5.1
NEUBERGER BERMAN	14.2	19.7	-17.1		
BENCHMARK EM	18.3	18.4	-14.6		
Excess	-4.1	1.3	-2.6		
PZENA	7.7	13.4	-10.8		
BENCHMARK EM	18.3	18.4	-14.6		
Excess	-10.6	-5.1	3.8		
ROCK CREEK	22.0	22.3	-17.6		
BENCHMARK EM	18.3	18.4	-14.6		
Excess	3.7	3.9	-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(1)	\$2,813,808,338	20.1%	3.7%	37.8%	64.5%	7.3%	11.7%	3.5%		
BENCHMARK EM			2.3	34.1	58.4	6.5	12.1	3.7		
Excess			1.4	3.7	6.1	0.9	-0.4	-0.1		
SSGA EMERGING MARKETS PASSIVE	1,139,871,385	8.1	2.4	33.6	58.0	6.4	12.0		6.6	01/2012
BENCHMARK EM			2.3	34.1	58.4	6.5	12.1		6.5	01/2012
Excess			0.1	-0.5	-0.4	-0.0	-0.1		0.1	
EMERGING MARKETS TOTAL(1)	3,953,679,723	28.2	3.3	36.6	62.5	7.1	12.0	3.7		
BENCHMARK EM			2.3	34.1	58.4	6.5	12.1	3.7		
Excess			1.0	2.4	4.1	0.6	-0.1	-0.0		

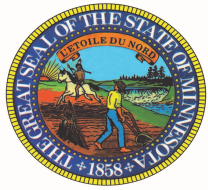
(1) Earnest Partners EM transitioned its portfolio benchmark to the MSCI China A Index (Gross) during December 2020. Post publication of the 12-31-2020 Comprehensive Performance Report, an error was discovered in the performance reported in that period for Earnest Partners EM as it transitioned from the Emerging Markets Total to the China Only Aggregate. The 3-31-2021 returns reflect the following performance that should have been reported for the period ending 12-31-2020:

Earnest Partners EM 4Q20: 26.3, FYTD: 35.1, 1 Year: 9.6, 3 Year: 5.0, Since Inception: 9.7, Ending Market Value: \$209,952,131

Active Emerging Markets 4Q20: 20.8, FYTD: 32.9, 1 Year: 17.6, 3 Year: 6.4, 5 Year: 11.7, 10 year: 3.2, Ending Market Value: \$3,086,121,450

Emerging Markets Total 4Q20: 20.4, FYTD: 32.2, 1 Year: 17.9, 3 Year: 6.3, 5 Year: 12.2, 10 year: 3.4, Ending Market Value: \$4,270,411,993

Total International Equity 4Q20: 17.0, 1 Year: 11.4, Ending Market Value: \$14,085,885,523



	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>	<u>2017 Calendar Return</u>	<u>2016 Calendar Return</u>
Total Emerging Markets					
ACTIVE EMERGING MARKETS AGGREGATE (1)	17.6%	21.4%	-15.6%	37.2%	5.3%
BENCHMARK EM	18.3	18.4	-14.6	37.3	11.2
Excess	-0.7	3.0	-1.0	-0.1	-5.9
SSGA EMERGING MARKETS PASSIVE	18.3%	18.1%	-14.7%	37.4%	11.1
BENCHMARK EM	18.3%	18.4%	-14.6%	37.3%	11.2
Excess	0.0%	-0.3%	-0.1%	0.1%	-0.1
EMERGING MARKETS TOTAL (1)	17.9%	20.3%	-15.4%	37.7%	7.5
BENCHMARK EM	18.3%	18.4%	-14.6%	37.3%	11.2
Excess	-0.4%	1.9%	-0.8%	0.4%	-3.7

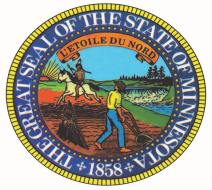
(1) Earnest Partners EM transitioned its portfolio benchmark to the MSCI China A Index (Gross) during December 2020. Post publication of the 12-31-2020 Comprehensive Performance Report, an error was discovered in the performance reported in that period for Earnest Partners EM as it transitioned from the Emerging Markets Total to the China Only Aggregate. The 3-31-2021 returns reflect the following performance that should have been reported for the period ending 12-31-2020:

Earnest Partners EM 4Q20: 26.3, FYTD: 35.1, 1 Year: 9.6, 3 Year: 5.0, Since Inception: 9.7, Ending Market Value: \$209,952,131

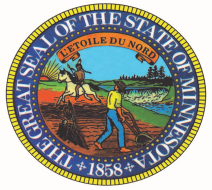
Active Emerging Markets 4Q20: 20.8, FYTD: 32.9, 1 Year: 17.6, 3 Year: 6.4, 5 Year: 11.7, 10 year: 3.2, Ending Market Value: \$3,086,121,450

Emerging Markets Total 4Q20: 20.4, FYTD: 32.2, 1 Year: 17.9, 3 Year: 6.3, 5 Year: 12.2, 10 year: 3.4, Ending Market Value: \$4,270,411,993

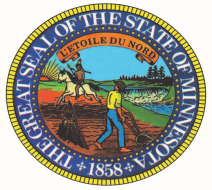
Total International Equity 4Q20: 17.0, 1 Year: 11.4, Ending Market Value: \$14,085,885,523



	<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 ACWI ex-US										
EARNEST PARTNERS ACWI EX US	\$394,104,635	2.8%	3.9%						3.9%	1/2021
MSCI AC WORLD ex US (NET) - DAILY			3.5						3.5	1/2021
Excess			0.4						0.4	
TOTAL ACWI EX-US AGGREGATE	394,104,635	2.8	3.9						3.9	1/2021
MSCI AC WORLD ex US (NET) - DAILY			3.5						3.5	1/2021
Excess			0.4						0.4	



	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>	<u>2017 Calendar Return</u>	<u>2016 Calendar Return</u>
Active ACWI ex-US					
EARNEST PARTNERS ACWI EX US					
MSCI AC WORLD ex US (NET) - DAILY					
Excess					
TOTAL ACWI EX-US AGGREGATE					
MSCI AC WORLD ex US (NET) - DAILY					
Excess					

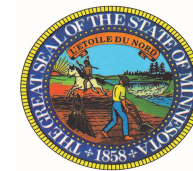


	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
China Only Managers										
EARNEST PARTNERS	\$196,516,065	1.4%	-6.4%						-6.4%	01/2021
MSCI China A			-4.2						-4.2	01/2021
Excess			-2.2						-2.2	
CHINA ONLY AGGREGATE	196,516,065	1.4%	-6.4%							
MSCI China A			-4.2%							
Excess			-2.2%							



	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>	<u>2017 Calendar Return</u>	<u>2016 Calendar Return</u>
China Only Managers					
EARNEST PARTNERS					
MSCI China A					
Excess					
CHINA ONLY AGGREGATE					
MSCI China A					
Excess					

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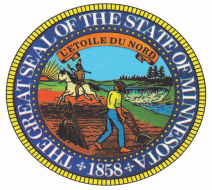


Global Equity

March 31, 2021



	<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>
Global Equity Managers										
ARIEL INVESTMENTS	\$358,206,324	33.9%	4.0%						4.0%	01/2021
MSCI AC WORLD NET USD DAILY			4.6						4.6	01/2021
Excess			-0.5						-0.5	
BAILLIE GIFFORD	309,273,142	29.3	-2.1						-2.1	01/2021
MSCI AC WORLD NET USD DAILY			4.6						4.6	01/2021
Excess			-6.7						-6.7	
MARTIN CURRIE INVESTMENTS - GLOBAL EQ	389,692,243	36.9	-0.9						-0.9	01/2021
MSCI AC WORLD NET USD DAILY			4.6						4.6	01/2021
Excess			-5.5						-5.5	
GLOBAL EQUITY	1,057,171,709	100.0	0.3						0.3	01/2021
MSCI AC WORLD NET USD DAILY			4.6						4.6	01/2021
Excess			-4.2						-4.2	



	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>	<u>2017 Calendar Return</u>	<u>2016 Calendar Return</u>
Global Equity Managers					
ARIEL INVESTMENTS					
MSCI AC WORLD NET USD DAILY					
Excess					
BAILLIE GIFFORD					
MSCI AC WORLD NET USD DAILY					
Excess					
MARTIN CURRIE INVESTMENTS - GLOBAL EQ					
MSCI AC WORLD NET USD DAILY					
Excess					
GLOBAL EQUITY					
MSCI AC WORLD NET USD DAILY					
Excess					

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Core/Core Plus Bonds

March 31, 2021



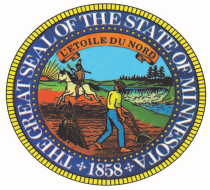
	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
Bonds										
CORE (1)	\$1,970,311,290	42.9%	-2.9%							
BBG BARC Agg (Dly)			-3.4							
Excess			0.4							
CORE PLUS (1)	2,617,223,151	57.1	-3.3							
BBG BARC Agg (Dly)			-3.4							
Excess			0.1							
TRANSITION AGGREGATE CORE BONDS (2)	19,080	0.0								
TOTAL CORE/CORE PLUS BONDS (3)	4,587,553,521	100.0	-3.1	-0.0	5.4	5.7	4.1	4.2	7.4	07/1984
Core Bonds Benchmark			-3.4	-2.1	0.7	4.7	3.1	3.4	7.0	07/1984
Excess			0.2	2.1	4.7	1.0	1.0	0.7	0.4	

(1) Prior to 12/1/2020 the Core and Core Plus managers were categorized as Active or Semi-Passive. For historical performance of each manager, see the following pages in this report. For information on the historical performance of the previous groupings refer to the 9/30/2020 Comprehensive Performance Report.

(2) The Transition Aggregate Core Bonds includes core bonds securities that are being transition to a different manager.

(3) The current Core Bonds 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>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>	<u>2017 Calendar Return</u>	<u>2016 Calendar Return</u>
Bonds					
CORE (1)					
BBG BARC Agg (Dly)					
Excess					
CORE PLUS (1)					
BBG BARC Agg (Dly)					
Excess					
TRANSITION AGGREGATE CORE BONDS (2)					
TOTAL CORE/CORE PLUS BONDS (3)	9.7%	9.7%	-0.0%	4.2%	3.6
Core Bonds Benchmark	7.5%	8.7%	0.0%	3.5%	2.6
Excess	2.2%	1.0%	-0.1%	0.7%	0.9

(1) Prior to 12/1/2020 the Core and Core Plus managers were categorized as Active or Semi-Passive. For historical performance of each manager, see the following pages in this report. For information on the historical performance of the previous groupings refer to the 9/30/2020 Comprehensive Performance Report.

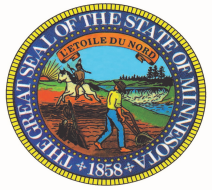
(2) The Transition Aggregate Core Bonds includes core bonds securities that are being transition to a different manager.

(3) The current Core Bonds 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 Core										
DODGE & COX	\$1,044,308,968	22.8%	-2.6%	1.1%	6.7%	5.6%	4.5%	4.4%	6.0%	02/2000
BBG BARC Agg (Dly)			-3.4	-2.1	0.7	4.7	3.1	3.4	5.0	02/2000
Excess			0.8	3.2	6.0	0.9	1.4	1.0	1.0	
BLACKROCK	926,002,322	20.2	-3.3	-1.7	2.3	5.0	3.4	3.7	5.2	04/1996
BBG BARC Agg (Dly)			-3.4	-2.1	0.7	4.7	3.1	3.4	5.1	04/1996
Excess			0.0	0.4	1.6	0.4	0.3	0.3	0.1	
CORE	1,970,311,290	42.9	-2.9							
BBG BARC Agg (Dly)			-3.4							
Excess			0.4							

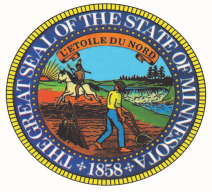


	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>	<u>2017 Calendar Return</u>	<u>2016 Calendar Return</u>
Active Core					
DODGE & COX	9.4%	9.6%	-0.0%	4.2%	4.8%
BBG BARC Agg (Dly)	7.5	8.7	0.0	3.5	2.6
Excess	1.8	0.9	-0.1	0.7	2.2
BLACKROCK					
BLACKROCK	8.3	9.3	-0.1	3.7	2.8
BBG BARC Agg (Dly)	7.5	8.7	0.0	3.5	2.6
Excess	0.8	0.6	-0.2	0.1	0.1

CORE

BBG BARC Agg (Dly)

Excess



	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
Core Plus Bonds										
GOLDMAN SACHS	\$780,389,716	17.0%	-3.9%	-1.7%	3.1%	5.2%	3.6%	3.9%	5.5%	07/1993
BBG BARC Agg (Dly)			-3.4	-2.1	0.7	4.7	3.1	3.4	5.1	07/1993
Excess			-0.6	0.4	2.4	0.5	0.5	0.4	0.3	
NEUBERGER	845,786,225	18.4	-2.7	-0.0	3.9	5.7	3.7	3.9	6.3	07/1988
BBG BARC Agg (Dly)			-3.4	-2.1	0.7	4.7	3.1	3.4	6.1	07/1988
Excess			0.6	2.1	3.2	1.1	0.6	0.5	0.3	
WESTERN	991,047,210	21.6	-3.2	1.2	8.7	6.4	5.0	4.8	8.2	07/1984
BBG BARC Agg (Dly)			-3.4	-2.1	0.7	4.7	3.1	3.4	7.0	07/1984
Excess			0.1	3.3	8.0	1.7	1.9	1.4	1.2	
CORE PLUS	2,617,223,151	57.1	-3.3							
BBG BARC Agg (Dly)			-3.4							
Excess			0.1							



	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>	<u>2017 Calendar Return</u>	<u>2016 Calendar Return</u>
Core Plus Bonds					
GOLDMAN SACHS	9.0%	9.6%	-0.0%	3.9%	3.0%
BBG BARC Agg (Dly)	7.5	8.7	0.0	3.5	2.6
Excess	1.5	0.9	-0.0	0.4	0.3
NEUBERGER	9.9	9.0	-0.1	3.6	2.7
BBG BARC Agg (Dly)	7.5	8.7	0.0	3.5	2.6
Excess	2.4	0.3	-0.1	0.0	0.1
WESTERN ASSET MANAGEMENT	10.9	11.1	-0.2	5.6	4.9
BBG BARC Agg (Dly)	7.5	8.7	0.0	3.5	2.6
Excess	3.4	2.4	-0.3	2.1	2.2

CORE PLUS

BBG BARC Agg (Dly)

Excess

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Return Seeking Bonds

March 31, 2021

Minnesota State Board of Investment
Quarter Ending March 31, 2021
Return Seeking Bonds Managers



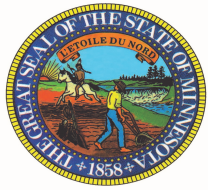
	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
Return Seeking Bonds Managers										
COLUMBIA	\$914,638,742	26.2%	-1.2%						-0.2%	12/2020
Credit Plus Benchmark			-2.6						-2.5	12/2020
Excess			1.4						2.4	
PIMCO	792,905,523	22.7	-2.2						-1.4	12/2020
Credit Plus Benchmark			-2.6						-2.5	12/2020
Excess			0.4						1.1	
CREDIT PLUS	1,707,544,265	48.9	-1.7						-0.7	12/2020
Credit Plus Benchmark			-2.6						-2.5	12/2020
Excess			0.9						1.8	
BLACKROCK	500,508,522	14.3	-0.7						-0.0	12/2020
ICE BofA US 3-Month Treasury Bill			0.0						0.0	12/2020
Excess			-0.7						-0.0	
OPPORTUNISTIC FIXED INCOME	500,508,522	14.3	-0.7						-0.0	12/2020
ICE BofA US 3-Month Treasury Bill			0.0						0.0	12/2020
Excess			-0.7						-0.0	
ASHMORE	236,818,662	6.8	-5.9						-5.9	01/2021
JPM JEMB Sovereign-only 50-50			-5.6						-5.6	01/2021
Excess			-0.3						-0.3	
EMERGING MARKET DEBT	236,818,662	6.8	-5.9						-5.9	01/2021
JPM JEMB Sovereign-only 50-50			-5.6						-5.6	01/2021
Excess			-0.3						-0.3	

Minnesota State Board of Investment
Quarter Ending March 31, 2021
Return Seeking Bonds Managers



	<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>
Return Seeking Bonds Managers										
PAYDEN RYGEL	\$249,110,542	7.1%	-0.8%						-0.8%	01/2021
Multi-Asset Credit Benchmark			-0.8						-0.8	01/2021
Excess			0.0						0.0	
PGIM	246,722,083	7.1	-1.7						-1.7	01/2021
Multi-Asset Credit Benchmark			-0.8						-0.8	01/2021
Excess			-1.0						-1.0	
MULTI-ASSET CREDIT	495,832,626	14.2	-1.3						-1.3	01/2021
Multi-Asset Credit Benchmark			-0.8						-0.8	01/2021
Excess			-0.5						-0.5	
KKR	301,772,579	8.6	0.2						0.2	01/2021
ICE BofA US Cash Pay HY Constrained			0.8						0.8	01/2021
Excess			-0.6						-0.6	
OAKTREE	252,315,826	7.2	0.2						0.2	01/2021
ICE BofA US Cash Pay HY Constrained			0.8						0.8	01/2021
Excess			-0.6						-0.6	
HIGH YIELD	554,088,405	15.9	0.2						0.2	01/2021
ICE BofA US Cash Pay HY Constrained			0.8						0.8	01/2021
Excess			-0.6						-0.6	

Minnesota State Board of Investment
Quarter Ending March 31, 2021
Return Seeking Bonds Managers



	<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>
Return Seeking Bonds Managers										
CREDIT PLUS	\$1,707,544,265	48.9%	-1.7%						-0.7%	12/2020
Credit Plus Benchmark			-2.6						-2.5	12/2020
Excess			0.9						1.8	
OPPORTUNISTIC FIXED INCOME	500,508,522	14.3	-0.7						-0.0	12/2020
ICE BofA US 3-Month Treasury Bill			0.0						0.0	12/2020
Excess			-0.7						-0.0	
EMERGING MARKET DEBT	236,818,662	6.8	-5.9						-5.9	01/2021
JPM JEMB Sovereign-only 50-50			-5.6						-5.6	01/2021
Excess			-0.3						-0.3	
MULTI-ASSET CREDIT	495,832,626	14.2	-1.3						-1.3	01/2021
Multi-Asset Credit Benchmark			-0.8						-0.8	01/2021
Excess			-0.5						-0.5	
HIGH YIELD	554,088,405	15.9	0.2						0.2	01/2021
ICE BofA US Cash Pay HY Constrained			0.8						0.8	01/2021
Excess			-0.6						-0.6	
RETURN SEEKING FIXED INCOME (1)	3,494,792,480	100.0	-1.5						-0.6	12/2020
Return Seeking Benchmark			-1.7						-1.1	12/2020
Excess			0.2						0.5	

(1)The current Return Seeking Benchmark is a weighted composite each of the individual return seeking bonds manager's benchmarks.



Treasuries

March 31, 2021

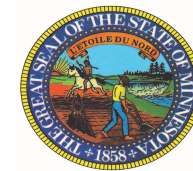


	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
Treasuries Managers										
BLACKROCK	\$2,361,520,883	31.6%	-8.7%	-10.1%	-9.9%	5.0%			4.8%	02/2018
BBG BARC 5Y + Us Tsy Idx			-8.7	-10.2	-9.7	5.2			5.0	02/2018
Excess			0.0	0.1	-0.2	-0.1			-0.1	
GOLDMAN SACHS	2,547,783,681	34.1	-8.5	-9.7	-9.4	5.2			5.0	02/2018
BBG BARC 5Y + Us Tsy Idx			-8.7	-10.2	-9.7	5.2			5.0	02/2018
Excess			0.2	0.5	0.3	0.0			0.0	
NEUBERGER	2,568,762,613	34.4	-8.2	-9.2	-8.9	5.3			5.1	02/2018
BBG BARC 5Y + Us Tsy Idx			-8.7	-10.2	-9.7	5.2			5.0	02/2018
Excess			0.6	1.0	0.8	0.2			0.1	
TREASURIES TRANSITION ACCOUNT	0	0.0								
TOTAL TREASURIES	7,478,067,178	100.0	-8.5	-9.7	-9.4	5.2			5.0%	02/2018
BBG BARC 5Y + Us Tsy Idx			-8.7	-10.2	-9.7	5.2			5.0%	02/2018
Excess			0.3	0.6	0.3	0.1			0.0%	



	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>	<u>2017 Calendar Return</u>	<u>2016 Calendar Return</u>
Treasuries Managers					
BLACKROCK	12.5%	10.4%			
BBG BARC 5Y + Us Tsy Idx	12.8	10.4			
Excess	-0.3	-0.1			
GOLDMAN SACHS	12.7	10.6			
BBG BARC 5Y + Us Tsy Idx	12.8	10.4			
Excess	-0.1	0.1			
NEUBERGER	12.8	10.4			
BBG BARC 5Y + Us Tsy Idx	12.8	10.4			
Excess	-0.1	-0.0			
TOTAL TREASURIES	12.7%	10.4%			
BBG BARC 5Y + Us Tsy Idx	12.8%	10.4%			
Excess	-0.2%	0.0%			

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Laddered Bonds + Cash

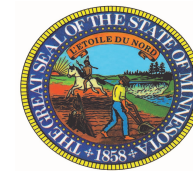
March 31, 2021

Minnesota State Board of Investment
Quarter Ending March 31, 2021
Laddered Bond + Cash Managers



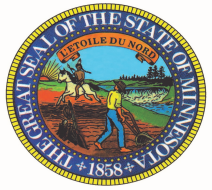
	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
Laddered Bond and Cash Managers										
Neuberger Berman Ladder Bond	\$1,646,532,722	35.9%	0.0%						0.1%	11/2020
ICE BofA US 3-Month Treasury Bill			0.0						0.0	11/2020
Excess			0.0						0.1	
Goldman Sachs Ladder Bond	1,646,086,745	35.9	0.0						0.1	11/2020
ICE BofA US 3-Month Treasury Bill			0.0						0.0	11/2020
Excess			0.0						0.0	
Treasury Ladder Aggregate	3,292,619,468	71.9	0.0						0.1	11/2020
ICE BofA US 3-Month Treasury Bill			0.0						0.0	11/2020
Excess			0.0						0.0	
COMBINED PLAN CASH ACCOUNT(1)	1,256,793,834	27.4	0.0							
iMoneyNet Money Fund Average-All Taxable			0.0							
Excess			0.0							
TEACHERS RETIREMENT CD REPO(1)	32,325,512	0.7	0.0							
iMoneyNet Money Fund Average-All Taxable			0.0							
Excess			0.0							
Laddered Bond + Cash	4,581,738,813	100.0	0.0							
ICE BofA US 3-Month Treasury Bill			0.0							
Excess			0.0							

(1) Prior to 10/1/2020 the returns for the cash accounts was not reported in this format.



Uninvested Private Markets

March 31, 2021

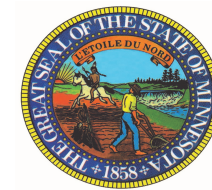


	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
Uninvested Private Markets Managers										
NISA PRIVATE MKT UNINV OVERLAY	\$2,330,673,386	29.3%	5.9%						5.9%	01/2021
S&P 500 INDEX (DAILY)			6.2						6.2	01/2021
Excess			-0.3						-0.3	
BLACKROCK SP INDEX	5,621,123,960	70.7	6.2						6.2	01/2021
S&P 500 INDEX (DAILY)			6.2						6.2	01/2021
Excess			0.0						0.0	
UNINVESTED PRIVATE PMARKETS	7,951,797,346	100.0	6.1						6.1	01/2021
S&P 500 INDEX (DAILY)			6.2						6.2	01/2021
Excess			-0.1						-0.1	



Private Markets

March 31, 2021



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 - Invested	8.7%	25.4%	14.1%	11.4%	13.1%	12.0%	12.0%	13.6%	12.6%
Private Markets - Uninvested (S&P 500)	6.1								
Private Equity	11.5%	34.9%	25.1%	17.9%	18.1%	15.4%	13.2%	15.6%	
Private Credit	3.7	9.7	2.1	8.3	11.3	12.0	11.6	12.2	
Resources	2.8	6.9	-14.0	-6.8	-0.5	1.8	11.4	12.7	
Real Estate	2.7	9.3	5.0	8.2	8.8	11.2	8.4	9.7	

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
Private Markets Investments as of March 31, 2021

Investments	Commitments	Contributions	Distributions	Remaining Commitment	Market Value	Investment Multiple	IRR	Vintage Year
Private Equity	17,084,768,476	11,924,103,883	10,883,975,252	6,270,559,430	8,593,478,576	1.63	13.25	
Adams Street Partners, LLC	200,000,000	135,814,692	62,638,088	64,185,308	117,911,493	1.33	9.96	
Adams Street Global Secondary Fund 5 LP	100,000,000	77,114,692	48,900,493	22,885,308	50,382,482	1.29	6.30	2012
Adams Street Global Secondary Fund 6	100,000,000	58,700,000	13,737,595	41,300,000	67,529,011	1.38	38.19	2017
Advent International Group	355,000,000	281,185,339	237,831,058	80,574,023	283,443,354	1.85	17.99	
Advent International GPE IX	115,000,000	48,601,383	3,675,408	70,074,025	63,348,983	1.38	41.71	2019
Advent International GPE VI-A, L.P.	50,000,000	52,993,313	101,973,095	0	6,389,789	2.04	16.65	2008
Advent International GPE VII, L.P.	90,000,000	84,690,641	101,501,690	5,400,000	59,646,774	1.90	15.08	2012
Advent International GPE VIII-B	100,000,000	94,900,002	30,680,865	5,099,998	154,057,809	1.95	24.88	2016
Affinity Ventures	9,000,000	9,000,000	3,248,215	0	1,241,214	0.50	-12.34	
Affinity Ventures IV, L.P.	4,000,000	4,000,000	1,541,970	0	3,279	0.39	-40.37	2004
Affinity Ventures V, L.P.	5,000,000	5,000,000	1,706,245	0	1,237,936	0.59	-8.77	2008
Apax Partners	500,000,000	398,205,838	370,405,398	162,277,487	342,867,965	1.79	19.06	
Apax IX USD L.P.	150,000,000	149,445,866	48,084,795	16,028,951	225,038,615	1.83	28.68	2016
APAX VIII - USD	200,000,000	233,434,305	322,489,935	11,743,535	97,925,522	1.80	16.36	2013
Apax X USD L.P.	150,000,000	15,325,667	(169,333)	134,505,000	19,903,828	1.29	117.77	2019
Arsenal Capital Partners	75,000,000	52,537,813	2,474,447	24,823,725	52,370,524	1.04	4.22	
Arsenal Capital Partners V, L.P.	75,000,000	52,537,813	2,474,447	24,823,725	52,370,524	1.04	4.22	2019
Asia Alternatives	299,000,000	68,420,823	4,210,604	231,844,539	65,680,569	1.02	1.98	
Asia Alternatives Capital Partners V	99,000,000	66,103,650	4,210,604	34,161,712	63,363,396	1.02	1.99	2017
MN Asia Investors	200,000,000	2,317,173	0	197,682,827	2,317,173	1.00	0.00	2020
Banc Fund	276,801,387	274,474,841	209,219,835	2,326,545	194,498,197	1.47	9.58	
Banc Fund IX, L.P.	107,205,932	107,205,932	19,549,737	0	109,174,019	1.20	4.34	2014
Banc Fund VIII, L.P.	98,250,000	98,250,000	189,670,098	0	15,095,782	2.08	12.41	2008
Banc Fund X, L.P.	71,345,455	69,018,909	0	2,326,545	70,228,396	1.02	1.34	2018
BlackRock	250,000,000	186,632,097	2,660,745	67,985,426	227,367,692	1.23	20.19	
BlackRock Long Term Capital, SCSP	250,000,000	186,632,097	2,660,745	67,985,426	227,367,692	1.23	20.19	2019
Blackstone Group L.P.	840,000,000	522,938,112	587,658,001	394,042,539	261,859,537	1.62	15.70	
Blackstone Capital Partners IV, L.P.	70,000,000	84,459,884	200,025,998	1,832,302	1,500,166	2.39	37.02	2002
Blackstone Capital Partners V L.P.	140,000,000	152,334,321	242,056,247	7,027,560	1,660,256	1.60	7.91	2006
Blackstone Capital Partners VI, L.P.	100,000,000	106,255,338	116,304,239	11,175,309	61,478,964	1.67	12.20	2008
Blackstone Capital Partners VII	130,000,000	134,974,709	21,711,149	10,977,430	150,182,904	1.27	12.63	2015
Blackstone Capital Partners VIII LP	150,000,000	16,156,954	0	133,906,713	15,013,427	0.93	-7.08	2019
Blackstone Growth	250,000,000	28,756,906	7,560,367	229,123,224	32,023,820	1.38	49.80	2020
Blackstone Strategic Partners	815,500,000	584,902,053	659,870,112	273,096,208	210,402,787	1.49	10.70	
Strategic Partners III VC, L.P.	25,000,000	25,056,899	33,788,877	1,010,804	376,103	1.36	5.99	2004
Strategic Partners III-B, L.P.	100,000,000	79,581,948	118,286,611	12,351,861	394,388	1.49	6.35	2004
Strategic Partners IV VC, L.P.	40,500,000	42,125,703	60,782,583	2,297,212	2,799,229	1.51	9.04	2008
Strategic Partners IV-B	100,000,000	99,294,982	148,115,680	11,729,144	6,821,906	1.56	12.16	2008
Strategic Partners V, LP	100,000,000	86,904,989	126,519,245	21,354,151	13,544,166	1.61	18.53	2011

Minnesota State Board of Investment
Private Markets Investments as of March 31, 2021

Investments	Commitments	Contributions	Distributions	Remaining Commitment	Market Value	Investment Multiple	IRR	Vintage Year
Strategic Partners VI, L.P.	150,000,000	101,397,696	108,814,912	54,949,001	37,032,547	1.44	14.10	2014
Strategic Partners VII, L.P.	150,000,000	104,914,230	58,312,204	59,958,516	91,647,832	1.43	16.32	2016
Strategic Partners VIII	150,000,000	45,625,606	5,250,000	109,445,519	57,786,616	1.38	35.21	2018
Bridgepoint	173,225,288	69,134,010	13,311,036	104,091,278	64,427,088	1.12	11.94	
Bridgepoint Europe VI L.P.	173,225,288	69,134,010	13,311,036	104,091,278	64,427,088	1.12	11.94	2018
Brookfield Asset Management Inc.	350,000,000	202,941,774	156,329,332	178,834,002	202,350,596	1.77	44.40	
Brookfield Capital Partners Fund IV	100,000,000	99,282,747	144,955,123	21,118,820	95,050,338	2.42	50.25	2015
Brookfield Capital Partners V L.P.	250,000,000	103,659,027	11,374,209	157,715,182	107,300,258	1.14	13.64	2018
CVC Capital Partners	393,506,287	424,349,523	428,345,713	39,468,088	311,987,290	1.74	16.24	
CVC Capital Partners VI	259,511,417	270,536,478	135,903,629	37,789,479	306,058,149	1.63	15.44	2013
CVC European Equity Partners V, L.P.	133,994,870	153,813,045	292,442,084	1,678,608	5,929,142	1.94	16.76	2008
Cardinal Partners	10,000,000	10,000,000	39,196,082	0	30,625	3.92	10.61	
DSV Partners IV	10,000,000	10,000,000	39,196,082	0	30,625	3.92	10.61	1985
Carlyle Group	150,000,000	77,425,450	4,181,489	76,756,039	74,203,791	1.01	1.01	
Carlyle Partners VII, L.P.	150,000,000	77,425,450	4,181,489	76,756,039	74,203,791	1.01	1.01	2017
Chicago Growth Partners	110,000,000	106,497,626	193,069,552	3,302,374	1,076,451	1.82	12.48	
Chicago Growth Partners II, L.P.	60,000,000	58,347,626	123,371,040	1,652,374	571,224	2.12	19.55	2008
William Blair Capital Partners VII, L.P.	50,000,000	48,150,000	69,698,512	1,650,000	505,226	1.46	8.58	2001
Court Square	500,000,000	410,582,288	452,127,879	126,321,485	223,149,632	1.64	13.68	
Court Square Capital Partners II, L.P.	175,000,000	170,245,229	295,667,586	16,541,716	9,336,991	1.79	12.55	2006
Court Square Capital Partners III, L.P.	175,000,000	184,380,035	152,457,358	11,802,347	153,823,276	1.66	16.96	2012
Court Square Capital Partners IV, L.P.	150,000,000	55,957,024	4,002,935	97,977,422	59,989,365	1.14	16.94	2018
Crescendo	101,500,000	103,101,226	57,982,654	0	216,465	0.56	-4.62	
Crescendo Ventures IV	101,500,000	103,101,226	57,982,654	0	216,465	0.56	-4.62	2000
GTCR	210,000,000	209,767,876	373,244,188	15,509,513	211,166,634	2.79	28.14	
GTCR Fund X	100,000,000	104,934,096	202,619,633	6,751,396	7,614,400	2.00	21.19	2010
GTCR XI	110,000,000	104,833,780	170,624,555	8,758,117	203,552,235	3.57	41.06	2013
Goldman, Sachs & Co.	549,800,000	402,770,218	385,127,102	178,781,023	200,789,554	1.45	13.56	
GS Capital Partners V, L.P.	100,000,000	74,319,006	191,435,136	1,041,099	1,095,365	2.59	18.25	2005
GS Capital Partners VI, L.P.	100,000,000	110,258,192	134,939,054	2,551,356	9,474,919	1.31	7.13	2007
GS China-US Cooperation Fund	99,800,000	15,144,445	0	84,830,000	11,154,731	0.74	-16.06	2018
GS Vintage VII	100,000,000	79,914,100	28,412,623	48,618,662	77,531,507	1.33	13.96	2016
West Street Capital Partners VII, L.P.	150,000,000	123,134,475	30,340,289	41,739,906	101,533,032	1.07	4.25	2016
Goldner Hawn Johnson & Morrison	77,755,138	29,155,440	29,444,283	48,771,665	30,032,696	2.04	17.00	
GHJM TrailHead Fund	20,000,000	16,652,130	29,444,283	3,354,486	17,480,144	2.82	17.88	2012
Goldner Hawn Fund VII, L.P.	57,755,138	12,503,309	0	45,417,179	12,552,552	1.00	0.34	2018
Green Equity Investors	325,000,000	237,480,683	166,501,812	124,064,948	256,424,773	1.78	14.81	
Green Equity Investors VI, L.P.	200,000,000	220,617,366	166,501,812	15,928,265	240,119,109	1.84	14.87	2012
Green Equity Investors VIII	125,000,000	16,863,317	0	108,136,683	16,305,664	0.97	-4.87	2020
HarbourVest*	21,667,185	20,931,185	21,750,040	822,141	7,543,262	1.40	11.15	
Dover Street VII Cayman Fund L.P.	2,198,112	2,073,906	1,662,612	132,416	202,973	0.90	-4.66	2014

Minnesota State Board of Investment
Private Markets Investments as of March 31, 2021

Investments	Commitments	Contributions	Distributions	Remaining Commitment	Market Value	Investment Multiple	IRR	Vintage Year
HarbourVest Intl PE Partners V-Cayman US	3,528,653	3,345,452	4,146,340	188,048	383,425	1.35	13.83	2014
Harbourvest Intl PE Partners VI-Cayman	4,242,812	4,039,120	3,715,058	205,677	3,240,054	1.72	14.82	2014
HarbourVest Partners VIII Cayman Buyout	4,506,711	4,387,189	5,055,020	156,000	924,562	1.36	12.72	2014
HarbourVest Partners VIII-Cayman Venture	7,190,898	7,085,519	7,171,009	140,000	2,792,248	1.41	9.89	2014
Hellman & Friedman	400,000,000	343,473,648	448,669,105	57,371,715	155,830,171	1.76	14.69	
Hellman & Friedman Capital Partners VI, L.P.	175,000,000	171,037,755	315,233,005	5,084,864	3,136,850	1.86	12.91	2007
Hellman & Friedman Capital Partners VII, L.P.	50,000,000	49,868,708	133,073,278	2,232,906	22,911,433	3.13	24.70	2009
Hellman & Friedman Investors IX, L.P.	175,000,000	122,567,185	362,822	50,053,945	129,781,889	1.06	11.88	2018
IK Limited	510,251,838	361,969,676	338,969,443	156,412,060	237,757,221	1.59	14.42	
IK Fund IX	158,831,226	11,505,782	0	147,325,068	7,881,749	0.69	-80.73	2019
IK Fund VII	180,622,285	178,607,264	237,205,800	8,913,791	78,753,468	1.77	13.71	2013
IK Fund VIII	170,798,327	171,856,630	101,763,643	173,201	151,122,005	1.47	17.13	2016
Kohlberg, Kravis, Roberts & Co.	997,000,000	664,853,895	793,661,130	376,077,558	348,061,221	1.72	13.20	
KKR 2006 Fund L.P.	200,000,000	218,934,618	343,350,543	3,300,979	48,642,394	1.79	9.17	2006
KKR Americas Fund XII L.P.	150,000,000	96,685,976	10,570,503	61,950,228	134,005,370	1.50	21.70	2016
KKR Asian Fund III	100,000,000	73,811,569	13,144,687	33,532,546	92,124,535	1.43	25.46	2017
KKR Asian Fund IV	150,000,000	0	0	150,000,000	0	0.00		2020
KKR Core Investments Partnership	97,000,000	28,929,639	0	68,618,328	28,381,672	0.98	-1.89	2021
KKR Europe V	100,000,000	41,324,523	1,649,369	58,675,477	44,745,326	1.12	15.91	2018
KKR Millennium Fund	200,000,000	205,167,570	424,946,028	0	161,924	2.07	16.37	2002
Lexington Partners	1,245,000,000	704,524,647	541,994,645	592,727,308	454,833,972	1.41	12.12	
Lexington Capital Partners IX, L.P.	150,000,000	52,399,402	10,459,142	104,542,055	57,551,586	1.30	71.38	2018
Lexington Capital Partners VI-B, L.P.	100,000,000	98,374,022	140,974,427	1,634,703	5,181,016	1.49	7.90	2005
Lexington Capital Partners VII, L.P.	200,000,000	172,466,709	239,641,927	38,059,995	37,657,512	1.61	14.27	2009
Lexington Capital Partners VIII, L.P.	150,000,000	136,386,669	95,500,196	32,663,555	97,814,424	1.42	15.65	2014
Lexington Co-Investment Partners IV	200,000,000	197,734,406	46,184,888	17,990,439	211,742,285	1.30	14.34	2017
Lexington Co-Investment Partners V	300,000,000	0	0	300,000,000	0	0.00		2020
Lexington Co-Investment Partners V Overage	45,000,000	1,881,000	0	43,119,000	1,881,000	1.00	0.00	2021
Lexington Middle Market Investors IV	100,000,000	45,282,439	9,234,065	54,717,561	43,006,150	1.15	16.77	2016
Madison Dearborn Capital Partners LLC	200,000,000	106,745,512	20,769,344	107,821,905	123,698,669	1.35	13.47	
Madison Dearborn Capital Partners VII, L.P.	100,000,000	94,367,417	20,769,344	20,200,000	107,953,557	1.36	12.59	2015
Madison Dearborn Capital Partners VIII-A, L.P.	100,000,000	12,378,095	0	87,621,905	15,745,111	1.27	27.52	2019
Neuberger Berman LLC	625,000,000	289,413,256	209,994,958	508,476,187	231,589,791	1.53	33.77	
Dyal Capital Partners III	175,000,000	191,137,715	159,319,479	106,482,937	136,000,723	1.55	29.18	2015
Dyal Capital Partners IV	250,000,000	87,275,541	50,633,381	212,993,250	84,589,067	1.55	64.00	2018
Dyal Capital Partners V	200,000,000	11,000,000	42,098	189,000,000	11,000,000	1.00	0.39	2020
Nordic Capital	507,327,908	336,738,713	203,500,754	247,351,711	338,454,670	1.61	18.12	
Nordic Capital Fund VIII	177,024,756	211,938,889	194,360,005	37,481,646	145,175,091	1.60	14.40	2013
Nordic Capital Fund X	158,665,420	0	0	158,665,420	0	0.00		2020
Nordic Capital IX Beta, L.P.	171,637,732	124,799,824	9,140,749	51,204,645	193,279,579	1.62	51.80	2017

Minnesota State Board of Investment
Private Markets Investments as of March 31, 2021

Investments	Commitments	Contributions	Distributions	Remaining Commitment	Market Value	Investment Multiple	IRR	Vintage Year
North Sky Capital*	2,454,339	1,998,089	2,407,407	456,250	329,649	1.37	12.19	
North Sky Capital LBO Fund III, LP	1,070,259	720,259	942,598	350,000	120,777	1.48	14.01	2014
North Sky Capital Venture Fund III, LP	1,384,080	1,277,830	1,464,808	106,250	208,872	1.31	10.98	2014
Oak Hill Capital Management, Inc.	250,000,000	155,540,952	107,688,995	118,803,341	118,625,641	1.46	27.76	
Oak Hill Capital Partners IV Onshore LP	150,000,000	145,591,859	107,653,952	28,752,434	110,459,246	1.50	28.60	2016
Oak Hill Capital Partners V	100,000,000	9,949,093	35,043	90,050,907	8,166,395	0.82	-16.32	2018
Paine & Partners, LLC	225,000,000	111,847,415	35,885,510	114,776,878	94,669,989	1.17	7.45	
Paine Schwartz Food Chain Fund IV	75,000,000	64,036,939	35,334,371	12,036,215	50,080,804	1.33	9.00	2014
Paine Schwartz Food Chain Fund V, L.P.	150,000,000	47,810,476	551,139	102,740,663	44,589,184	0.94	-12.85	2018
Permal PE*	5,337,098	4,388,647	3,903,251	1,090,000	746,417	1.06	2.25	
Glouston Private Equity Opportunities IV	5,337,098	4,388,647	3,903,251	1,090,000	746,417	1.06	2.25	2014
Permira	461,933,147	367,020,443	321,466,053	134,862,346	498,567,412	2.23	25.37	
Permira V, L.P.	178,332,332	181,541,371	285,418,270	19,025,948	236,778,613	2.88	25.00	2013
Permira VI, L.P.	138,238,116	124,325,040	36,047,783	31,627,731	196,319,865	1.87	28.60	2016
Permira VII L.P.1	145,362,698	61,154,032	0	84,208,667	65,468,934	1.07	10.47	2019
Public Pension Capital Management	175,000,000	100,382,733	78,974,067	87,990,755	92,839,778	1.71	22.27	
Public Pension Capital, LLC	175,000,000	100,382,733	78,974,067	87,990,755	92,839,778	1.71	22.27	2014
Silver Lake Partners	435,000,000	419,271,610	482,262,507	35,293,547	361,164,911	2.01	15.87	
Silver Lake Partners II, L.P.	100,000,000	90,200,747	171,694,975	11,771,953	84,601	1.90	11.02	2004
Silver Lake Partners III, L.P.	100,000,000	93,713,939	188,115,154	9,422,180	29,302,638	2.32	18.71	2007
Silver Lake Partners IV	100,000,000	113,304,540	100,619,932	4,168,036	169,844,968	2.39	27.10	2012
Silver Lake Partners V, L.P.	135,000,000	122,052,384	21,832,446	9,931,378	161,932,703	1.51	28.74	2017
Split Rock	110,000,000	107,055,906	125,392,564	2,944,094	23,284,486	1.39	4.85	
Split Rock Partners II, LP	60,000,000	59,165,000	66,598,372	835,000	19,496,761	1.46	6.98	2008
Split Rock Partners LP	50,000,000	47,890,906	58,794,192	2,109,094	3,787,724	1.31	3.26	2005
Summit Partners	350,000,000	288,250,255	251,474,672	140,937,121	277,280,784	1.83	27.72	
Summit Partners Growth Equity Fund IX	100,000,000	115,093,065	39,330,864	24,237,799	158,238,942	1.72	32.22	2015
Summit Partners Growth Equity Fund VIII	100,000,000	116,727,192	212,143,808	23,129,320	53,049,555	2.27	26.51	2011
Summit Partners Growth Equity Fund X-A	150,000,000	56,429,998	0	93,570,002	65,992,287	1.17	39.02	2019
TPG Capital	250,000,000	125,820,847	54,258,623	133,901,100	122,562,065	1.41	14.82	
TPG Partners VII, L.P.	100,000,000	97,538,980	52,128,194	10,052,538	97,335,339	1.53	15.84	2015
TPG Partners VIII	150,000,000	28,281,867	2,130,429	123,848,562	25,226,725	0.97	-4.36	2018
Thoma Bravo LLC	425,000,000	279,873,466	204,101,716	210,221,262	287,833,661	1.76	24.42	
Thoma Bravo Fund XII, L.P.	75,000,000	81,653,101	19,798,296	13,216,430	116,114,917	1.66	17.80	2016
Thoma Bravo Fund XIII, L.P.	150,000,000	148,220,365	77,245,480	47,004,832	171,269,473	1.68	59.19	2018
Thoma Bravo Fund XIV	150,000,000	0	0	150,000,000	0	0.00		2020
Thoma Cressey Fund VII, L.P.	50,000,000	50,000,000	107,057,940	0	449,271	2.15	23.58	2000
Thomas H. Lee Partners	250,000,000	185,060,373	133,311,503	84,449,905	194,700,541	1.77	31.70	
Thomas H. Lee Equity Fund VII, LP.	100,000,000	99,043,447	122,222,073	11,118,710	89,500,634	2.14	30.59	2015
Thomas H. Lee Equity Fund VIII, L.P.	150,000,000	86,016,926	11,089,430	73,331,195	105,199,906	1.35	39.57	2018

Minnesota State Board of Investment
Private Markets Investments as of March 31, 2021

Investments	Commitments	Contributions	Distributions	Remaining Commitment	Market Value	Investment Multiple	IRR	Vintage Year
Thomas, McNerney & Partners	80,000,000	78,125,000	122,735,180	1,875,000	7,635,851	1.67	8.53	
Thomas, McNerney & Partners I, L.P.	30,000,000	30,000,000	15,087,143	0	3,234,752	0.61	-7.24	2002
Thomas, McNerney & Partners II, L.P.	50,000,000	48,125,000	107,648,037	1,875,000	4,401,098	2.33	16.58	2006
Vestar Capital Partners	380,000,000	278,857,319	351,018,794	110,201,981	95,123,225	1.60	11.23	
Vestar Capital Partners IV, L.P.	55,000,000	55,652,024	102,293,320	57,313	372,620	1.84	14.63	1999
Vestar Capital Partners V, L.P.	75,000,000	76,797,458	98,533,182	0	3,083,849	1.32	3.96	2005
Vestar Capital Partners VI, LP	100,000,000	106,516,978	150,071,483	35,527	46,378,590	1.84	24.13	2011
Vestar Capital Partners VII, L.P.	150,000,000	39,890,859	120,808	110,109,141	45,288,166	1.14	6.88	2017
Vista Equity Partners	200,000,000	69,302,944	0	131,909,959	67,210,181	0.97	-2.89	
Vista Equity Partners	200,000,000	69,302,944	0	131,909,959	67,210,181	0.97	-2.89	2020
Warburg Pincus	1,216,000,000	1,027,776,892	1,102,927,687	194,623,500	562,691,014	1.62	11.48	
Warburg Pincus China-Southeast Asia II	50,000,000	8,700,000	960,000	41,300,000	8,557,785	1.09	12.55	2019
Warburg Pincus China, L.P.	45,000,000	44,460,000	11,972,700	2,475,000	59,574,557	1.61	20.21	2016
Warburg Pincus Financial Sector	90,000,000	71,838,308	4,590,000	22,455,000	83,532,976	1.23	13.23	2017
Warburg Pincus Global Growth, L.P.	250,000,000	122,835,974	1,812,500	126,625,000	126,323,009	1.04	5.27	2018
Warburg Pincus Private Equity IX, L.P.	100,000,000	100,000,000	169,104,301	0	3,300,344	1.72	9.63	2005
Warburg Pincus Private Equity VIII, LP	100,000,000	100,368,657	229,106,755	0	0	2.28	14.74	2002
Warburg Pincus Private Equity X, LP	150,000,000	150,000,000	253,954,638	0	12,744,931	1.78	9.43	2007
Warburg Pincus Private Equity XI, LP	200,000,000	200,342,452	227,352,748	0	115,594,992	1.71	12.98	2012
Warburg Pincus Private Equity XII, LP	131,000,000	129,231,500	40,531,793	1,768,500	152,669,285	1.49	14.69	2015
Warburg, Pincus Equity Partners, L.P.	100,000,000	100,000,000	163,542,253	0	393,136	1.64	10.03	1998
Wellspring Capital Partners	125,000,000	73,886,750	0	51,113,250	82,301,416	1.11	8.85	
Wellspring Capital Partners VI, L.P.	125,000,000	73,886,750	0	51,113,250	82,301,416	1.11	8.85	2016
Welsh, Carson, Anderson & Stowe	500,000,000	301,611,678	264,495,760	198,388,322	250,093,274	1.71	16.68	
Welsh, Carson, Anderson & Stowe XI, L.P.	100,000,000	100,000,000	137,471,465	0	26,889,458	1.64	11.62	2008
Welsh, Carson, Anderson & Stowe XII, L.P.	150,000,000	143,501,728	127,024,295	6,498,272	161,484,773	2.01	27.04	2014
Welsh, Carson, Anderson & Stowe XIII, L.P.	250,000,000	58,109,950	0	191,890,050	61,719,043	1.06	8.76	2018
Whitehorse Capital	200,000,000	113,484,284	43,807,459	112,199,579	94,026,034	1.21	28.06	
Whitehorse Liquidity Partners III	100,000,000	77,838,323	35,117,365	39,543,617	56,949,898	1.18	18.90	2019
Whitehorse Liquidity Partners IV	100,000,000	35,645,961	8,690,094	72,655,962	37,076,137	1.28	31.55	2020
Wind Point Partners	100,000,000	25,125,131	0	74,879,472	25,235,178	1.00	0.58	
Wind Point Partners IX	100,000,000	25,125,131	0	74,879,472	25,235,178	1.00	0.58	2019
Windjammer Capital Investors	266,708,861	183,454,896	179,476,459	85,524,968	105,289,164	1.55	10.12	
Windjammer Mezzanine & Equity Fund II	66,708,861	55,215,684	84,876,800	1,013,936	63,278	1.54	8.94	2000
Windjammer Senior Equity Fund IV, L.P.	100,000,000	94,740,728	93,392,762	16,802,619	75,005,320	1.78	13.11	2012
Windjammer Senior Equity Fund V, L.P.	100,000,000	33,498,484	1,206,897	67,708,413	30,220,566	0.94	-4.82	2017
Private Credit	3,080,672,584	2,085,457,179	1,789,523,960	1,214,071,357	910,431,733	1.29	9.57	
Audax Group	300,000,000	175,234,721	156,460,803	137,609,127	59,359,312	1.23	9.40	
Audax Mezzanine Fund III, L.P.	100,000,000	100,391,948	117,877,230	1,246,175	13,221,050	1.31	9.43	2010
Audax Mezzanine Fund IV-A, L.P.	100,000,000	74,842,773	38,583,573	36,362,952	46,138,262	1.13	9.29	2015

Minnesota State Board of Investment
Private Markets Investments as of March 31, 2021

Investments	Commitments	Contributions	Distributions	Remaining Commitment	Market Value	Investment Multiple	IRR	Vintage Year
Audax Mezzanine Fund V	100,000,000	0	0	100,000,000	0	0.00		2020
BlackRock	97,500,000	69,802,405	6,057,160	27,697,595	70,658,043	1.10	6.01	
BlackRock Middle Market Senior Fund	97,500,000	69,802,405	6,057,160	27,697,595	70,658,043	1.10	6.01	2018
Brookfield Asset Management Inc.	200,000,000	0	0	200,000,000	0	0.00		
Brookfield Real Estate Finance Fund VI	200,000,000	0	0	200,000,000	0	0.00		2021
Energy Capital Partners	28,087,500	14,022,144	4,029,385	18,094,741	9,531,118	0.97	-5.65	
Energy Capital Credit Solutions II-A	28,087,500	14,022,144	4,029,385	18,094,741	9,531,118	0.97	-5.65	2018
Gold Hill	65,852,584	65,852,584	112,080,756	0	4,652,581	1.77	11.85	
Gold Hill 2008	25,852,584	25,852,584	46,819,154	0	4,507,170	1.99	14.66	2008
Gold Hill Venture Lending	40,000,000	40,000,000	65,261,602	0	145,411	1.64	10.68	2004
Goldman, Sachs & Co.	250,000,000	261,172,810	315,503,895	47,422,591	1,689,878	1.21	6.80	
GS Mezzanine Partners 2006 Institutional	100,000,000	113,454,150	134,861,849	9,858,563	806,039	1.20	5.00	2006
GS Mezzanine Partners V, L.P.	150,000,000	147,718,660	180,642,046	37,564,028	883,839	1.23	9.09	2007
HPS Investment Partners	100,000,000	52,125,221	8,571,542	55,041,967	49,379,026	1.11	17.65	
HPS Mezzanine Partners 2019, L.P.	100,000,000	52,125,221	8,571,542	55,041,967	49,379,026	1.11	17.65	2019
Kohlberg, Kravis, Roberts & Co.	274,000,000	242,500,133	130,787,954	76,172,483	148,209,240	1.15	8.92	
KKR Lending Partner II L.P.	75,000,000	86,658,994	79,747,153	8,802,924	12,114,553	1.06	3.06	2015
KKR Lending Partners III L.P.	199,000,000	155,841,139	51,040,801	67,369,559	136,094,687	1.20	14.50	2017
LBC Credit Partners	200,000,000	109,527,073	49,031,809	114,274,378	82,896,304	1.20	10.83	
LBC Credit Partners IV, L.P.	100,000,000	89,627,247	47,175,152	34,274,378	60,905,804	1.21	9.41	2016
LBC Credit Partners V, L.P.	100,000,000	19,899,826	1,856,657	80,000,000	21,990,500	1.20	60.37	2019
Marathon	100,000,000	42,570,563	858,534	58,451,444	49,180,236	1.18	12.81	
Marathon Secured Private Strategies Fund II	100,000,000	42,570,563	858,534	58,451,444	49,180,236	1.18	12.81	2019
Merit Capital Partners	320,232,500	226,693,050	243,160,305	93,472,650	114,138,208	1.58	11.02	
Merit Mezzanine Fund IV, L.P.	75,000,000	70,178,571	139,120,463	4,821,429	697,406	1.99	11.58	2004
Merit Mezzanine Fund V, LP	75,000,000	71,044,898	78,853,274	3,955,102	31,451,242	1.55	9.60	2009
Merit Mezzanine Fund VI	100,000,000	85,469,581	25,186,567	14,463,619	81,989,560	1.25	11.52	2016
Merit Mezzanine Fund VII	70,232,500	0	0	70,232,500	0	0.00		2020
Oaktree Capital Management, LLC	200,000,000	42,600,000	1,878,198	157,400,000	45,614,248	1.11	19.14	
Oaktree Real Estate Debt III	200,000,000	42,600,000	1,878,198	157,400,000	45,614,248	1.11	19.14	2020
Portfolio Advisors LLC	100,000,000	80,867,108	96,478,980	936,315	450,103	1.20	7.50	
IP III Mezzanine Partners, L.P.	100,000,000	80,867,108	96,478,980	936,315	450,103	1.20	7.50	2006
Prudential Global Investment Mgmt	550,000,000	440,054,516	439,652,859	152,439,521	169,868,051	1.39	10.20	
PGIM Capital Partners VI, L.P.	100,000,000	0	0	100,000,000	0	0.00		2020
Prudential Capital Partners II, L.P.	100,000,000	97,418,748	136,427,860	11,049,052	3,899,223	1.44	8.62	2005
Prudential Capital Partners III, L.P.	100,000,000	102,414,320	173,348,677	13,828,229	2,645,385	1.72	14.09	2009
Prudential Capital Partners IV	100,000,000	111,887,809	95,197,155	2,136,397	47,841,958	1.28	8.04	2012
Prudential Capital Partners V, L.P.	150,000,000	128,333,639	34,679,166	25,425,844	115,481,484	1.17	8.03	2016
Summit Partners	95,000,000	100,002,497	133,679,035	22,177,023	6,871,741	1.41	9.30	
Summit Subordinated Debt Fund III, L.P.	45,000,000	44,088,494	60,443,093	2,250,000	3,862,224	1.46	8.86	2004
Summit Subordinated Debt Fund IV, L.P.	50,000,000	55,914,003	73,235,942	19,927,023	3,009,517	1.36	10.01	2008

Minnesota State Board of Investment
Private Markets Investments as of March 31, 2021

Investments	Commitments	Contributions	Distributions	Remaining Commitment	Market Value	Investment Multiple	IRR	Vintage Year
TCW	200,000,000	162,432,352	91,292,747	52,881,522	97,933,645	1.16	7.67	
TCW Direct Lending LLC	100,000,000	83,599,652	72,991,861	25,329,409	28,223,693	1.21	7.25	2014
TCW Direct Lending VII	100,000,000	78,832,700	18,300,886	27,552,113	69,709,951	1.12	8.81	2018
Real Assets	4,147,571,518	3,692,020,455	2,161,251,895	717,311,658	1,759,461,334	1.06	1.80	
BlackRock	198,500,000	106,990,776	23,819,605	98,472,368	88,642,959	1.05	2.45	
BlackRock Global Renewable Power Fund II	98,500,000	94,413,824	23,779,794	11,049,320	76,949,815	1.07	2.88	2017
BlackRock Global Renewable Power Infra III	100,000,000	12,576,952	39,811	87,423,048	11,693,144	0.93	-9.11	2019
EIG Global Energy Partners	450,000,000	461,771,019	334,676,001	82,090,869	144,032,515	1.04	1.01	
EIG Energy Fund XIV	100,000,000	113,459,470	95,309,310	2,761,129	4,680,265	0.88	-4.68	2007
EIG Energy Fund XV	150,000,000	159,823,964	139,398,552	22,871,323	27,406,255	1.04	1.10	2010
EIG Energy Fund XVI	200,000,000	188,487,585	99,968,139	56,458,417	111,945,996	1.12	3.61	2013
Encap Energy	400,000,000	419,856,645	311,888,508	15,180,316	126,111,590	1.04	1.79	
EnCap Energy Capital Fund VII, L.P.	100,000,000	105,388,244	135,600,209	0	2,845,008	1.31	14.19	2007
EnCap Energy Capital Fund VIII, L.P.	100,000,000	103,335,766	54,781,243	470,044	22,143,997	0.74	-8.25	2010
EnCap Energy Capital Fund X, L.P.	100,000,000	98,119,369	33,342,494	10,111,570	69,226,815	1.05	1.56	2015
Encap Energy Fund IX	100,000,000	113,013,265	88,164,562	4,598,702	31,895,769	1.06	2.37	2012
Energy & Minerals Group	680,000,000	660,007,351	360,415,063	58,212,792	438,127,013	1.21	5.38	
NGP Midstream & Resources, L.P.	100,000,000	103,565,615	179,560,149	17,857	4,744,870	1.78	13.30	2007
The Energy & Minerals Group Fund II, L.P.	100,000,000	106,674,084	104,295,500	170,365	89,492,448	1.82	12.56	2011
The Energy & Minerals Group Fund III, L.P.	200,000,000	201,327,783	22,410,545	1,284,543	95,069,897	0.58	-9.91	2014
The Energy & Minerals Group Fund IV, LP	150,000,000	154,847,719	52,874,472	18,530,797	141,986,234	1.26	7.65	2015
The Energy & Minerals Group Fund V	112,500,000	79,270,469	1,115,700	34,782,014	89,806,309	1.15	9.34	2019
The Energy & Minerals Group Fund V Accordion, LP	17,500,000	14,321,681	158,697	3,427,216	17,027,255	1.20	12.73	2019
Energy Capital Partners	450,000,000	373,688,853	272,296,730	162,854,807	219,325,401	1.32	9.33	
Energy Capital Partners II-A	100,000,000	85,722,480	112,434,332	29,749,110	5,987,278	1.38	9.14	2010
Energy Capital Partners III, L.P.	200,000,000	230,177,453	140,892,028	28,474,141	155,978,345	1.29	8.65	2013
Energy Capital Partners IV-A, LP	150,000,000	57,788,920	18,970,370	104,631,556	57,359,778	1.32	14.92	2017
Enervest Management Partners	100,000,000	98,041,120	47,874,936	10,052,578	46,893,136	0.97	-1.01	
EnerVest Energy Institutional Fund XIV-A, L.P.	100,000,000	98,041,120	47,874,936	10,052,578	46,893,136	0.97	-1.01	2015
First Reserve	500,000,000	531,264,896	253,256,899	14,747,144	132,810,934	0.73	-8.87	
First Reserve Fund XI, L.P.	150,000,000	150,292,121	98,378,656	0	150,375	0.66	-9.45	2006
First Reserve Fund XII, L.P.	150,000,000	165,617,044	83,516,783	0	10,502,047	0.57	-13.18	2008
First Reserve Fund XIII, L.P.	200,000,000	215,355,731	71,361,460	14,747,144	122,158,512	0.90	-5.09	2013
Kohlberg, Kravis, Roberts & Co.	149,850,000	74,674,108	5,280,832	83,219,287	68,919,881	0.99	-0.51	
KKR Global Infrastructure Investors III	149,850,000	74,674,108	5,280,832	83,219,287	68,919,881	0.99	-0.51	2018
Merit Energy Partners	519,721,518	375,497,783	116,244,407	103,746,596	268,928,524	1.03	0.54	
Merit Energy Partners F-II, L.P.	100,000,000	59,522,861	31,422,724	0	5,786,810	0.63	-7.53	2006
Merit Energy Partners H	100,000,000	100,000,000	29,668,582	0	45,065,426	0.75	-5.07	2011
Merit Energy Partners I, L.P.	169,721,518	169,721,518	53,039,059	0	160,436,504	1.26	6.15	2014

Minnesota State Board of Investment
Private Markets Investments as of March 31, 2021

Investments	Commitments	Contributions	Distributions	Remaining Commitment	Market Value	Investment Multiple	IRR	Vintage Year
Merit Energy Partners K, L.P.	150,000,000	46,253,404	2,114,042	103,746,596	57,639,783	1.29	27.01	2019
NGP	599,500,000	555,874,899	413,373,915	75,234,901	203,392,377	1.11	4.19	
Natural Gas Partners IX, LP	150,000,000	173,921,032	245,366,339	605,481	4,288,156	1.44	12.07	2007
NGP Natural Resources X, L.P.	150,000,000	147,769,572	119,289,761	2,230,428	19,820,401	0.94	-1.85	2011
NGP Natural Resources XI, L.P.	150,000,000	149,883,995	48,462,120	7,539,767	99,185,096	0.99	-0.50	2014
NGP Natural Resources XII, L.P.	149,500,000	84,300,300	255,695	64,859,225	80,098,725	0.95	-2.31	2017
Sheridan	100,000,000	34,353,005	22,125,000	13,500,000	22,277,004	1.29	8.26	
Sheridan Production Partners III-B, L.P.	100,000,000	34,353,005	22,125,000	13,500,000	22,277,004	1.29	8.26	2014
Real Estate	2,948,147,868	1,911,163,208	1,274,661,567	1,136,216,567	1,188,006,467	1.29	7.64	
Angelo, Gordon & Co.	550,000,000	330,653,957	71,165,815	220,096,250	327,313,583	1.21	9.23	
AG Asia Realty Fund III, L.P.	50,000,000	47,587,261	42,875,000	6,196,250	23,038,610	1.39	13.97	2016
AG Asia Realty Fund IV, L.P.	100,000,000	40,610,956	0	57,500,000	45,537,560	1.12	9.41	2018
AG Europe Realty Fund II, L.P.	75,000,000	69,004,017	28,384	5,250,000	79,250,996	1.15	7.44	2018
AG Europe Realty Fund III	75,000,000	13,809,980	0	60,375,000	14,216,158	1.03	3.80	2020
AG Realty Fund IX	100,000,000	92,141,126	28,250,000	11,650,000	93,104,766	1.32	8.50	2014
AG Realty Fund X, L.P.	150,000,000	67,500,617	12,431	79,125,000	72,165,492	1.07	7.26	2018
Blackstone	824,500,000	654,678,470	700,458,614	277,654,041	325,252,571	1.57	12.29	
Blackstone Real Estate Partners Asia II	74,500,000	47,763,337	2,777,457	31,771,395	47,639,661	1.06	4.75	2017
Blackstone Real Estate Partners IX, L.P.	300,000,000	114,277,114	16,313,234	201,163,871	115,501,877	1.15	16.51	2018
Blackstone Real Estate Partners V	100,000,000	104,213,007	203,276,351	4,174,052	3,180,643	1.98	10.74	2006
Blackstone Real Estate Partners VI, L.P.	100,000,000	109,477,567	216,200,914	4,907,906	3,971,951	2.01	13.10	2007
Blackstone Real Estate Partners VII, LP	100,000,000	111,357,845	146,079,913	11,217,447	38,620,546	1.66	14.43	2011
Blackstone Real Estate VIII.TE.1 L.P.	150,000,000	167,589,600	115,810,745	24,419,370	116,337,893	1.39	13.23	2015
Blackstone Strategic Partners	75,000,000	77,535,615	65,089,715	1,019,101	1,970,373	0.86	-2.13	
Strategic Partners III RE, L.P.	25,000,000	25,987,864	15,252,523	9,006	97,393	0.59	-6.46	2005
Strategic Partners IV RE, L.P.	50,000,000	51,547,751	49,837,192	1,010,095	1,872,980	1.00	0.05	2008
Carlyle Group	150,000,000	64,827,430	18,054,472	103,315,341	53,156,837	1.10	8.08	
Carlyle Realty Partners VIII, L.P.	150,000,000	64,827,430	18,054,472	103,315,341	53,156,837	1.10	8.08	2017
Landmark Partners	149,500,000	71,519,488	28,140,174	83,806,773	52,014,010	1.12	8.81	
Landmark Real Estate Partners VIII, L.P.	149,500,000	71,519,488	28,140,174	83,806,773	52,014,010	1.12	8.81	2016
Lubert Adler	74,147,868	63,877,820	18,368,769	11,122,180	59,998,063	1.23	9.77	
Lubert-Adler Real Estate Fund VII-B, L.P.	74,147,868	63,877,820	18,368,769	11,122,180	59,998,063	1.23	9.77	2017
Oaktree Capital Management, LLC	200,000,000	19,000,000	19,000,000	200,000,000	6,263,527	1.33	153.36	
Oaktree Real Estate Opportunities Fund VIII	200,000,000	19,000,000	19,000,000	200,000,000	6,263,527	1.33	153.36	2020
Rockpoint	200,000,000	111,906,650	36,095,669	103,415,380	84,395,091	1.08	3.23	
Rockpoint Real Estate Fund V, L.P.	100,000,000	96,606,494	36,084,442	18,715,536	69,526,001	1.09	3.55	2014
Rockpoint Real Estate Fund VI, L.P.	100,000,000	15,300,156	11,227	84,699,844	14,869,089	0.97	-2.72	2019
Rockwood	200,000,000	123,406,616	22,734,600	78,257,780	109,206,731	1.07	3.56	
Rockwood Capital RE Partners X, L.P.	100,000,000	86,572,864	22,706,090	15,111,665	73,857,333	1.12	4.31	2015
Rockwood Capital RE Partners XI	100,000,000	36,833,751	28,511	63,146,116	35,349,398	0.96	-13.67	2019

Minnesota State Board of Investment
Private Markets Investments as of March 31, 2021

Investments	Commitments	Contributions	Distributions	Remaining Commitment	Market Value	Investment Multiple	IRR	Vintage Year
Silverpeak Real Estate Partners	225,000,000	143,757,163	105,887,112	7,529,720	8,677,265	0.80	-3.60	
Silverpeak Legacy Pension Partners II, L.P.	75,000,000	73,035,350	91,687,519	7,529,720	847,826	1.27	4.19	2005
Silverpeak Legacy Pension Partners III, L.P.	150,000,000	70,721,813	14,199,594	0	7,829,440	0.31	-11.96	2008
TA Associates Realty	300,000,000	250,000,000	189,666,626	50,000,000	159,758,415	1.40	11.38	
Realty Associates Fund X	100,000,000	100,000,000	150,369,810	0	10,536,089	1.61	12.61	2012
Realty Associates Fund XI	100,000,000	100,000,000	37,180,964	0	98,943,826	1.36	9.44	2015
Realty Associates Fund XII	100,000,000	50,000,000	2,115,852	50,000,000	50,278,500	1.05	8.61	2018
Distressed/Opportunistic	3,639,714,067	2,583,270,508	2,270,677,779	1,135,726,832	1,286,817,881	1.38	9.56	
Avenue Capital Partners	200,000,000	200,977,328	40,317,523	0	149,431,752	0.94	-1.48	
Avenue Energy Opportunities Fund II	100,000,000	100,000,000	417,420	0	90,654,900	0.91	-3.25	2017
Avenue Energy Opportunities Fund, L.P.	100,000,000	100,977,328	39,900,103	0	58,776,852	0.98	-0.47	2014
BlackRock	1,774,870	1,774,870	1,737,312	0	232,032	1.11	5.75	
BlackRock Tempus Fund	1,774,870	1,774,870	1,737,312	0	232,032	1.11	5.75	2015
Canyon Partners	125,000,000	71,250,000	8,750,000	62,500,000	71,150,396	1.12	15.73	
Canyon Distressed Opportunity Fund III	125,000,000	71,250,000	8,750,000	62,500,000	71,150,396	1.12	15.73	2020
CarVal Investors	900,000,000	720,203,333	861,737,458	180,000,000	228,642,640	1.51	10.68	
CarVal Credit Value Fund I	100,000,000	95,000,000	213,343,831	5,000,000	505,285	2.25	18.72	2010
CVI Credit Value Fund A II	150,000,000	142,500,000	199,242,174	7,500,000	1,678,065	1.41	8.12	2012
CVI Credit Value Fund A III	150,000,000	142,500,000	128,593,506	7,500,000	55,883,625	1.29	8.15	2015
CVI Credit Value Fund IV	150,000,000	135,203,333	60	15,000,000	155,285,235	1.15	7.15	2017
CVI Credit Value Fund V	150,000,000	15,000,000	0	135,000,000	15,000,000	1.00		2020
CVI Global Value Fund, L.P.	200,000,000	190,000,000	320,557,888	10,000,000	290,430	1.69	9.53	2007
Carlyle Group	100,000,000	65,659,958	28,156,618	62,444,726	35,787,704	0.97	-2.02	
Carlyle Strategic Partners IV, L.P.	100,000,000	65,659,958	28,156,618	62,444,726	35,787,704	0.97	-2.02	2016
MHR Institutional Partners	75,000,000	56,246,892	8,857,817	27,552,345	62,014,275	1.26	8.42	
MHR Institutional Partners IV LP	75,000,000	56,246,892	8,857,817	27,552,345	62,014,275	1.26	8.42	2014
Marathon	200,000,000	53,906,171	6,185,200	152,000,000	54,258,720	1.12	48.03	
Marathon Distressed Credit Fund	200,000,000	53,906,171	6,185,200	152,000,000	54,258,720	1.12	48.03	2020
Merced Capital	278,737,500	285,449,091	237,759,646	2,673,787	89,158,360	1.15	3.25	
Merced Partners III	100,000,000	103,878,468	131,176,445	0	4,050,238	1.30	5.56	2010
Merced Partners IV	125,000,000	124,968,390	101,222,539	0	39,137,249	1.12	2.64	2013
Merced Partners V	53,737,500	56,602,233	5,360,662	2,673,787	45,970,874	0.91	-2.83	2017
Oaktree Capital Management, LLC	650,000,000	260,113,680	46,905,111	419,489,598	269,367,545	1.22	9.92	
Oaktree Opportunities Fund X, L.P.	50,000,000	46,500,021	13,969,660	8,500,000	44,815,319	1.26	7.82	2015
Oaktree Opportunities Fund Xb, L.P.	100,000,000	60,000,000	0	40,000,000	67,026,300	1.12	9.19	2015
Oaktree Opportunities Fund XI	300,000,000	30,000,000	0	270,000,000	31,095,300	1.04	5.59	2020
Oaktree Special Situations Fund II, L.P.	100,000,000	26,691,187	12,600,000	85,748,304	25,411,230	1.42	70.98	2018
Oaktree Special Situations Fund, L.P.	100,000,000	96,922,472	20,335,451	15,241,294	101,019,396	1.25	8.36	2014
PIMCO BRAVO*	9,201,697	8,654,933	8,488,982	7,399,997	1,386,729	1.14	4.35	
PIMCO BRAVO Fund Onshore Feeder I	3,958,027	3,958,027	4,016,443	2,385,880	8,935	1.02	1.66	2014

Minnesota State Board of Investment
Private Markets Investments as of March 31, 2021

Investments	Commitments	Contributions	Distributions	Remaining Commitment	Market Value	Investment Multiple	IRR	Vintage Year
PIMCO Bravo Fund OnShore Feeder II	5,243,670	4,696,906	4,472,539	5,014,116	1,377,794	1.25	4.84	2014
TSSP	200,000,000	90,869,252	21,795,922	130,916,380	89,059,888	1.22	18.40	
TSSP Adjacent Opportunities GenPar, L.P	100,000,000	29,851,845	6,578,405	76,726,099	30,003,330	1.23	38.24	2018
TSSP Adjacent Opportunities Partners (B)	50,000,000	37,111,658	11,488,002	24,376,344	33,284,549	1.21	12.18	2018
TSSP Opportunities Partners IV (A), L.P.	50,000,000	23,905,749	3,729,515	29,813,937	25,772,010	1.23	21.48	2018
Varde Fund	600,000,000	525,000,000	633,688,381	75,000,000	209,583,626	1.61	10.26	
Varde Fund IX, L.P.	100,000,000	100,000,000	216,097,236	0	125,751	2.16	15.01	2008
Varde Fund X, LP	150,000,000	150,000,000	250,804,375	0	18,249,599	1.79	10.51	2010
Varde Fund XI, LP	200,000,000	200,000,000	166,766,732	0	102,994,251	1.35	5.24	2013
Varde Fund XIII, L.P.	150,000,000	75,000,000	20,038	75,000,000	88,214,025	1.18	15.28	2018
Wayzata Investment Partners	300,000,000	243,165,000	366,297,810	15,750,000	26,744,214	1.62	14.34	
Wayzata Opportunities Fund II, LLC	150,000,000	174,750,000	327,229,040	750,000	4,093,727	1.90	16.51	2007
Wayzata Opportunities Fund III	150,000,000	68,415,000	39,068,770	15,000,000	22,650,487	0.90	-2.71	2012
Total	39,237,508,931	30,351,689,001	33,640,011,002	10,473,885,844	13,738,195,991	1.56	12.03	
<i>Difference**</i>					49,633,286			
<i>Private Markets Total with Difference</i>					13,787,829,277			

<i>Private Markets Portfolio Status</i>	<i>Managers</i>	<i>Funds</i>
PRIVATE EQUITY	51	145
PRIVATE CREDIT	16	31
REAL ASSETS	11	32
REAL ESTATE	11	27
DISTRESSED / OPPORTUNISTIC	13	32
Total	102	267

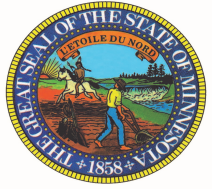
Notes

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.

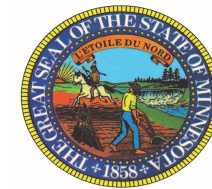
*Partnership interests transferred to the MSBI during 1Q2015. All data presented as of the transfer date.

** Difference is from an in-kind stock distribution liquidating account, cash transactions posted to next day and distributions received in foreign currency during the month.



Participant Directed Investment Program

March 31, 2021



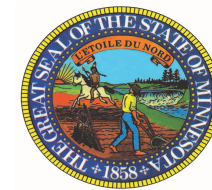
Quarterly Report

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 an investment platform that provides participants with the option to invest in many of the same pools as the Combined Fund in addition to a Stable Value Fund and a Money Market Fund. The Volunteer Firefighter Account is an option in the SIF for local firefighter entities that join the Statewide Voluntary Firefighter Plan administered by PERA. The investment vehicles are structured much like a family of mutual funds where participating entities buy or sell units in each fund. Participants may allocate their investments among one or more funds that are appropriate for their needs and are within statutory requirements and rules established by the participating organizations.
- The Mutual Fund Line-up is an investment platform that offers participants three sets of investment options. The first is a set of actively and passively managed mutual funds, a Stable Value Fund and a Money Market Fund. 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. 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.
- The SBI is responsible for the investment options provided in the two State Sponsored Savings Plans established under provisions of the Internal Revenue Code 529, the Minnesota College Savings Plan and Minnesota Achieving a Better Life Experience Plan (ABLE). The Minnesota College Savings Plan is an educational savings plan designed to help families save for qualified nationwide 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 have contracted jointly with TIAA-CREF Tuition Financing, Inc. to provide administrative, marketing, communication, recordkeeping and investment management services. The ABLE Plan 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 platform that offers a range of investment options to state and local public employees. This investment platform provides some or all of the investment options to the Public Employees Retirement Association (PERA) Defined Contribution Plan, local pension 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.

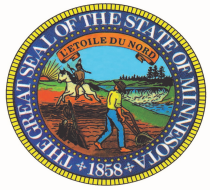
Investment Option Descriptions

- 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	\$108,616,268	2.9%	37.6%	12.9%	11.8%	10.0%	01/1980
U.S. ACTIVELY MANAGED FUND	89,984,870	6.0	70.2	18.9	18.3	14.4	07/1986
U.S. STOCK INDEX FUND	451,122,980	6.4	62.9	17.2	16.7	13.8	07/1986
BROAD INTERNATIONAL STOCK FUND	152,341,708	4.2	51.8	7.1	10.0	5.5	09/1994
BOND FUND	110,903,111	-3.1	5.4	5.7	4.1	4.2	07/1986
MONEY MARKET FUND	587,621,104	0.0	0.3	1.6	1.3	0.8	07/1986
STABLE VALUE FUND	1,706,992,829	0.5	2.4	2.5	2.4	2.4	11/1994
VOLUNTEER FIREFIGHTER ACCOUNT	140,051,897	1.5	29.9	10.2	9.6	7.8	01/2010

Note:

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



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	\$108,616,268	2.9%	37.6%	12.9%	11.8%	10.0%
SIF BALANCED FUND BENCHMARK		2.6	34.8	12.3	11.3	9.7
Excess		0.3	2.7	0.6	0.5	0.3

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	89,984,870	6.0	70.2	18.9	18.3	14.4
Russell 3000		6.3	62.5	17.1	16.6	13.8
Excess		-0.3	7.7	1.8	1.6	0.7



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	\$451,122,980	6.4%	62.9%	17.2%	16.7%	13.8%
Russell 3000		6.3	62.5	17.1	16.6	13.8
Excess		0.1	0.3	0.1	0.1	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	152,341,708	4.2	51.8	7.1	10.0	5.5
International Equity Benchmark		3.5	49.2	6.5	9.7	4.9
Excess		0.8	2.6	0.6	0.3	0.6



Supplemental Investment Fund Performance

Bond Fund

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

	<u>Ending Market Value</u>	<u>Last Qtr</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>
BOND FUND	\$110,903,111	-3.1%	5.4%	5.7%	4.1%	4.2%
BBG BARC US Agg		-3.4	0.7	4.7	3.1	3.4
Excess		0.2	4.7	1.1	1.0	0.7

Money Market Fund

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

	<u>Ending Market Value</u>	<u>Last Qtr</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>
MONEY MARKET FUND	587,621,104	0.0	0.3	1.6	1.3	0.8
ICE BofA US 3-Month Treasury Bill		0.0	0.1	1.5	1.2	0.6
Excess		0.0	0.2	0.1	0.1	0.1



Supplemental Investment Fund Performance

Stable Value Fund

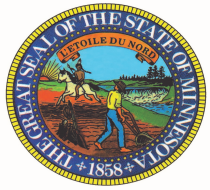
The investment objectives of the Stable Value Fund are to protect investors from loss of their original investment and to provide competitive interest rates using somewhat longer-term investments than typically found in a money market fund. The Fund is invested in a well-diversified portfolio of high-quality 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	\$1,706,992,829	0.5%	2.4%	2.5%	2.4%	2.4%
Fixed Interest Blended Benchmark		0.2	0.7	1.9	1.9	1.5
Excess		0.3	1.7	0.6	0.5	0.8

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.

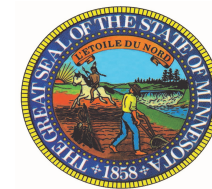
	<u>Ending Market Value</u>	<u>Last Qtr</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>
VOLUNTEER FIREFIGHTER ACCOUNT	140,051,897	1.5	29.9	10.2	9.6	7.8
SIF Volunteer Firefighter Account BM		1.2	26.9	9.5	8.9	7.4
Excess		0.3	2.9	0.7	0.7	0.4



Mutual Funds

The mutual fund investment line-up provides investment options to the Minnesota Deferred Compensation Plan (MNDCP), Unclassified Retirement Plan, Health Care Savings Plan, and the Hennepin Country Retirement Plan. The MNDCP is a tax-sheltered retirement savings plan that is supplemental to public employees primary retirement plan. (In most cases, the primary plan is a defined benefit plan administered by TRA, PERA, or MSRS.) Participants can choose from active and passively managed stock and bond funds, a Stable Value Fund, a Money Market Fund, a set of 10 target date retirement fund options, and a brokerage window where participants can choose from hundreds of mutual funds.

	<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 TOTAL STOCK MARKET INSTITUTIONAL INDEX PLUS	\$640,781,000	6.4%	63.0%				07/2019
VANGUARD INSTITUTIONAL INDEX PLUS	1,661,945,448	6.2	56.4	16.8%	16.3%	13.9%	07/1999
VANGUARD DIVIDEND GROWTH	851,946,494	4.3	41.2	15.7			10/2016
VANGUARD MID CAP INDEX	709,551,985	7.2	70.6	14.7	14.6	12.3	01/2004
T. ROWE PRICE SMALL-CAP STOCK	1,031,225,844	8.5	83.9	20.0	19.4	14.3	04/2000
FIDELITY DIVERSIFIED INTERNATIONAL	362,667,161	0.1	48.4	10.3	10.8	7.3	07/1999
VANGUARD TOTAL INTERNATIONAL STOCK INDEX	357,668,302	4.0	52.8	6.6	10.0		07/2011
VANGUARD BALANCED INDEX	1,439,060,193	2.3	34.7	12.4	11.4	9.8	12/2003
DODGE & COX INCOME	328,089,038	-2.5	7.4	5.6	4.7	4.2	07/1999
VANGUARD TOTAL BOND MARKET INDEX	394,570,816	-3.5	0.7	4.7	3.1	3.4	12/2003
2025 FUND	224,168,452	1.8	26.8	8.5	8.5		07/2011
2030 FUND	174,441,209	1.9	33.7	10.2	10.3		07/2011
2035 FUND	138,560,171	1.9	38.4	11.2	11.3		07/2011
2040 FUND	109,771,917	2.3	42.5	11.7	12.0		07/2011
2045 FUND	98,322,091	2.8	46.4	12.1	12.5		07/2011
2050 FUND	76,964,058	3.2	50.3	12.4	13.0		07/2011
2055 FUND	50,295,519	3.5	52.4	12.7	13.2		07/2011
2060 FUND	41,126,326	3.5	52.4	12.7	13.2		07/2011
2065 FUND	2,360,532	3.5	58.0				04/2020
INCOME FUND	243,116,901	1.3	20.5	7.3	6.5		07/2011
TD Ameritrade SDB	89,597,494						
TD Ameritrade SDB Roth	2,278,754						



Mutual Funds

LARGE CAP EQUITY

Vanguard Total Stock Market Institutional Index Plus (passive)

A passive domestic stock portfolio of large and small companies that tracks the CRSP US Total Market Index.

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

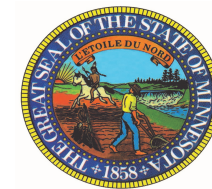
Fidelity Diversified International (active)

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 TOTAL STOCK MARKET INSTITUTIONAL INDEX PLUS	\$640,781,000	6.4%	63.0%			07/2019
CRSP US Total Market Index		6.4	62.8			07/2019
Excess		0.0	0.2			
VANGUARD INSTITUTIONAL INDEX PLUS	1,661,945,448	6.2	56.4	16.8%	16.3%	07/1999
S&P 500		6.2	56.4	16.8	16.3	07/1999
Excess		0.0	0.0	-0.0	-0.0	
VANGUARD DIVIDEND GROWTH	851,946,494	4.3	41.2	15.7		10/2016
NASDAQ US Dividend Achievers Select		4.4	45.0	15.5		10/2016
Excess		-0.2	-3.8	0.2		
Mid Cap US Equity						
VANGUARD MID CAP INDEX	709,551,985	7.2	70.6	14.7	14.6	01/2004
CRSP US Mid Cap Index		7.2	70.7	14.7	14.6	01/2004
Excess		0.0	-0.0	0.0	-0.0	
Small Cap US Equity						
T. ROWE PRICE SMALL-CAP STOCK	1,031,225,844	8.5	83.9	20.0	19.4	04/2000
Russell 2000		12.7	94.8	14.8	16.4	04/2000
Excess		-4.2	-10.9	5.2	3.0	
International Equity						
FIDELITY DIVERSIFIED INTERNATIONAL	362,667,161	0.1	48.4	10.3	10.8	07/1999
MSCI EAFE FREE (NET)		3.5	44.6	6.0	8.8	07/1999
Excess		-3.4	3.8	4.2	1.9	
VANGUARD TOTAL INTERNATIONAL STOCK INDEX	357,668,302	4.0	52.8	6.6	10.0	07/2011
FTSE Global All Cap ex US Index Net		3.8	51.7	6.5	9.8	07/2011
Excess		0.2	1.1	0.0	0.2	



Mutual Funds

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.

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

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

VANGUARD BALANCED INDEX	\$1,439,060,193	2.3%	34.7%	12.4%	11.4%	12/2003
Vanguard Balanced Fund Benchmark		2.4	35.0	12.5	11.4	12/2003
Excess		-0.0	-0.3	-0.1	-0.0	

Fixed Income

DODGE & COX INCOME	328,089,038	-2.5	7.4	5.6	4.7	07/1999
BBG BARC Agg Bd		-3.4	0.7	4.7	3.1	07/1999
Excess		0.9	6.7	1.0	1.6	

VANGUARD TOTAL BOND MARKET INDEX	394,570,816	-3.5	0.7	4.7	3.1	12/2003
BBG BARC Agg Bd		-3.4	0.7	4.7	3.1	12/2003
Excess		-0.1	-0.0	0.0	-0.0	

MONEY MARKET FUND	587,621,104	0.0	0.3	1.6	1.3	07/1986
ICE BofA US 3-Month Treasury Bill		0.0	0.1	1.5	1.2	07/1986
Excess		0.0	0.2	0.1	0.1	

Stable Value

STABLE VALUE FUND	1,706,992,829	0.5	2.4	2.5	2.4	11/1994
Fixed Interest Blended Benchmark		0.2	0.7	1.9	1.9	11/1994
Excess		0.3	1.7	0.6	0.5	

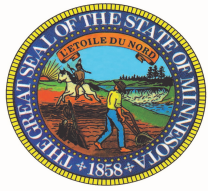
(1) Vanguard Dividend Growth replaced the Janus Twenty Fund in the third quarter of 2016.

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

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

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

(5) Money Market and Stable Value are Supplemental Investment Fund options which are also offered to eligible plans that invest through other plans.



Mutual Funds

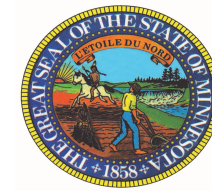
MN TARGET RETIREMENT ACCOUNTS

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														
2025 FUND	\$224,168,452	1.8%	26.8%	8.5%	8.5%	07/2011		2050 FUND	\$76,964,058	3.2%	50.3%	12.4%	13.0%	07/2011
2025 FUND BENCHMARK		1.8	26.6	8.4	8.5	07/2011		2050 FUND BENCHMARK		3.2	49.9	12.4	13.0	07/2011
Excess		0.0	0.2	0.0	0.0			Excess		0.0	0.4	-0.0	0.0	
2030 FUND	174,441,209	1.9	33.7	10.2	10.3	07/2011		2055 FUND	50,295,519	3.5	52.4	12.7	13.2	07/2011
2030 FUND BENCHMARK		1.9	33.5	10.2	10.3	07/2011		2055 FUND BENCHMARK		3.5	52.0	12.7	13.2	07/2011
Excess		0.0	0.3	0.0	0.0			Excess		0.0	0.4	-0.0	-0.0	
2035 FUND	138,560,171	1.9	38.4	11.2	11.3	07/2011		2060 FUND	41,126,326	3.5	52.4	12.7	13.2	07/2011
2035 FUND BENCHMARK		1.9	38.1	11.2	11.3	07/2011		2060 FUND BENCHMARK		3.5	52.0	12.7	13.2	07/2011
Excess		0.0	0.3	-0.0	-0.0			Excess		0.0	0.4	-0.1	-0.0	
2040 FUND	109,771,917	2.3	42.5	11.7	12.0	07/2011		2065 FUND	2,360,532	3.5	58.0			04/2020
2040 FUND BENCHMARK		2.3	42.2	11.7	12.0	07/2011		2065 FUND BENCHMARK		3.5	52.0			04/2020
Excess		0.0	0.3	-0.0	0.0			Excess		0.0	6.0			
2045 FUND	98,322,091	2.8	46.4	12.1	12.5	07/2011		INCOME FUND	243,116,901	1.3	20.5	7.3	6.5	07/2011
2045 FUND BENCHMARK		2.8	46.1	12.1	12.5	07/2011		INCOME FUND BENCHMARK		1.3	20.3	7.3	6.5	07/2011
Excess		0.0	0.3	-0.0	0.0			Excess		-0.0	0.1	0.0	0.0	

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.

ENROLLMENT-BASED MANAGED ALLOCATIONS

The Enrollment Year Investment Option is a set of single fund options representing the date your future student needs their college savings. The asset allocation adjusts automatically to a more conservative investment objective and level of risk as the enrollment year approaches. The managed allocation changed from Age-Based to Enrollment-Based on October 28, 2019.

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 = \$1,759 Million

Performance Statistics for the Period Ending: March 31, 2021

Fund Name	Ending Market	3 Months	1 Year	Annualized				Inception Date
				3 Years	5 Years	10 Years	Since Inception	
2036/2037 Enrollment Option	\$36,415,302	3.93%	42.59%				16.33%	10/28/2019
2036-2037 Custom Benchmark		3.78%	42.64%				15.60%	
2034/2035 Enrollment Option	\$36,592,567	3.71%	40.85%				15.61%	10/28/2019
2034-2035 Custom Benchmark		3.51%	40.94%				14.95%	
2032/2033 Enrollment Option	\$43,184,885	3.29%	38.66%				15.08%	10/28/2019
2032-2033 Custom Benchmark		3.21%	38.77%				14.44%	
2030/2031 Enrollment Option	\$54,825,101	2.81%	35.81%				13.97%	10/28/2019
2030-2031 Custom Benchmark		2.72%	35.74%				13.32%	
2028/2029 Enrollment Option	\$72,080,512	2.16%	30.97%				12.25%	10/28/2019
2028-2029 Custom Benchmark		2.04%	30.86%				11.52%	
2026/2027 Enrollment Option	\$102,972,193	1.49%	25.49%				10.71%	10/28/2019
2026-2027 Custom Benchmark		1.36%	25.33%				10.03%	
2024/2025 Enrollment Option	\$146,325,003	0.89%	20.53%				9.11%	10/28/2019
2024-2025 Custom Benchmark		0.79%	20.15%				8.34%	
2022/2023 Enrollment Option	\$177,569,710	0.55%	14.97%				6.74%	10/28/2019
2022-2023 Custom Benchmark		0.39%	14.29%				5.90%	
2020/2021 Enrollment Option	\$188,191,855	0.37%	10.53%				5.59%	10/28/2019
2020-2021 Custom Benchmark		0.19%	9.73%				4.81%	
In School Option	\$169,892,327	0.28%	9.18%				5.65%	10/28/2019
In School Custom Benchmark		0.15%	8.43%				4.49%	



MINNESOTA COLLEGE SAVINGS PLAN
Performance Statistics for the Period Ending: March 31, 2021

Fund Name	Ending Market	3 Months	1 Year	Annualized				Inception Date
				3 Years	5 Years	10 Years	Since Inception	
U.S. and International Equity Option BB: U.S. and International Equity Option	\$312,010,861	5.71% 5.83%	55.06% 55.21%	13.14% 12.96%	13.52% 13.36%	10.81% 10.87%	7.93% 8.66%	10/ 1/2001
Moderate Allocation Option BB: Moderate Allocation Option	\$90,387,493	2.51% 2.58%	32.39% 32.76%	10.12% 10.06%	9.68% 9.60%	7.85% 8.11%	6.25% 6.79%	8/ 2/2007
100% Fixed-Income Option BB: 100% Fixed-Income Option	\$21,972,523	-2.39% -2.21%	3.28% 4.08%	4.57% 4.90%	3.21% 3.56%	3.01% 3.53%	3.67% 4.29%	8/16/2007
International Equity Index Option BB: International Equity Index Option	\$7,988,967	3.54% 3.27%	47.89% 47.45%	5.86% 6.20%	9.46% 9.56%		6.04% 6.25%	6/18/2013
Money Market Option BB: Money Market Option	\$14,951,601	0.00% 0.00%	0.09% 0.03%	1.24% 1.08%	0.94% 0.80%	0.46% 0.41%	0.54% 0.48%	11/ 1/2007
Principal Plus Interest Option Citigroup 3-Month U.S. Treasury Bill	\$132,387,497	0.38% 0.02%	1.72% 0.21%	1.86% 1.45%	1.72% 1.15%	1.62% 0.60%	2.44% 1.29%	10/10/2001
Aggressive Allocation Option BB: Aggressive Allocation Option	\$56,054,364	4.13% 4.20%	43.02% 43.63%	11.52% 11.57%	11.63% 11.51%		9.19% 9.08%	8/12/2014
Conservative Allocation Option BB: Conservative Allocation Option	\$15,593,552	0.66% 0.73%	16.38% 16.65%	6.56% 6.72%	6.05% 6.03%		4.88% 4.93%	8/18/2014
Equity and Interest Accumulation Option BB: Equity and Interest Accumulation Option	\$6,426,852	3.41% 3.16%	28.79% 28.35%	9.48% 9.53%	9.08% 8.97%		7.42% 7.36%	8/18/2014
U.S. Large Cap Equity Option BB: U.S. Large Cap Equity Option	\$71,242,338	6.14% 6.17%	56.06% 56.35%	16.60% 16.78%	16.08% 16.29%		13.50% 13.60%	8/12/2014
Matching Grant Citigroup 3-Month U.S. Treasury Bill	\$2,053,557	0.38% 0.02%	1.72% 0.21%	1.86% 1.45%	1.72% 1.15%	1.62% 0.60%	2.44% 1.29%	3/22/2002

MINNESOTABLE^{plan}

A member of The National ABLE Alliance

Performance as of
03/31/21

Total Market Value: \$ 19,450,625

<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>Date</u>
Aggressive Option	\$ 1,688,243	8.68%	2.04	5.56	5.56	55.21	12.37			12.42	12/15/16
ABLE Aggressive Custom Benchmark			1.97	5.45	5.45	56.59	12.96			13.04	
Variance			0.07	0.11	0.11	(1.38)	(0.59)			(0.62)	
Moderately Aggressive Option	\$ 1,864,473	9.59%	1.62	4.40	4.40	45.04	11.14			11.00	12/15/16
ABLE Moderately Aggressive Custom Benchmark			1.61	4.37	4.37	46.68	11.85			11.67	
Variance			0.01	0.03	0.03	(1.64)	(0.71)			(0.67)	
Growth Option	\$ 2,561,172	13.17%	1.23	3.29	3.29	35.54	9.83			9.49	12/15/16
ABLE Growth Custom Benchmark			1.25	3.29	3.29	37.21	10.58			10.20	
Variance			(0.02)	(0.00)	(0.00)	(1.67)	(0.75)			(0.71)	
Moderate Option	\$ 2,181,354	11.21%	0.87	2.20	2.20	26.80	8.43			7.99	12/15/16
ABLE Moderate Custom Benchmark			0.88	2.22	2.22	28.17	9.17			8.64	
Variance			(0.01)	(0.02)	(0.02)	(1.37)	(0.74)			(0.65)	
Moderately Conservative Option	\$ 2,304,133	11.85%	0.55	1.43	1.43	17.88	6.33			5.90	12/15/16
ABLE Moderately Conservative Custom Benchmark			0.57	1.40	1.40	18.61	6.93			6.43	
Variance			(0.02)	0.03	0.03	(0.73)	(0.60)			(0.53)	
Conservative Option	\$ 3,395,123	17.46%	0.18	0.35	0.35	6.45	3.38			3.06	12/15/16
ABLE Conservative Custom Benchmark			0.15	0.32	0.32	6.57	3.71			3.34	
Variance			0.03	0.03	0.03	(0.12)	(0.33)			(0.28)	
Checking Option	\$ 5,456,127	28.05%									03/30/17

MINNESOTA ACHIEVE A BETTER LIFE EXPERIENCE

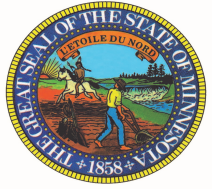
The Minnesota Achieve a Better Life Experience Plan (ABLE) is a savings plan designed to help individuals save for qualified disability expenses without losing eligibility for certain assistance programs. The plan is administered by the Department of Human Services (DHS).

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

RISK BASED ALLOCATIONS

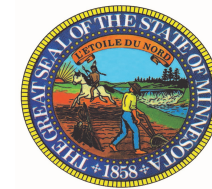
The plan offers seven different allocation investment options: Aggressive, Moderately Aggressive, Growth, Moderate, Moderately Conservative, Conservative, and Checking. Each allocation is based on a fixed risk level.

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Non-Retirement

March 31, 2021



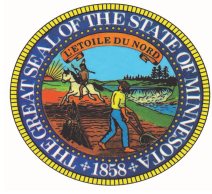
Quarterly Report

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

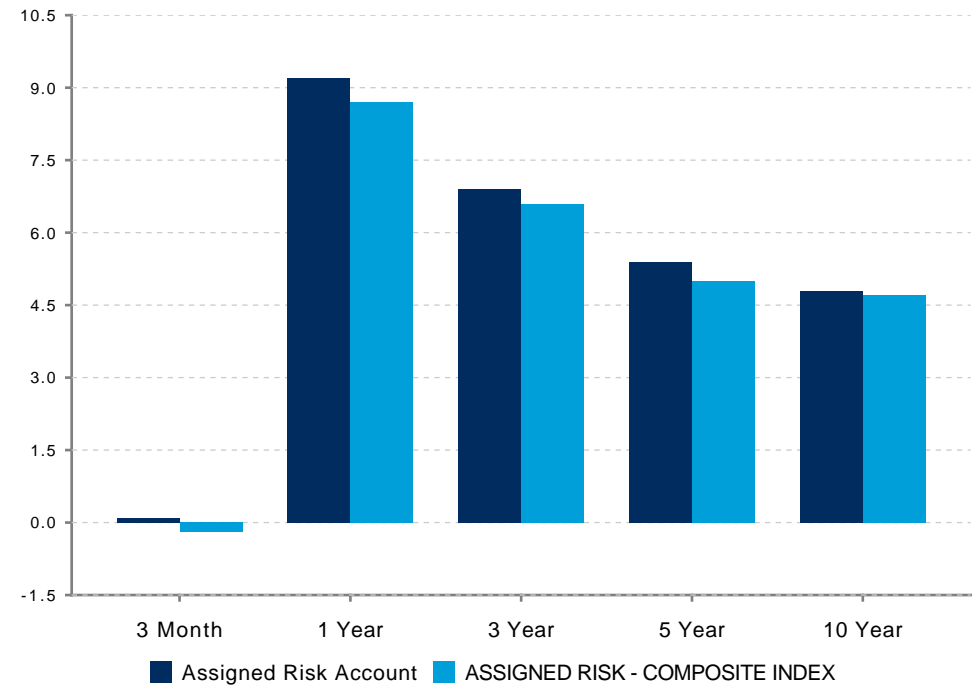
Assigned Risk Plan

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.

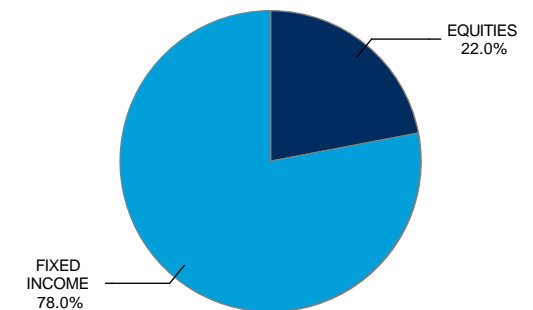
The Assigned Risk Plan is invested in a portfolio of common stocks and bonds

The equity segment is passively managed to track the performance of the S&P 500.

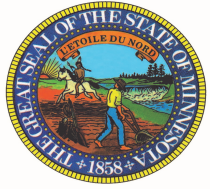
The fixed income benchmark is the Bloomberg Barclays Intermediate Government Index. The total fund benchmark is a combination of the fixed income and equity benchmarks, weighted according to the total fund asset allocation targets of 80% equities and 20% fixed income. The actual asset mix will fluctuate and is shown in the graph below.



	Ending Market Value	Last Qtr	1 Year	3 Year	5 Year	10 Year
Assigned Risk Account	\$298,788,311	0.1%	9.2%	6.9%	5.4%	4.8%
EQUITIES	65,678,270	6.2	56.3	16.8	16.6	13.2
FIXED INCOME	233,110,042	-1.5	-0.7	3.9	2.2	2.3
ASSIGNED RISK - COMPOSITE INDEX		-0.2	8.7	6.6	5.0	4.7
Excess		0.2	0.5	0.4	0.4	0.1
S&P 500		6.2	56.4	16.8	16.3	13.9
BBG BARC US Gov: Int		-1.7	-1.2	3.8	2.1	2.3



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



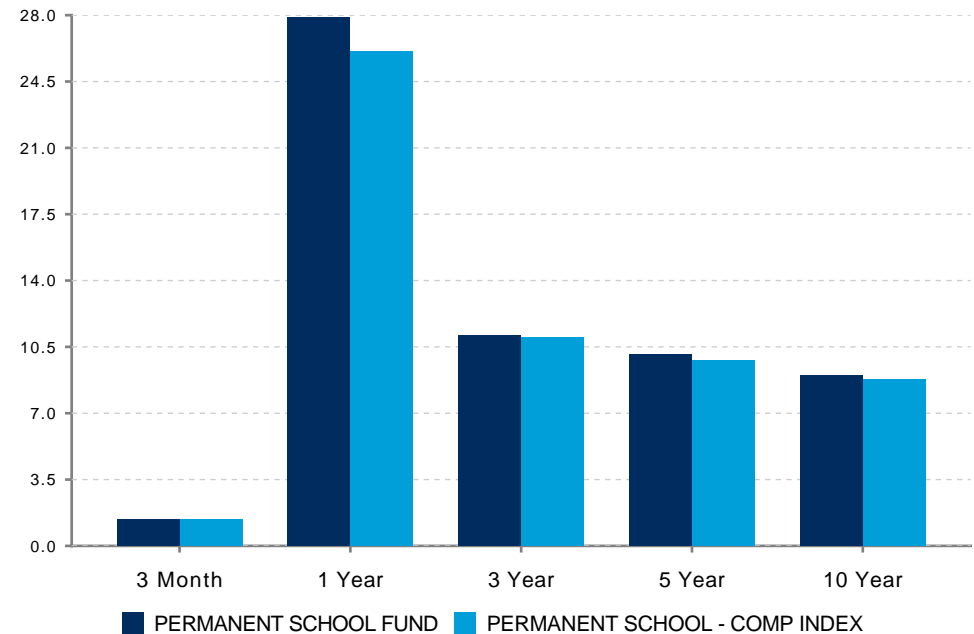
Non-Retirement

Permanent School Fund

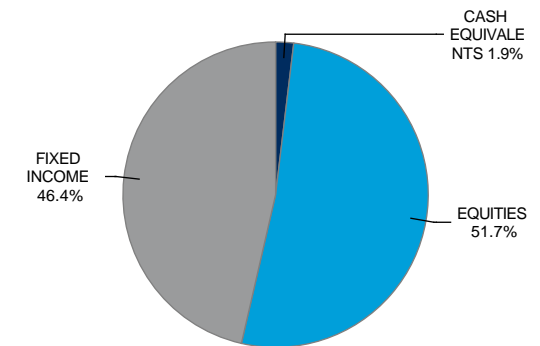
The investment objective of the Permanent School Fund is to produce a growing level of spendable income, within the constraints of maintaining adequate portfolio quality and liquidity. The income from the portfolio is transferred to the school endowment fund and distributed to Minnesota's public schools.

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

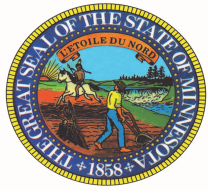
The stock segment is passively managed to track the performance of the S&P 500. The bond segment is actively managed to add incremental value through sector, security and yield curve decisions. The fixed income benchmark is the Bloomberg Barclays U.S. Aggregate. The total fund benchmark is a combination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



	Ending Market Value	Last Qtr	1 Year	3 Year	5 Year	10 Year
PERMANENT SCHOOL FUND	\$1,837,342,444	1.4%	27.9%	11.1%	10.1%	9.0%
CASH EQUIVALENTS	34,317,655	0.0	0.2	1.5	1.2	0.7
EQUITIES	949,688,767	6.2	56.3	16.8	16.3	13.9
FIXED INCOME	853,336,021	-3.5	4.0	5.1	3.6	3.8
PERMANENT SCHOOL - COMP INDEX		1.4	26.1	11.0	9.8	8.8
Excess		0.0	1.8	0.1	0.3	0.2
S&P 500		6.2	56.4	16.8	16.3	13.9
BBG BARC US Agg		-3.4	0.7	4.7	3.1	3.4



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.



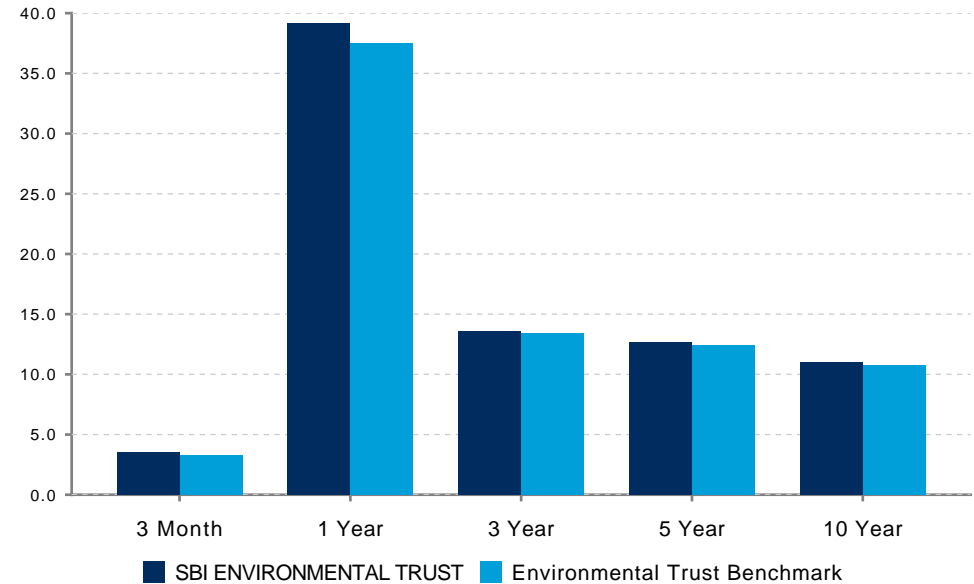
Non-Retirement

Environmental Trust Fund

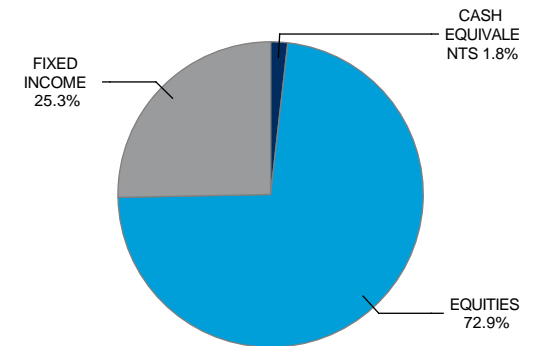
The objective of the Environmental Trust Fund is to increase the market value of the Fund over time in order to increase the annual amount made available for spending within the constraints of maintaining adequate portfolio quality and liquidity.

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.

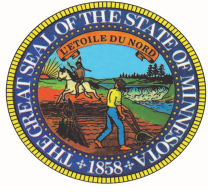
The bond segment is actively managed to add incremental value through sector, security and yield curve decisions. The stock segment is passively managed to track the performance of the S&P 500. The fixed income benchmark is the Bloomberg Barclays U.S. Aggregate. The total fund benchmark is a combination 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	\$1,542,581,897	3.5%	39.2%	13.6%	12.7%	11.0%
CASH EQUIVALENTS	27,659,533	0.0	0.2	1.5	1.2	0.7
EQUITIES	1,125,137,827	6.2	56.3	16.8	16.3	13.9
FIXED INCOME	389,784,537	-3.5	4.0	5.1	3.6	3.8
Environmental Trust Benchmark		3.3	37.5	13.4	12.4	10.8
Excess		0.1	1.7	0.3	0.3	0.2
S&P 500		6.2	56.4	16.8	16.3	13.9
BBG BARC US Agg		-3.4	0.7	4.7	3.1	3.4



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

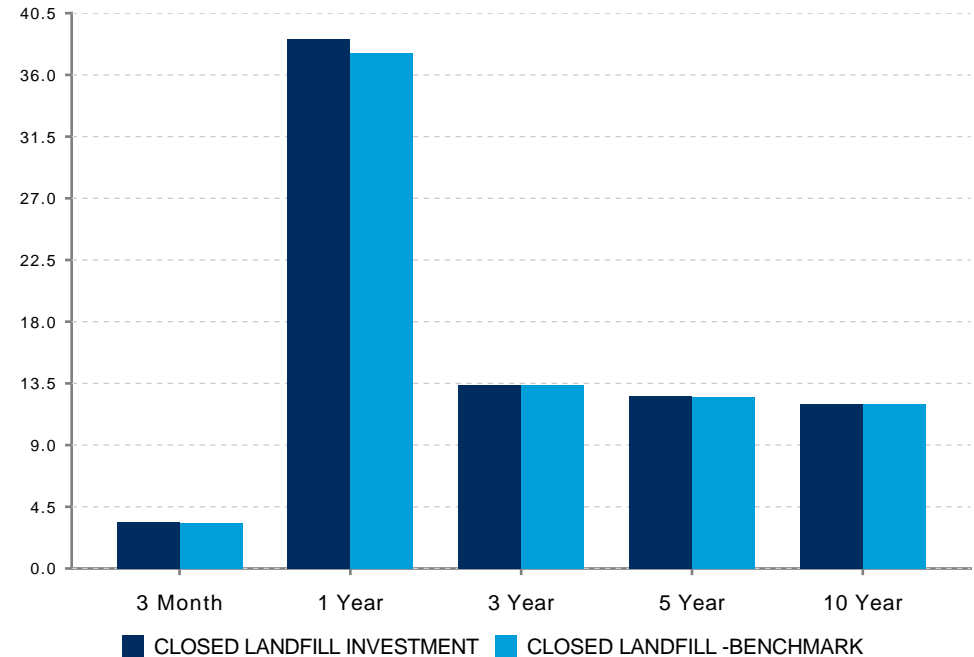


Non-Retirement

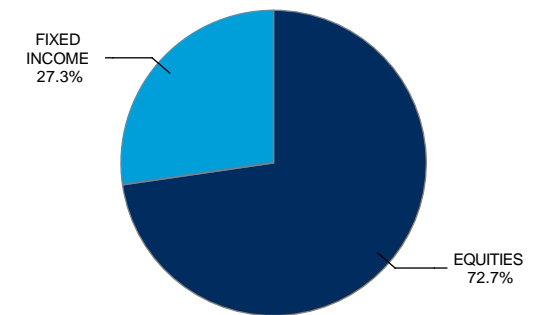
Closed Landfill Investment Fund

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

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

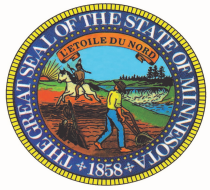


	Ending Market Value	Last Qtr	1 Year	3 Year	5 Year	10 Year
CLOSED LANDFILL INVESTMENT	\$123,282,262	3.4%	38.6%	13.4%	12.6%	12.0%
EQUITIES	89,687,406	6.2	56.3	16.8	16.3	13.9
FIXED INCOME	33,594,855	-3.5	4.0	5.1	3.6	
CLOSED LANDFILL -BENCHMARK		3.3	37.6	13.4	12.5	12.0
Excess		0.1	1.1	-0.0	0.1	0.0
S&P 500		6.2	56.4	16.8	16.3	13.9
BBG BARC US Agg		-3.4	0.7	4.7	3.1	3.4



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.

Minnesota State Board of Investment
Quarter Ending March 31, 2021
Non-Retirement Managers



	<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	3,050,655,737	6.2	29.7	56.4	16.8	16.3	13.9	10.4	07/1993
S&P 500 INDEX (DAILY)		6.2	29.7	56.4	16.8	16.3	13.9	10.3	07/1993
Excess		0.0	0.0	-0.0	0.0	-0.0	-0.0	0.1	
NON RETIREMENT FIXED INCOME - PRUDENTIAL	1,465,566,763	-3.5	-0.8	4.1	5.1	3.6	3.8	5.9	07/1994
BBG BARC Agg (Dly)		-3.4	-2.1	0.7	4.7	3.1	3.4	5.4	07/1994
Excess		-0.1	1.3	3.3	0.5	0.5	0.4	0.5	
RBC	233,110,144	-1.5	-1.4	-0.7	3.9	2.2	2.3	4.8	07/1991
RBC Custom Benchmark		-1.7	-1.7	-1.2	3.8	2.1	2.3	4.9	07/1991
Excess		0.2	0.4	0.5	0.1	0.1	0.1	-0.1	
MET COUNCIL OPEB BOND POOL	110,414,180	-0.6	-0.4	-0.1	3.0				02/2009
NON RETIREMENT CASH	154,012,633	0.0	0.1	0.2	1.5	1.2	0.7	2.6	
iMoneyNet Money Fund Average- All Taxable		0.0	0.0	0.1	1.1	0.9	0.4		
Excess		0.0	0.1	0.1	0.4	0.4	0.3		

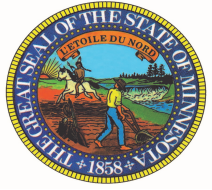
Note:

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

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

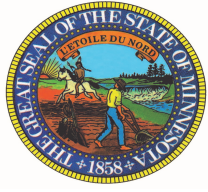
In addition to the Non-Retirement Funds listed on the previous pages, the Non Retirement Equity Index and the Non Retirement Fixed Income accounts also include the assets of various smaller Miscellaneous Trust Accounts and Other Post Employment Benefits.

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State Cash

March 31, 2021



State Cash Accounts

Invested Treasurer's Cash

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

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

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

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

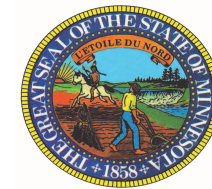
Beginning in January 2003, the Treasurer's Cash Pool is measured against the iMoneyNet, All Taxable Money Fund Report Average.

	<u>Ending Market Value</u>	<u>Last Qtr</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>
Treasurer's Cash	13,151,218,921	0.0	0.6	1.7	1.4	1.0
iMoneyNet Money Fund Average-All Taxable		0.0	0.1	1.1	0.9	0.4

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	73,140,756	-0.7	3.2	3.9	2.8	
Public Facilities Authority	2,114,012	1.1	2.3	2.1	1.9	



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:

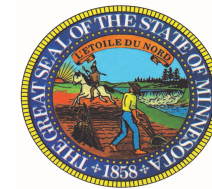
The Composite Index performance is calculated by multiplying the beginning of month Composite weights by the monthly returns of the asset class benchmarks. Asset class weights for Private Markets - Invested and Private Markets - Uninvested are reset at the start of each month. From 1/1/2018-2/28/2019 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. 7/1/2016 to 12/1/2020 the uninvested portion of Private Markets allocated to Public Equity. 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.

Core Bonds 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. The SBI name for this benchmark changed from Fixed Income to Core Bonds on March 31, 2020.

Credit Plus Benchmark:

40% Bloomberg Barclays US Corporate Bond Index, 30% Bloomberg Barclays US Mortgage Backed Index, 20% BofA ML US High Yield BB-B Cash Pay Constrained Index, and 10% JPM EMBI Global Diversified Index.



Addendum

Domestic Equity Benchmark:

Since 12/1/2020 the benchmark is the Russell 3000. From 1/1/2019-11/30/2020 the benchmark was 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 Interest Blended Benchmark: Since 6/1/2002, equals 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 12/1/2020 equals the MSCI ACWI ex-US(Net). From 1/1/2018 to 1/1/2019 it was 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).

Multi-Asset Credit Benchmark:

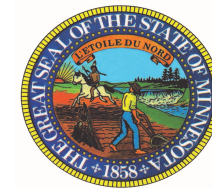
33.33% ICE BofA High Yield, 33.33% S&P LSTA Leveraged Loan, and 33.33% JPM EMBI Global Diversified Index.

Passive Domestic Equity Benchmark:

A weighted average of the Russell 1000, Russell 2000 and Russell 3000 effective 11/1/2018. From 10/1/2016-11/1/2018 it was a weighted average of the Russell 1000 and Russell 3000. 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.



Addendum

Public Equity Benchmark:

Since 12/1/2020 it is 67% Russell 3000 and 33% MSCI ACWI ex-US(net). From 1/1/2019 to 12/1/2020 it was 60.3% Russell 1000, 6.7% Russell 2000, 24.75% MSCI World Ex US (net), and 8.25% MSCI EM (net). 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 67% and 33%.

Return Seeking BM:

A weighted composite of each individual return seeking fixed income managers' benchmarks. The calculation uses the average weight of the manager relative to the total group of active managers during the month.

Semi-Passive Domestic Equity Benchmark: Russell 1000 index effective 1/1/2004. Prior to 1/1/2004 it was the Completeness Fund benchmark.

Total Fixed Income Benchmark:

Since 7/1/2020 the Total Fixed Income benchmark is 40% Bloomberg Barclays U.S. Aggregate Index/ 40% Bloomberg Barclays Treasury 5+ Years Index/ 20% ICE BofA US 3-Month Treasury Bill. From 4/1/2019-6/30/2020 it was 50% Bloomberg Barclays Agg and 50% Bloomberg Barclays Treasury 5+ Years Index. From 2/1/2018-3/31/19 the weighting of this benchmark reflected the relative weights of the Core Bonds and Treasuries allocations in the Combined Funds Composite.

Zevenbergen Benchmark: Russell 3000 Growth index effective 1/1/2021. Prior to 1/1/2021 it was the Russell 1000 Growth Index.