

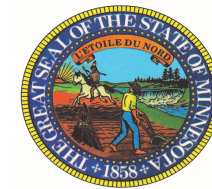
# REPORT

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## SBI Comprehensive Performance Report

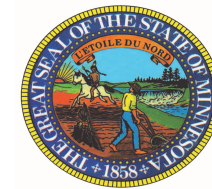
December 31, 2021

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# Comprehensive Performance Report

December 31, 2021



## Description of SBI Investment Programs

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

### Combined Funds

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

### 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

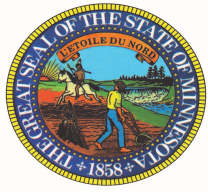
The Participant Directed Investment Program (PDIP) provides investment vehicles for a variety of retirement or other tax-advantaged savings plans. Investment goals among the PDIP's many participants are varied. In order to meet the variety of goals, participants may allocate their investments among one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

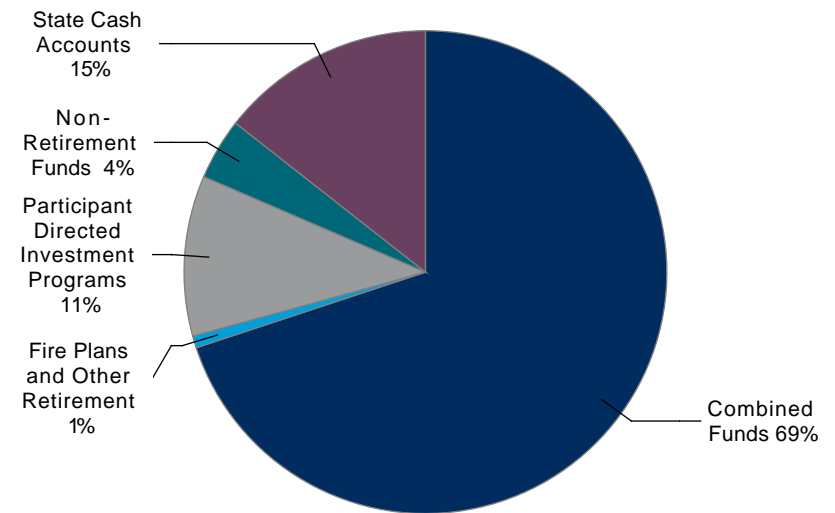
### State Cash

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>
<b>COMBINED FUNDS</b>	<b>\$94,134</b>
<b>FIRE PLANS + OTHER RETIREMENT</b>	<b>1,074</b>
<b>PARTICIPANT DIRECTED INVESTMENT PROGRAMS</b>	<b>14,470</b>
State Deferred Compensation Plan	10,069
Health Care Savings Plan	1,747
Unclassified Employees Retirement Plan	409
Hennepin County Supplemental Retirement Plan	196
PERA Defined Contribution Plan	103
Minnesota College Savings Plan	1,920
Minnesota Achieving a Better Life Experience Plan	26
<b>NON-RETIREMENT FUNDS</b>	<b>5,540</b>
Assigned Risk Plan	282
Permanent School Fund	2,057
Environmental Trust Fund	1,759
Closed Landfill Investment Fund	140
Miscellaneous Trust Funds	375
Other Postemployment Benefits Accounts	927
<b>STATE CASH ACCOUNTS</b>	<b>20,515</b>
Invested Treasurer's Cash	20,446
Other State Cash Accounts	69
<b>TOTAL SBI AUM</b>	<b>135,733</b>



Note: Differentials within column amounts may occur due to rounding



## Quarterly Report

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### Performance Reporting Legend

**Manager Level Data**

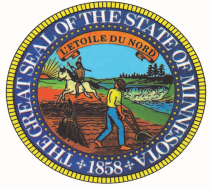
**Aggregate Level Data**

**Sub-Asset Class Level Data**

**Asset Class Level Data**

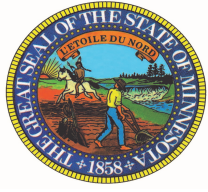
#### Note:

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



# Combined Funds

December 31, 2021



## Combined Funds Summary

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

	One Quarter
COMBINED FUNDS	
Beginning Market Value	\$89,948
Net Contributions	-675
Investment Return	4,860
Ending Market Value	94,134

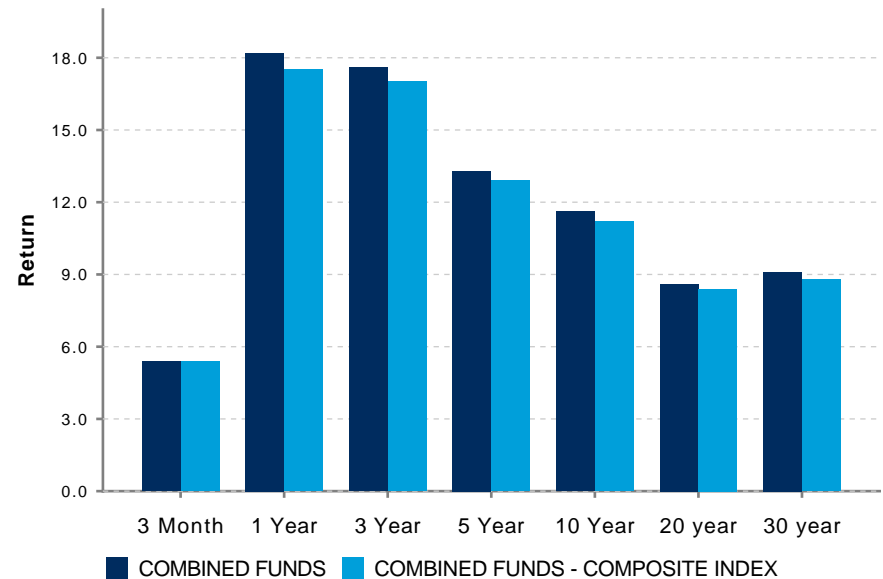
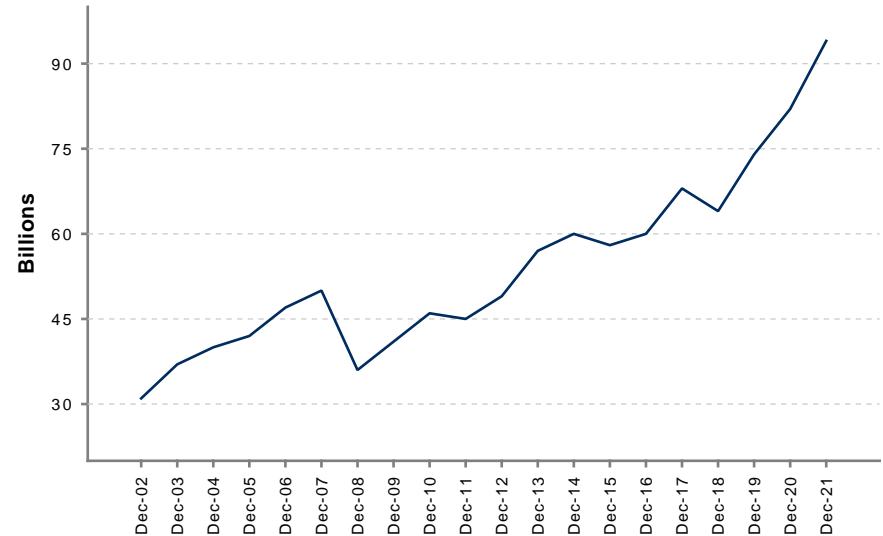
The change in market value of the Combined Funds since the end of last quarter is due to net contributions and investment returns.

### Performance (Net of Fees)

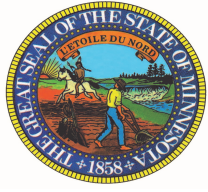
The Combined Funds' performance is evaluated relative to a composite of public market index and private market investment returns. The Composite performance is calculated by multiplying the beginning of month Composite weights and the monthly returns of the asset class benchmarks.

	Qtr	FYTD	1 Yr	3 Yr	5 Yr	10 Yr	20 Yr	30 Yr
COMBINED FUNDS	5.4%	6.8%	18.2%	17.6%	13.3%	11.6%	8.6%	9.1%
COMBINED FUNDS - COMPOSITE INDEX	5.4	6.7	17.5	17.0	12.9	11.2	8.4	8.8
Excess	0.0	0.1	0.7	0.6	0.5	0.4	0.2	0.2

### Asset Growth





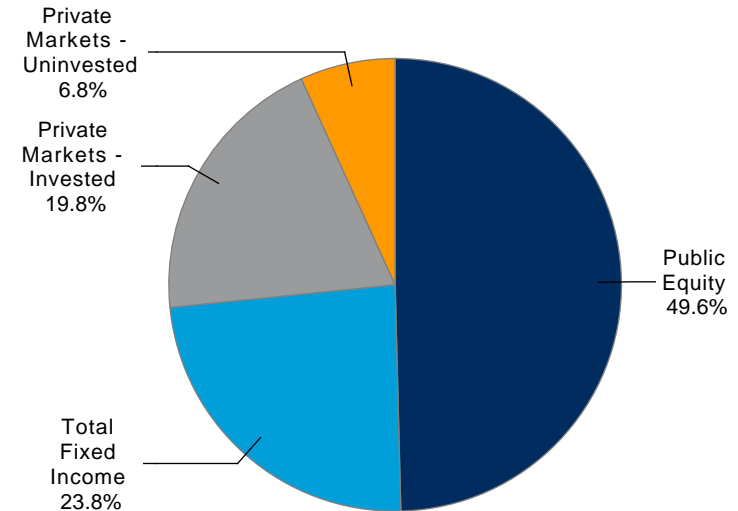


## Combined Funds Summary

### Asset Mix

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

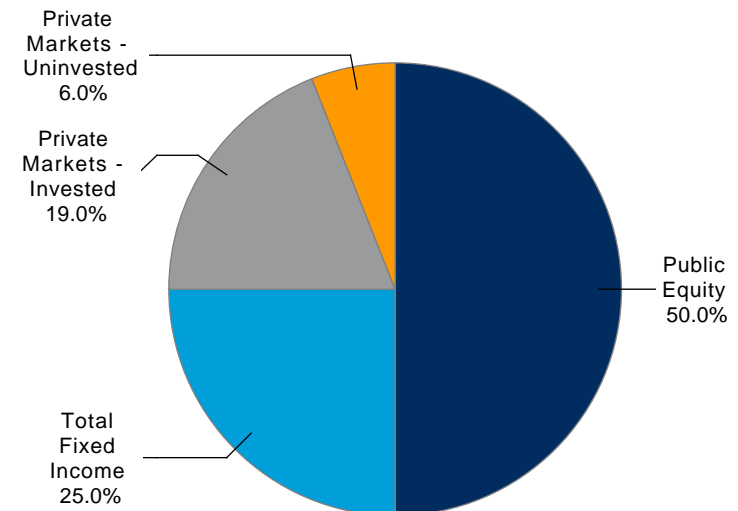
	<u>(Millions)</u>	<u>Actual Mix</u>	<u>Policy Target</u>
Public Equity	\$46,689	49.6%	50.0%
Total Fixed Income	22,391	23.8	25.0
Private Markets - Total	25,053	26.6	25.0
Private Markets - Invested	18,621	19.8	
Private Markets - Uninvested	6,432	6.8	
<b>TOTAL</b>	<b>94,134</b>	<b>100.0</b>	



### 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	19.0	Private Markets
Private Markets - Uninvested	6.0	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	\$46.7	49.6%	50.0%	6.8%	5.8%	19.9%	22.0%	15.5%	13.9%	8.9%	9.6%
Public Equity Benchmark				6.8	5.7	19.6	21.5	15.1			
Excess				-0.0	0.1	0.4	0.5	0.3			
Domestic Equity	31.6	33.5	33.5	9.1	9.1	25.8	26.0	18.1	16.4	9.6	10.4
Domestic Equity Benchmark				9.3	9.2	25.7	25.7	17.9	16.3	9.7	10.5
Excess				-0.2	-0.1	0.1	0.3	0.2	0.1	-0.1	-0.1
International Equity	14.0	14.8	16.5	2.1	-0.6	9.0	14.1	10.1	7.9	7.1	
International Equity Benchmark				1.8	-1.2	7.8	13.1	9.6	7.3	6.8	
Excess				0.3	0.6	1.2	1.0	0.6	0.7	0.3	
Global Equity	1.2	1.2	0.0	3.3	-1.3	9.6					
MSCI AC WORLD INDEX NET				6.7	5.6	18.5					
Excess				-3.3	-6.8	-8.9					

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 U.S. Aggregate Index/ 40% Bloomberg 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	\$22.4	23.8%	25.0%	0.4%	0.5%	-1.6%	6.4%	4.7%	3.9%	4.9%	5.8%
Total Fixed Income Benchmark				0.5	0.6	-2.1	5.8				
Excess				-0.1	-0.1	0.5	0.6				
Core/Core Plus	4.8	5.1	5.0	-0.1	0.1	-1.1	6.0	4.4	3.7	4.8	5.7
Core Bonds Benchmark				0.0	0.1	-1.5	4.8	3.6	2.9	4.3	5.3
Excess				-0.1	0.0	0.5	1.2	0.8	0.9	0.5	0.4
Return Seeking Fixed Income	4.0	4.3	5.0	0.1	-0.0	0.8					
Bloomberg U.S. Aggregate				0.0	0.1	-1.5					
Excess				0.1	-0.1	2.4					
Treasury Protection	9.0	9.6	10.0	1.0	1.2	-3.7	6.2				
Bloomberg Treasury 5+ Year				1.3	1.4	-3.8	6.2				
Excess				-0.2	-0.2	0.1	-0.0				
Laddered Bond + Cash	4.6	4.8	5.0	-0.1	-0.0	0.0	1.0	1.2	0.8	1.6	3.2
ICE BofA US 3-Month Treasury Bill				0.0	0.0	0.0	1.0	1.1	0.6	1.3	2.5
Excess				-0.1	-0.1	-0.0	-0.0	0.0	0.1	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	6.4%	16.4%	39.1%	16.9%	17.0%	13.9%	13.8%	13.8%	13.1%
Private Markets -Uninvested(1)	11.1	11.7	28.5						
Private Equity	5.9%	16.9%	44.5%	23.8%	22.3%	18.1%	15.7%	15.4%	15.7%
Private Credit	7.3%	13.4%	26.9%	11.8%	13.3%	13.2%	12.6%	12.7%	
Resources	6.5%	13.6%	27.8%	-2.4%	3.2%	2.4%	13.3%	12.6%	12.6%
Real Estate	9.4%	20.6%	29.6%	14.0%	12.7%	12.4%	9.4%	10.5%	8.6%

### 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.

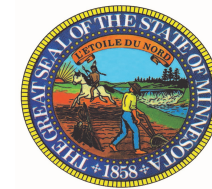
**Private Credit Investments** - The objectives of the Private Credit portfolio, which may include mezzanine debt, direct lending, and other forms of non-investment grade fixed income instruments, are to achieve a high total return over a full market cycle and to provide some degree of downside protection 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.

(1) The Uninvested portion of the Private Markets allocation is invested in a combination of a passively managed S&P 500 Index strategy and a cash overlay strategy invested in equity derivatives and cash



## Quarterly Report

# Asset Class & Manager Performance

## December 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

### December 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>
<b>Total Domestic Equity</b>										
<b>ACTIVE DOMESTIC EQUITY AGGREGATE (1)</b>	<b>\$3,658,221,094</b>	<b>11.3%</b>	<b>3.1%</b>	<b>2.3%</b>	<b>18.5%</b>	<b>24.4%</b>	<b>16.8%</b>	<b>15.5%</b>		
Active Domestic Equity Benchmark			5.7	3.4	20.3	22.7	15.0	14.9		
Excess			-2.5	-1.1	-1.7	1.7	1.7	0.6		
<b>SEMI PASSIVE DOMESTIC EQUITY AGGREGATE (2)</b>	<b>3,376,194,650</b>	<b>10.5</b>	<b>11.0</b>	<b>11.1</b>	<b>28.8</b>	<b>26.8</b>	<b>18.9</b>	<b>16.9</b>		
Semi Passive Domestic Equity Benchmark			9.8	10.0	26.5	26.2	18.4	16.5		
Excess			1.2	1.1	2.3	0.6	0.5	0.3		
<b>PASSIVE DOMESTIC EQUITY AGGREGATE (3)</b>	<b>25,268,638,610</b>	<b>78.2</b>	<b>9.7</b>	<b>9.9</b>	<b>26.5</b>	<b>26.1</b>	<b>18.2</b>	<b>16.4</b>		
Passive Domestic Equity Benchmark			9.7	9.9	26.4	26.1	18.3	16.4		
Excess			-0.0	0.0	0.1	0.0	-0.0	0.0		
TRANSITION AGGREGATE DOMESTIC EQUITY (4)	39	0.0								
<b>TOTAL DOMESTIC EQUITY (5)</b>	<b>32,303,054,393</b>	<b>100.0</b>	<b>9.1</b>	<b>9.1</b>	<b>25.8</b>	<b>26.0</b>	<b>18.1</b>	<b>16.4</b>	<b>11.2</b>	<b>01/1984</b>
Domestic Equity Benchmark			9.3	9.2	25.7	25.7	17.9	16.3	11.4	01/1984
Excess			-0.2	-0.1	0.1	0.3	0.2	0.1	-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 contain 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>
<b>Total Domestic Equity</b>					
<b>ACTIVE DOMESTIC EQUITY AGGREGATE (1)</b>	<b>27.3%</b>	<b>27.6%</b>	<b>-6.5%</b>	<b>20.6%</b>	<b>10.9%</b>
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
<b>SEMI PASSIVE DOMESTIC EQUITY AGGREGATE (2)</b>	<b>21.0</b>	<b>30.9</b>	<b>-4.9</b>	<b>22.5</b>	<b>11.1</b>
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
<b>PASSIVE DOMESTIC EQUITY AGGREGATE (3)</b>	<b>20.8</b>	<b>31.3</b>	<b>-5.0</b>	<b>21.3</b>	<b>12.6</b>
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)					
<b>TOTAL DOMESTIC EQUITY (5)</b>	<b>21.7%</b>	<b>30.7%</b>	<b>-5.3%</b>	<b>21.4%</b>	<b>11.5</b>
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 contain 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>
<b>Active Large Cap Growth</b>										
<b>SANDS</b>	<b>\$275,654,189</b>	<b>0.9%</b>	<b>-6.6%</b>	<b>-2.8%</b>	<b>5.2%</b>	<b>33.9%</b>	<b>28.3%</b>	<b>20.5%</b>	<b>14.0%</b>	<b>01/2005</b>
Russell 1000 Growth			11.6	12.9	27.6	34.1	25.3	19.8	12.9	01/2005
Excess			-18.2	-15.7	-22.4	-0.2	3.0	0.7	1.0	
<b>WINSLOW</b>	<b>215,151,938</b>	<b>0.7</b>	<b>7.9</b>	<b>10.6</b>	<b>24.8</b>	<b>32.1</b>	<b>26.2</b>	<b>19.2</b>	<b>13.4</b>	<b>01/2005</b>
Russell 1000 Growth			11.6	12.9	27.6	34.1	25.3	19.8	12.9	01/2005
Excess			-3.8	-2.3	-2.8	-2.0	0.9	-0.6	0.4	
<b>RUSSELL 1000 GROWTH AGGREGATE (1)</b>	<b>490,806,127</b>	<b>1.5</b>	<b>-0.9</b>	<b>2.6</b>	<b>12.8</b>	<b>41.1</b>	<b>31.4</b>	<b>22.2</b>		
Russell 1000 Growth			11.6	12.9	27.6	34.1	25.3	19.8		
Excess			-12.5	-10.3	-14.8	7.0	6.1	2.5		

(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>
<b>Active Large Cap Growth</b>					
<b>SANDS</b>	<b>71.0%</b>	<b>33.5%</b>	<b>7.0%</b>	<b>35.3%</b>	<b>-6.9%</b>
Russell 1000 Growth	38.5	36.4	-1.5	30.2	7.1
Excess	32.5	-2.8	8.6	5.1	-13.9
<b>WINSLOW</b>	<b>37.6</b>	<b>34.2</b>	<b>4.2</b>	<b>33.2</b>	<b>-1.9</b>
Russell 1000 Growth	38.5	36.4	-1.5	30.2	7.1
Excess	-0.9	-2.2	5.7	3.0	-9.0
<b>RUSSELL 1000 GROWTH AGGREGATE (1)</b>	<b>81.3%</b>	<b>37.3%</b>	<b>4.7%</b>	<b>33.4%</b>	<b>1.0</b>
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>
<b>Semi-Passive Large Cap</b>										
<b>BLACKROCK</b>	<b>\$1,697,838,501</b>	<b>5.3%</b>	<b>10.8%</b>	<b>10.7%</b>	<b>28.3%</b>	<b>26.4%</b>	<b>19.3%</b>	<b>17.4%</b>	<b>11.2%</b>	<b>01/1995</b>
Semi Passive Domestic Equity Benchmark			9.8	10.0	26.5	26.2	18.4	16.5	10.8	01/1995
Excess			1.0	0.7	1.8	0.2	0.8	0.8	0.4	
<b>J.P. MORGAN</b>	<b>1,678,356,149</b>	<b>5.2</b>	<b>11.3</b>	<b>11.5</b>	<b>29.3</b>	<b>27.2</b>	<b>18.9</b>	<b>17.1</b>	<b>11.1</b>	<b>01/1995</b>
Semi Passive Domestic Equity Benchmark			9.8	10.0	26.5	26.2	18.4	16.5	10.8	01/1995
Excess			1.5	1.5	2.8	1.0	0.4	0.6	0.3	
<b>SEMI-PASSIVE DOMESTIC EQUITY AGGREGATE</b>	<b>3,376,194,650</b>	<b>10.5</b>	<b>11.0</b>	<b>11.1</b>	<b>28.8</b>	<b>26.8</b>	<b>18.9</b>	<b>16.9</b>		
Semi Passive Domestic Equity Benchmark			9.8	10.0	26.5	26.2	18.4	16.5		
Excess			1.2	1.1	2.3	0.6	0.5	0.3		



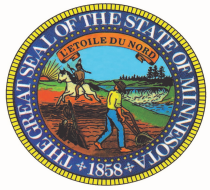
	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>	<u>2017 Calendar Return</u>	<u>2016 Calendar Return</u>
<b>Semi-Passive Large Cap</b>					
<b>BLACKROCK</b>	<b>20.7%</b>	<b>30.4%</b>	<b>-4.1%</b>	<b>24.6%</b>	<b>12.5%</b>
Semi Passive Domestic Equity Benchmark	21.0	31.4	-4.8	21.7	12.1
Excess	-0.3	-1.0	0.7	2.9	0.5
<b>J.P. MORGAN</b>					
<b>J.P. MORGAN</b>	<b>21.2</b>	<b>31.3</b>	<b>-5.4</b>	<b>21.8</b>	<b>12.3</b>
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
<b>SEMI-PASSIVE DOMESTIC EQUITY AGGREGATE</b>					
<b>SEMI-PASSIVE DOMESTIC EQUITY AGGREGATE</b>	<b>21.0%</b>	<b>30.9%</b>	<b>-4.9%</b>	<b>22.5%</b>	<b>11.1</b>
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>
<b>Active Large Cap Value</b>										
<b>BARROW HANLEY</b>	<b>\$382,116,838</b>	<b>1.2%</b>	<b>9.2%</b>	<b>7.9%</b>	<b>27.7%</b>	<b>18.4%</b>	<b>12.3%</b>	<b>13.3%</b>	<b>9.1%</b>	<b>04/2004</b>
Russell 1000 Value			7.8	6.9	25.2	17.6	11.2	13.0	8.7	04/2004
Excess			1.4	1.0	2.5	0.7	1.2	0.4	0.4	
<b>LSV</b>	<b>387,457,748</b>	<b>1.2</b>	<b>6.9</b>	<b>4.5</b>	<b>29.7</b>	<b>17.5</b>	<b>11.2</b>	<b>14.2</b>	<b>9.6</b>	<b>04/2004</b>
Russell 1000 Value			7.8	6.9	25.2	17.6	11.2	13.0	8.7	04/2004
Excess			-0.9	-2.4	4.5	-0.1	0.0	1.2	0.9	
<b>RUSSELL 1000 VALUE AGGREGATE</b>	<b>769,574,587</b>	<b>2.4</b>	<b>8.0</b>	<b>6.2</b>	<b>28.8</b>	<b>18.6</b>	<b>12.3</b>	<b>13.7</b>		
Russell 1000 Value			7.8	6.9	25.2	17.6	11.2	13.0		
Excess			0.3	-0.8	3.7	0.9	1.1	0.7		



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

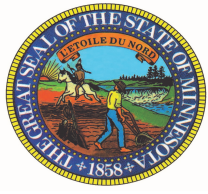


	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
<b>Active Small Cap Growth</b>										
<b>ARROWMARK</b>	<b>\$208,976,684</b>	<b>0.6%</b>	<b>-4.9%</b>	<b>-5.9%</b>	<b>6.1%</b>	<b>15.8%</b>	<b>14.6%</b>		<b>16.0%</b>	<b>11/2016</b>
Russell 2000 Growth			0.0	-5.6	2.8	21.2	14.5		16.2	11/2016
Excess			-4.9	-0.2	3.2	-5.4	0.1		-0.2	
<b>HOOD RIVER</b>	<b>287,085,207</b>	<b>0.9</b>	<b>4.8</b>	<b>2.9</b>	<b>24.2</b>	<b>35.6</b>	<b>23.0</b>		<b>24.1</b>	<b>11/2016</b>
Russell 2000 Growth			0.0	-5.6	2.8	21.2	14.5		16.2	11/2016
Excess			4.7	8.6	21.4	14.5	8.5		7.9	
<b>RICE HALL JAMES</b>	<b>231,074,888</b>	<b>0.7</b>	<b>4.5</b>	<b>1.8</b>	<b>15.6</b>	<b>19.1</b>	<b>15.0</b>		<b>17.0</b>	<b>11/2016</b>
Russell 2000 Growth			0.0	-5.6	2.8	21.2	14.5		16.2	11/2016
Excess			4.4	7.4	12.8	-2.1	0.5		0.8	
<b>WELLINGTON</b>	<b>308,784,968</b>	<b>1.0</b>	<b>0.5</b>	<b>-0.8</b>	<b>4.3</b>	<b>23.4</b>	<b>15.3</b>		<b>17.0</b>	<b>11/2016</b>
Russell 2000 Growth			0.0	-5.6	2.8	21.2	14.5		16.2	11/2016
Excess			0.4	4.8	1.4	2.3	0.8		0.8	
<b>RUSSELL 2000 GROWTH AGGREGATE</b>	<b>1,035,921,748</b>	<b>3.2</b>	<b>1.3</b>	<b>-0.3</b>	<b>12.4</b>	<b>23.8</b>	<b>16.8</b>	<b>13.8</b>		
Russell 2000 Growth			0.0	-5.6	2.8	21.2	14.5	14.1		
Excess			1.3	5.3	9.5	2.6	2.2	-0.3		





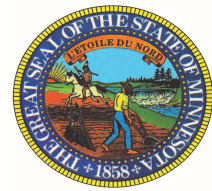
	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>	<u>2017 Calendar Return</u>	<u>2016 Calendar Return</u>
<b>Active Small Cap Growth</b>					
<b>ARROWMARK</b>	<b>21.9%</b>	<b>20.1%</b>	<b>0.9%</b>	<b>26.2%</b>	
Russell 2000 Growth	34.6	28.5	-9.3	22.2	
Excess	-12.8	-8.4	10.3	4.1	
<b>HOOD RIVER</b>	<b>61.7</b>	<b>24.3</b>	<b>-7.0</b>	<b>21.3</b>	
Russell 2000 Growth	34.6	28.5	-9.3	22.2	
Excess	27.0	-4.2	2.3	-0.9	
<b>RICE HALL JAMES</b>	<b>23.8</b>	<b>18.0</b>	<b>-6.9</b>	<b>27.9</b>	
Russell 2000 Growth	34.6	28.5	-9.3	22.2	
Excess	-10.8	-10.5	2.4	5.8	
<b>WELLINGTON</b>	<b>33.1</b>	<b>35.6</b>	<b>-11.6</b>	<b>22.6</b>	
Russell 2000 Growth	34.6	28.5	-9.3	22.2	
Excess	-1.5	7.1	-2.3	0.4	
<b>RUSSELL 2000 GROWTH AGGREGATE</b>	<b>35.4%</b>	<b>24.6%</b>	<b>-6.2%</b>	<b>22.0%</b>	<b>4.7</b>
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>
<b>Active Small Cap Value</b>										
<b>GOLDMAN SACHS</b>	<b>\$340,151,466</b>	<b>1.1%</b>	<b>6.9%</b>	<b>5.7%</b>	<b>27.0%</b>	<b>17.0%</b>	<b>9.3%</b>	<b>12.4%</b>	<b>9.8%</b>	<b>01/2004</b>
Russell 2000 Value			4.4	1.2	28.3	18.0	9.1	12.0	8.7	01/2004
Excess			2.6	4.4	-1.3	-1.0	0.3	0.4	1.1	
<b>HOTCHKIS AND WILEY</b>	<b>195,634,393</b>	<b>0.6</b>	<b>3.6</b>	<b>5.9</b>	<b>36.5</b>	<b>17.7</b>	<b>8.5</b>	<b>13.0</b>	<b>8.9</b>	<b>01/2004</b>
Russell 2000 Value			4.4	1.2	28.3	18.0	9.1	12.0	8.7	01/2004
Excess			-0.7	4.7	8.2	-0.3	-0.5	0.9	0.2	
<b>MARTINGALE</b>	<b>194,548,367</b>	<b>0.6</b>	<b>8.5</b>	<b>8.7</b>	<b>41.3</b>	<b>17.7</b>	<b>8.2</b>	<b>13.3</b>	<b>8.6</b>	<b>01/2004</b>
Russell 2000 Value			4.4	1.2	28.3	18.0	9.1	12.0	8.7	01/2004
Excess			4.1	7.5	13.0	-0.3	-0.9	1.3	-0.1	
<b>PEREGRINE</b>	<b>315,957,218</b>	<b>1.0</b>	<b>6.7</b>	<b>4.6</b>	<b>28.6</b>	<b>18.7</b>	<b>9.5</b>	<b>12.3</b>	<b>10.5</b>	<b>07/2000</b>
Russell 2000 Value			4.4	1.2	28.3	18.0	9.1	12.0	9.9	07/2000
Excess			2.4	3.4	0.3	0.7	0.5	0.3	0.5	
<b>RUSSELL 2000 VALUE AGGREGATE</b>	<b>1,046,291,443</b>	<b>3.2</b>	<b>6.5</b>	<b>6.0</b>	<b>31.8</b>	<b>17.5</b>	<b>8.8</b>	<b>12.6</b>		
Russell 2000 Value			4.4	1.2	28.3	18.0	9.1	12.0		
Excess			2.2	4.8	3.5	-0.5	-0.3	0.5		



	<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>
<b>Active Small Cap Value</b>					
<b>GOLDMAN SACHS</b>	<b>2.4%</b>	<b>23.2%</b>	<b>-13.3%</b>	<b>12.6%</b>	<b>24.6%</b>
Russell 2000 Value	4.6	22.4	-12.9	7.8	31.7
Excess	-2.3	0.8	-0.5	4.7	-7.1
<b>HOTCHKIS AND WILEY</b>	<b>-0.2</b>	<b>19.7</b>	<b>-14.4</b>	<b>7.9</b>	<b>19.9</b>
Russell 2000 Value	4.6	22.4	-12.9	7.8	31.7
Excess	-4.8	-2.7	-1.5	0.0	-11.8
<b>MARTINGALE</b>	<b>-4.6</b>	<b>21.1</b>	<b>-15.0</b>	<b>6.9</b>	<b>34.3</b>
Russell 2000 Value	4.6	22.4	-12.9	7.8	31.7
Excess	-9.2	-1.3	-2.1	-0.9	2.5
<b>PEREGRINE</b>	<b>7.3</b>	<b>21.1</b>	<b>-16.1</b>	<b>12.5</b>	<b>27.8</b>
Russell 2000 Value	4.6	22.4	-12.9	7.8	31.7
Excess	2.7	-1.3	-3.3	4.7	-3.9
<b>RUSSELL 2000 VALUE AGGREGATE</b>	<b>1.5%</b>	<b>21.3%</b>	<b>-14.7%</b>	<b>10.2%</b>	<b>26.5</b>
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>
<b>Active All Cap</b>										
<b>ZEVENBERGEN (1)</b>	<b>\$315,627,190</b>	<b>1.0%</b>	<b>-5.8%</b>	<b>-9.8%</b>	<b>-9.7%</b>	<b>43.0%</b>	<b>32.2%</b>	<b>22.3%</b>	<b>13.3%</b>	<b>04/1994</b>
Zevenbergen Custom Benchmark			10.9	11.7	32.3	35.7	26.2	20.2		04/1994
Excess			-16.7	-21.5	-42.0	7.3	6.0	2.1		
<b>ACTIVE RUSSELL 3000 GROWTH (2)</b>	<b>315,627,190</b>	<b>1.0</b>	<b>-5.8</b>	<b>-9.8</b>	<b>-9.7</b>					
Russell 3000 Growth TR			10.9	11.7	25.8					
Excess			-16.7	-21.5	-35.6					

(1) Effective 1/1/2021, 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>
<b>Active All Cap</b>					
<b>ZEVENBERGEN (1)</b>	<b>126.2%</b>	<b>43.0%</b>	<b>2.3%</b>	<b>35.1%</b>	<b>-2.8%</b>
Zevenbergen Custom 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 TR  
Excess

(1) Effective 1/1/2021, 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>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
<b>Total Passive Domestic Equity</b>										
<b>BLACKROCK RUSSELL 1000</b>	<b>\$24,010,475,647</b>	<b>74.3%</b>	<b>9.8%</b>	<b>10.0%</b>	<b>26.5%</b>	<b>26.2%</b>	<b>18.4%</b>		<b>19.1%</b>	<b>11/2016</b>
RUSSELL 1000 (DAILY)			9.8	10.0	26.5	26.2	18.4		19.1	11/2016
Excess			-0.0	0.0	0.1	0.0	-0.0		-0.0	
<b>BLACKROCK RUSSELL 2000</b>	<b>100,149,002</b>	<b>0.3</b>	<b>2.1</b>	<b>-2.3</b>	<b>16.0</b>	<b>20.6</b>			<b>15.4</b>	<b>11/2018</b>
RUSSELL 2000 (DAILY)			2.1	-2.3	14.8	20.0			14.8	11/2018
Excess			0.0	-0.0	1.2	0.6			0.6	
<b>BLACKROCK RUSSELL 3000 (1)</b>	<b>1,158,013,961</b>	<b>3.6</b>	<b>9.3</b>	<b>9.3</b>	<b>26.2</b>	<b>26.1</b>	<b>18.1</b>	<b>16.4%</b>	<b>10.6</b>	<b>07/1995</b>
Passive Manager Benchmark			9.3	9.2	25.7	25.8	18.0	16.3	10.5	07/1995
Excess			-0.0	0.1	0.5	0.3	0.2	0.1	0.1	
<b>PASSIVE DOMESTIC EQUITY AGGREGATE (2)</b>	<b>25,268,638,610</b>	<b>78.2</b>	<b>9.7</b>	<b>9.9</b>	<b>26.5</b>	<b>26.1</b>	<b>18.2</b>	<b>16.4</b>		
Passive Domestic Equity Benchmark			9.7	9.9	26.4	26.1	18.3	16.4		
Excess			-0.0	0.0	0.1	0.0	-0.0	0.0		

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

(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>
<b>Total Passive Domestic Equity</b>					
<b>BLACKROCK RUSSELL 1000</b>	<b>20.9%</b>	<b>31.4%</b>	<b>-4.8%</b>	<b>21.7%</b>	
RUSSELL 1000 (DAILY)	21.0	31.4	-4.8	21.7	
Excess	-0.0	0.0	-0.0	-0.0	
<b>BLACKROCK RUSSELL 2000</b>	<b>20.8</b>	<b>25.2</b>			
RUSSELL 2000 (DAILY)	20.0	25.5			
Excess	0.8	-0.3			
<b>BLACKROCK RUSSELL 3000 (1)</b>	<b>21.2</b>	<b>31.1</b>	<b>-5.2</b>	<b>21.1</b>	<b>12.7%</b>
Passive Manager Benchmark	20.9	31.0	-5.2	21.1	12.7
Excess	0.3	0.0	-0.0	0.0	0.0
<b>PASSIVE DOMESTIC EQUITY AGGREGATE (2)</b>	<b>20.8%</b>	<b>31.3%</b>	<b>-5.0%</b>	<b>21.3%</b>	<b>12.6</b>
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

## December 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>
<b>Total International Equity</b>										
<b>DEVELOPED MARKETS (1)</b>	<b>\$9,794,110,103</b>	<b>69.2%</b>	<b>3.2%</b>	<b>2.6%</b>	<b>12.9%</b>	<b>14.9%</b>	<b>10.2%</b>	<b>8.6%</b>		
BENCHMARK DM			3.1	2.5	12.6	14.1	9.6	7.8		
Excess			0.0	0.1	0.3	0.9	0.6	0.8		
<b>EMERGING MARKETS (2)</b>	<b>3,723,030,419</b>	<b>26.3</b>	<b>-1.0</b>	<b>-8.8</b>	<b>-1.5</b>	<b>11.8</b>	<b>10.3</b>	<b>5.6</b>		
BENCHMARK EM			-1.3	-9.3	-2.5	10.9	9.9	5.5		
Excess			0.3	0.5	1.1	0.9	0.4	0.1		
<b>ACWI EX-US AGGREGATE</b>	<b>401,712,273</b>	<b>2.8</b>	<b>1.8</b>	<b>0.6</b>	<b>12.8</b>					
MSCI AC WORLD ex US (NET) - DAILY			1.8	-1.2	7.8					
Excess			-0.1	1.9	4.9					
<b>CHINA ONLY AGGREGATE</b>	<b>203,955,847</b>	<b>1.4</b>	<b>5.0</b>	<b>-1.6</b>	<b>-2.9</b>					
MSCI China A			3.2	-1.4	3.2					
Excess			1.9	-0.2	-6.1					
TRANSITION AGGREGATE INTERNATIONAL EQUITY (3)	782,461	0.0								
<b>TOTAL INTERNATIONAL EQUITY (4)</b>	<b>14,149,250,807</b>	<b>100.0</b>	<b>2.1</b>	<b>-0.6</b>	<b>8.9</b>	<b>14.1</b>	<b>10.1</b>	<b>7.9</b>	<b>6.8</b>	<b>10/1992</b>
International Equity Benchmark			1.8	-1.2	7.8	13.1	9.6	7.3	6.3	10/1992
Excess			0.3	0.6	1.1	1.0	0.5	0.7	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.

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>
<b>Total International Equity</b>					
<b>DEVELOPED MARKETS (1)</b>	<b>9.1%</b>	<b>23.3%</b>	<b>-14.2%</b>	<b>24.9%</b>	<b>1.3%</b>
BENCHMARK DM	7.6	22.5	-14.1	24.2	2.7
Excess	1.5	0.8	-0.1	0.7	-1.5
<b>EMERGING MARKETS (2)</b>					
<b>EMERGING MARKETS (2)</b>	<b>17.9</b>	<b>20.3</b>	<b>-15.4</b>	<b>37.7</b>	<b>7.5</b>
BENCHMARK EM	18.3	18.4	-14.6	37.3	11.2
Excess	-0.4	1.9	-0.8	0.4	-3.7
<b>ACWI EX-US AGGREGATE</b>					
MSCI AC WORLD ex US (NET) - DAILY					
Excess					
<b>CHINA ONLY AGGREGATE</b>					
MSCI China A					
Excess					
TRANSITION AGGREGATE INTERNATIONAL EQUITY (3)					
<b>TOTAL INTERNATIONAL EQUITY (4)</b>					
<b>TOTAL INTERNATIONAL EQUITY (4)</b>	<b>11.4%</b>	<b>22.4%</b>	<b>-14.5%</b>	<b>27.6%</b>	<b>2.6</b>
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.

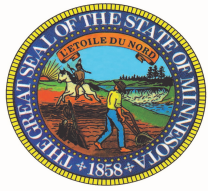
Note: All aggregates include the performance of terminated managers. For historical benchmark details please refer to the addendum of this report.



	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
<b>Active Developed Markets</b>										
<b>ACADIAN</b>	<b>\$400,215,354</b>	<b>2.8%</b>	<b>4.2%</b>	<b>0.9%</b>	<b>13.6%</b>	<b>14.7%</b>	<b>12.4%</b>	<b>11.2%</b>	<b>7.3%</b>	<b>07/2005</b>
BENCHMARK DM			3.1	2.5	12.6	14.1	9.6	7.8	5.7	07/2005
Excess			1.1	-1.6	0.9	0.7	2.7	3.4	1.6	
<b>COLUMBIA</b>	<b>429,803,043</b>	<b>3.0</b>	<b>3.3</b>	<b>4.4</b>	<b>14.2</b>	<b>19.2</b>	<b>13.8</b>	<b>10.3</b>	<b>4.4</b>	<b>03/2000</b>
BENCHMARK DM			3.1	2.5	12.6	14.1	9.6	7.8	4.2	03/2000
Excess			0.2	1.9	1.6	5.1	4.2	2.5	0.2	
<b>FIDELITY</b>	<b>424,299,362</b>	<b>3.0</b>	<b>3.1</b>	<b>3.4</b>	<b>13.0</b>	<b>18.4</b>	<b>12.3</b>	<b>10.0</b>	<b>7.6</b>	<b>07/2005</b>
BENCHMARK DM			3.1	2.5	12.6	14.1	9.6	7.8	5.7	07/2005
Excess			-0.0	0.9	0.4	4.3	2.6	2.2	1.8	
<b>JP MORGAN</b>	<b>378,253,742</b>	<b>2.7</b>	<b>5.4</b>	<b>5.0</b>	<b>13.3</b>	<b>18.5</b>	<b>12.0</b>	<b>8.9</b>	<b>6.4</b>	<b>07/2005</b>
BENCHMARK DM			3.1	2.5	12.6	14.1	9.6	7.8	5.7	07/2005
Excess			2.3	2.5	0.7	4.4	2.4	1.1	0.7	
<b>MARATHON</b>	<b>393,222,114</b>	<b>2.8</b>	<b>1.3</b>	<b>1.2</b>	<b>12.8</b>	<b>14.5</b>	<b>9.8</b>	<b>9.4</b>	<b>8.3</b>	<b>11/1993</b>
BENCHMARK DM			3.1	2.5	12.6	14.1	9.6	7.8	5.5	11/1993
Excess			-1.9	-1.3	0.2	0.4	0.2	1.6	2.7	
<b>MCKINLEY</b>	<b>307,476,126</b>	<b>2.2</b>	<b>2.8</b>	<b>5.5</b>	<b>11.6</b>	<b>17.7</b>	<b>12.0</b>	<b>9.4</b>	<b>6.0</b>	<b>07/2005</b>
BENCHMARK DM			3.1	2.5	12.6	14.1	9.6	7.8	5.7	07/2005
Excess			-0.4	3.0	-1.0	3.6	2.4	1.5	0.3	
<b>AQR CAPITAL MANAGEMENT</b>	<b>374,601,660</b>	<b>2.6</b>	<b>1.9</b>	<b>-1.2</b>	<b>8.1</b>	<b>11.6</b>	<b>7.3</b>	<b>7.6</b>	<b>5.5</b>	<b>07/2005</b>
BENCHMARK DM			3.1	2.5	12.6	14.1	9.6	7.8	5.7	07/2005
Excess			-1.2	-3.7	-4.5	-2.4	-2.3	-0.3	-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>
<b>Active Developed Markets</b>					
<b>ACADIAN</b>	<b>11.7%</b>	<b>19.1%</b>	<b>-13.5%</b>	<b>37.0%</b>	<b>8.1%</b>
BENCHMARK DM	7.6	22.5	-14.1	24.2	2.7
Excess	4.2	-3.4	0.6	12.8	5.4
<b>COLUMBIA</b>	<b>15.0</b>	<b>28.9</b>	<b>-14.9</b>	<b>32.7</b>	<b>-5.6</b>
BENCHMARK DM	7.6	22.5	-14.1	24.2	2.7
Excess	7.4	6.4	-0.8	8.5	-8.3
<b>FIDELITY</b>	<b>15.4</b>	<b>27.1</b>	<b>-14.6</b>	<b>25.9</b>	<b>1.2</b>
BENCHMARK DM	7.6	22.5	-14.1	24.2	2.7
Excess	7.8	4.6	-0.5	1.7	-1.5
<b>JP MORGAN</b>	<b>14.2</b>	<b>28.5</b>	<b>-17.3</b>	<b>28.3</b>	<b>4.0</b>
BENCHMARK DM	7.6	22.5	-14.1	24.2	2.7
Excess	6.6	6.0	-3.3	4.1	1.2
<b>MARATHON</b>	<b>7.6</b>	<b>23.5</b>	<b>-13.4</b>	<b>23.1</b>	<b>-1.1</b>
BENCHMARK DM	7.6	22.5	-14.1	24.2	2.7
Excess	0.1	1.0	0.7	-1.1	-3.8
<b>MCKINLEY</b>	<b>16.4</b>	<b>25.6</b>	<b>-15.9</b>	<b>28.5</b>	<b>-7.5</b>
BENCHMARK DM	7.6	22.5	-14.1	24.2	2.7
Excess	8.8	3.1	-1.9	4.3	-10.2
<b>AQR CAPITAL MANAGEMENT</b>	<b>6.5</b>	<b>20.8</b>	<b>-18.2</b>	<b>25.1</b>	<b>0.8</b>
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>
<b>Total Developed Markets</b>										
Active Developed Markets Aggregate (1)	\$2,707,871,402	19.1%	3.1%	2.6%	12.5%	16.2%	11.1%	9.3%		
BENCHMARK DM			3.1	2.5	12.6	14.1	9.6	7.8		
Excess			0.0	0.2	-0.1	2.2	1.4	1.5		
SSgA DEVELOPED MARKETS PASSIVE	\$7,086,238,702	50.1%	3.2%	2.6%	13.0%	14.6%	10.1%	8.2%	6.6%	10/1992
BENCHMARK DM			3.1%	2.5%	12.6%	14.1%	9.6%	7.8%	6.3%	10/1992
Excess			0.0%	0.1%	0.4%	0.5%	0.4%	0.4%	0.3%	
RECORD CURRENCY (2)	\$25,659,704	0.2%	0.2%	0.4%	0.9%					
DM PASSIVE EQUITY WITH CURRENCY MGMT	\$7,111,898,406	50.3%	3.4%	3.0%	13.9%	14.8%	10.0%	8.2%		
BENCHMARK DM			3.1%	2.5%	12.6%	14.1%	9.6%	7.8%		
Excess			0.2%	0.5%	1.3%	0.7%	0.4%	0.4%		
DEVELOPED MARKETS TOTAL	9,794,110,103	69.2	3.2	2.6	12.9	14.9	10.2	8.6		
BENCHMARK DM			3.1	2.5	12.6	14.1	9.6	7.8		
Excess			0.0	0.1	0.3	0.9	0.6	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 the difference between the DM Passive Account with Currency Management and without.



	<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>
<b>Total Developed Markets</b>					
<b>Active Developed Markets Aggregate (1)</b>	<b>12.2%</b>	<b>24.4%</b>	<b>-15.1%</b>	<b>26.8%</b>	<b>-0.3%</b>
BENCHMARK DM	7.6	22.5	-14.1	24.2	2.7
Excess	4.6	1.9	-1.0	2.6	-3.0
<b>SSgA DEVELOPED MARKETS PASSIVE</b>	<b>8.2%</b>	<b>23.0%</b>	<b>-13.9%</b>	<b>24.7%</b>	<b>3.2</b>
BENCHMARK DM	7.6%	22.5%	-14.1%	24.2%	2.7
Excess	0.6%	0.5%	0.2%	0.5%	0.4
<b>DM PASSIVE EQUITY WITH CURRENCY MGMT</b>	<b>8.0%</b>	<b>23.0%</b>	<b>-13.9%</b>	<b>23.8%</b>	<b>3.3</b>
BENCHMARK DM	7.6%	22.5%	-14.1%	24.2%	2.7
Excess	0.4%	0.5%	0.2%	-0.4%	0.5
<b>DEVELOPED MARKETS TOTAL</b>	<b>9.1%</b>	<b>23.3%</b>	<b>-14.2%</b>	<b>24.9%</b>	<b>1.3</b>
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"

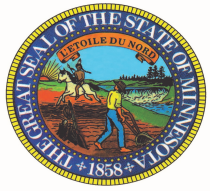


	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
<b>Active Emerging Markets</b>										
<b>MARTIN CURRIE</b>	<b>\$478,993,871</b>	<b>3.4%</b>	<b>-1.6%</b>	<b>-10.3%</b>	<b>-3.5%</b>	<b>15.8%</b>			<b>11.8%</b>	<b>04/2017</b>
BENCHMARK EM			-1.3	-9.3	-2.5	10.9			7.9	04/2017
Excess			-0.3	-1.0	-1.0	4.9			3.9	
<b>MACQUARIE</b>	<b>445,110,970</b>	<b>3.1</b>	<b>1.9</b>	<b>-8.7</b>	<b>-2.2</b>	<b>14.4</b>			<b>10.3</b>	<b>04/2017</b>
BENCHMARK EM			-1.3	-9.3	-2.5	10.9			7.9	04/2017
Excess			3.2	0.6	0.3	3.4			2.4	
<b>MORGAN STANLEY</b>	<b>563,392,394</b>	<b>4.0</b>	<b>0.5</b>	<b>-4.5</b>	<b>3.5</b>	<b>13.0</b>	<b>10.6%</b>	<b>6.6%</b>	<b>9.5</b>	<b>01/2001</b>
BENCHMARK EM			-1.3	-9.3	-2.5	10.9	9.9	5.5	9.0	01/2001
Excess			1.8	4.8	6.0	2.0	0.7	1.1	0.5	
<b>NEUBERGER BERMAN</b>	<b>403,048,387</b>	<b>2.8</b>	<b>-1.1</b>	<b>-10.2</b>	<b>-5.6</b>	<b>8.9</b>			<b>6.5</b>	<b>04/2017</b>
BENCHMARK EM			-1.3	-9.3	-2.5	10.9			7.9	04/2017
Excess			0.2	-0.9	-3.1	-2.1			-1.4	
<b>PZENA</b>	<b>369,735,725</b>	<b>2.6</b>	<b>-2.3</b>	<b>-5.6</b>	<b>9.3</b>	<b>10.1</b>			<b>7.0</b>	<b>04/2017</b>
BENCHMARK EM			-1.3	-9.3	-2.5	10.9			7.9	04/2017
Excess			-1.0	3.7	11.8	-0.9			-1.0	
<b>ROCK CREEK</b>	<b>427,884,306</b>	<b>3.0</b>	<b>-3.2</b>	<b>-11.5</b>	<b>-5.2</b>	<b>12.2</b>			<b>7.2</b>	<b>04/2017</b>
BENCHMARK EM			-1.3	-9.3	-2.5	10.9			7.9	04/2017
Excess			-1.9	-2.2	-2.7	1.3			-0.8	





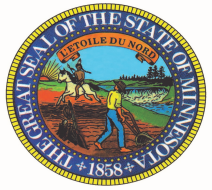
	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>	<u>2017 Calendar Return</u>	<u>2016 Calendar Return</u>
<b>Active Emerging Markets</b>					
<b>MARTIN CURRIE</b>	<b>26.5%</b>	<b>27.3%</b>	<b>-16.6%</b>		
BENCHMARK EM	18.3	18.4	-14.6		
Excess	8.2	8.8	-2.0		
<b>MACQUARIE</b>	<b>24.2</b>	<b>23.2</b>	<b>-13.3</b>		
BENCHMARK EM	18.3	18.4	-14.6		
Excess	5.9	4.7	1.3		
<b>MORGAN STANLEY</b>	<b>15.7</b>	<b>20.4</b>	<b>-16.7</b>	<b>37.9%</b>	<b>6.1%</b>
BENCHMARK EM	18.3	18.4	-14.6	37.3	11.2
Excess	-2.6	1.9	-2.2	0.6	-5.1
<b>NEUBERGER BERMAN</b>	<b>14.2</b>	<b>19.7</b>	<b>-17.1</b>		
BENCHMARK EM	18.3	18.4	-14.6		
Excess	-4.1	1.3	-2.6		
<b>PZENA</b>	<b>7.7</b>	<b>13.4</b>	<b>-10.8</b>		
BENCHMARK EM	18.3	18.4	-14.6		
Excess	-10.6	-5.1	3.8		
<b>ROCK CREEK</b>	<b>22.0</b>	<b>22.3</b>	<b>-17.6</b>		
BENCHMARK EM	18.3	18.4	-14.6		
Excess	3.7	3.9	-3.1		



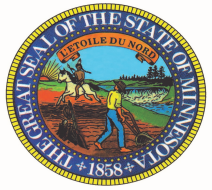
	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
<b>Total Emerging Markets</b>										
<b>ACTIVE EMERGING MARKETS AGGREGATE</b>	<b>\$2,688,165,653</b>	<b>19.0%</b>	<b>-0.9%</b>	<b>-8.4%</b>	<b>-0.9%</b>	<b>12.3%</b>	<b>10.4%</b>	<b>5.5%</b>		
BENCHMARK EM			-1.3	-9.3	-2.5	10.9	9.9	5.5		
Excess			0.4	0.9	1.6	1.3	0.5	-0.0		
<b>SSGA EMERGING MARKETS PASSIVE</b>	<b>1,034,864,765</b>	<b>7.3</b>	<b>-1.4</b>	<b>-9.5</b>	<b>-2.9</b>	<b>10.7</b>	<b>9.7</b>	<b>5.5</b>	<b>5.5</b>	<b>01/2012</b>
BENCHMARK EM			-1.3	-9.3	-2.5	10.9	9.9	5.5	5.5	01/2012
Excess			-0.0	-0.3	-0.3	-0.2	-0.1	0.0	0.0	
<b>EMERGING MARKETS TOTAL</b>	<b>3,723,030,419</b>	<b>26.3</b>	<b>-1.0</b>	<b>-8.8</b>	<b>-1.5</b>	<b>11.8</b>	<b>10.3</b>	<b>5.6</b>		
BENCHMARK EM			-1.3	-9.3	-2.5	10.9	9.9	5.5		
Excess			0.3	0.5	1.1	0.9	0.4	0.1		



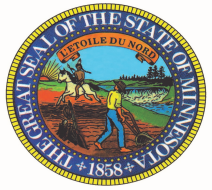
	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>	<u>2017 Calendar Return</u>	<u>2016 Calendar Return</u>
<b>Total Emerging Markets</b>					
<b>ACTIVE EMERGING MARKETS AGGREGATE</b>	<b>17.6%</b>	<b>21.4%</b>	<b>-15.6%</b>	<b>37.2%</b>	<b>5.3%</b>
BENCHMARK EM	18.3	18.4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



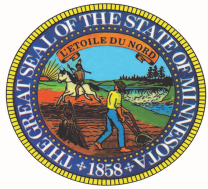
	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
<b>Active ACWI ex-US</b>										
EARNEST PARTNERS ACWI EX US	\$401,712,273	2.8%	1.8%	0.6%	12.8%				12.8%	01/2021
MSCI AC WORLD ex US (NET) - DAILY			1.8%	-1.2%	7.8%				7.8%	01/2021
Excess			-0.1%	1.9%	4.9%				4.9%	
<b>TOTAL ACWI EX-US AGGREGATE</b>										
MSCI AC WORLD ex US (NET) - DAILY			1.8%	-1.2%	7.8%					
Excess			-0.1%	1.9%	4.9%					



	<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>
<b>Active ACWI ex-US</b>					
EARNEST PARTNERS ACWI EX US					
MSCI AC WORLD ex US (NET) - DAILY					
Excess					
<b>TOTAL ACWI EX-US AGGREGATE</b>					
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>
<b>China Only Managers</b>										
EARNEST PARTNERS CHINA	\$203,955,847	1.4%	5.0%	-1.6%	-2.9%				-2.9%	01/2021
MSCI China A			3.2	-1.4	3.2				3.2	01/2021
Excess			1.9	-0.2	-6.1				-6.1	
<b>CHINA ONLY AGGREGATE</b>										
	\$203,955,847	1.4%	5.0%	-1.6%	-2.9%					
MSCI China A			3.2%	-1.4%	3.2%					
Excess			1.9%	-0.2%	-6.1%					

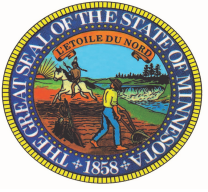


	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>	<u>2017 Calendar Return</u>	<u>2016 Calendar Return</u>
<b>China Only Managers</b>					
<b>EARNEST PARTNERS CHINA</b>					
MSCI China A					
Excess					
<b>CHINA ONLY AGGREGATE</b>					
MSCI China A					
Excess					

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# Global Equity

## December 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>
<b>Global Equity Managers</b>										
<b>ARIEL INVESTMENTS</b>	<b>\$385,890,261</b>	<b>33.4%</b>	<b>5.8%</b>	<b>2.3%</b>	<b>12.1%</b>				<b>12.1%</b>	<b>01/2021</b>
MSCI AC WORLD NET USD DAILY			6.7	5.6	18.5				18.5	01/2021
Excess			-0.9	-3.3	-6.5				-6.5	
<b>BAILLIE GIFFORD</b>	<b>325,699,683</b>	<b>28.2</b>	<b>-2.7</b>	<b>-7.9</b>	<b>3.1</b>				<b>3.1</b>	<b>01/2021</b>
MSCI AC WORLD NET USD DAILY			6.7	5.6	18.5				18.5	01/2021
Excess			-9.4	-13.4	-15.5				-15.5	
<b>MARTIN CURRIE INVESTMENTS - GLOBAL EQ</b>	<b>443,506,471</b>	<b>38.4</b>	<b>6.0</b>	<b>1.0</b>	<b>12.8</b>				<b>12.8</b>	<b>01/2021</b>
MSCI AC WORLD NET USD DAILY			6.7	5.6	18.5				18.5	01/2021
Excess			-0.6	-4.6	-5.8				-5.8	
<b>GLOBAL EQUITY</b>	<b>1,155,096,415</b>	<b>100.0</b>	<b>3.3</b>	<b>-1.3</b>	<b>9.6</b>				<b>9.6</b>	<b>01/2021</b>
MSCI AC WORLD NET USD DAILY			6.7	5.6	18.5				18.5	01/2021
Excess			-3.3	-6.8	-8.9				-8.9	



	<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>
<b>Global Equity Managers</b>					
<b>ARIEL INVESTMENTS</b>					
MSCI AC WORLD NET USD DAILY					
Excess					
<b>BAILLIE GIFFORD</b>					
MSCI AC WORLD NET USD DAILY					
Excess					
<b>MARTIN CURRIE INVESTMENTS - GLOBAL EQ</b>					
MSCI AC WORLD NET USD DAILY					
Excess					
<b>GLOBAL EQUITY</b>					
MSCI AC WORLD NET USD DAILY					
Excess					

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## Core/Core Plus Bonds

### December 31, 2021



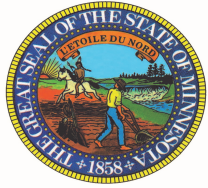
	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
<b>Bonds</b>										
<b>CORE (1)</b>	<b>\$2,009,485,585</b>	<b>39.9%</b>	<b>-0.2%</b>	<b>0.0%</b>	<b>-1.0%</b>					
Bloomberg U.S. Aggregate			0.0	0.1	-1.5					
Excess			-0.2	-0.0	0.5					
<b>CORE PLUS (1)</b>	<b>3,030,297,501</b>	<b>60.1</b>	<b>-0.1</b>	<b>0.1</b>	<b>-1.1</b>					
Bloomberg U.S. Aggregate			0.0	0.1	-1.5					
Excess			-0.1	0.0	0.4					
TRANSITION AGGREGATE CORE BONDS (2)	19,117	0.0								
<b>TOTAL CORE/CORE PLUS BONDS (3)</b>	<b>5,039,802,203</b>	<b>100.0</b>	<b>-0.1</b>	<b>0.1</b>	<b>-1.1</b>	<b>6.0</b>	<b>4.4</b>	<b>3.7</b>	<b>7.3</b>	<b>07/1984</b>
Bloomberg U.S. Aggregate			0.0	0.1	-1.5	4.8	3.6	2.9	6.9	07/1984
Excess			-0.1	0.0	0.5	1.2	0.8	0.9	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 U.S. Aggregate calculated daily. 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.



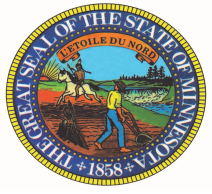
	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>	<u>2017 Calendar Return</u>	<u>2016 Calendar Return</u>
<b>Bonds</b>					
<b>CORE (1)</b>					
Bloomberg U.S. Aggregate					
Excess					
<b>CORE PLUS (1)</b>					
Bloomberg U.S. Aggregate					
Excess					
TRANSITION AGGREGATE CORE BONDS (2)					
<b>TOTAL CORE/CORE PLUS BONDS (3)</b>	<b>9.7%</b>	<b>9.7%</b>	<b>-0.0%</b>	<b>4.2%</b>	<b>3.6</b>
Bloomberg U.S. Aggregate	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.

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



	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
<b>Active Core</b>										
<b>DODGE &amp; COX</b>	<b>\$1,064,153,022</b>	<b>21.1%</b>	<b>-0.2%</b>	<b>-0.1%</b>	<b>-0.7%</b>	<b>6.0%</b>	<b>4.4%</b>	<b>4.2%</b>	<b>5.9%</b>	<b>02/2000</b>
Bloomberg U.S. Aggregate			0.0	0.1	-1.5	4.8	3.6	2.9	4.9	02/2000
Excess			-0.2	-0.1	0.8	1.2	0.8	1.3	1.0	
<b>BLACKROCK</b>	<b>945,332,564</b>	<b>18.8</b>	<b>-0.1</b>	<b>0.1</b>	<b>-1.3</b>	<b>5.3</b>	<b>3.9</b>	<b>3.2</b>	<b>5.1</b>	<b>04/1996</b>
Bloomberg U.S. Aggregate			0.0	0.1	-1.5	4.8	3.6	2.9	5.0	04/1996
Excess			-0.1	0.0	0.2	0.5	0.3	0.3	0.1	
<b>CORE</b>	<b>2,009,485,585</b>	<b>39.9</b>	<b>-0.2</b>	<b>0.0</b>	<b>-1.0</b>					
Bloomberg U.S. Aggregate			0.0	0.1	-1.5					
Excess			-0.2	-0.0	0.5					





	<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>
<b>Active Core</b>					
<b>DODGE &amp; COX</b>	<b>9.4%</b>	<b>9.6%</b>	<b>-0.0%</b>	<b>4.2%</b>	<b>4.8%</b>
Bloomberg U.S. Aggregate	7.5	8.7	0.0	3.5	2.6
Excess	1.8	0.9	-0.1	0.7	2.2
<b>BLACKROCK</b>					
Bloomberg U.S. Aggregate	7.5	8.7	0.0	3.5	2.6
Excess	0.8	0.6	-0.2	0.1	0.1

**CORE**

Bloomberg U.S. Aggregate

Excess



	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
<b>Core Plus Bonds</b>										
<b>GOLDMAN SACHS</b>	<b>\$901,449,039</b>	<b>17.9%</b>	<b>0.1%</b>	<b>0.4%</b>	<b>-1.5%</b>	<b>5.6%</b>	<b>4.1%</b>	<b>3.4%</b>	<b>5.4%</b>	<b>07/1993</b>
Bloomberg U.S. Aggregate			0.0	0.1	-1.5	4.8	3.6	2.9	5.1	07/1993
Excess			0.0	0.3	0.0	0.8	0.5	0.5	0.4	
<b>NEUBERGER</b>	<b>991,261,956</b>	<b>19.7</b>	<b>-0.0</b>	<b>0.2</b>	<b>-0.6</b>	<b>6.0</b>	<b>4.3</b>	<b>3.4</b>	<b>6.3</b>	<b>07/1988</b>
Bloomberg U.S. Aggregate			0.0	0.1	-1.5	4.8	3.6	2.9	6.0	07/1988
Excess			-0.0	0.1	1.0	1.2	0.7	0.5	0.3	
<b>WESTERN</b>	<b>1,137,586,507</b>	<b>22.6</b>	<b>-0.3</b>	<b>-0.2</b>	<b>-1.3</b>	<b>6.8</b>	<b>5.1</b>	<b>4.4</b>	<b>8.1</b>	<b>07/1984</b>
Bloomberg U.S. Aggregate			0.0	0.1	-1.5	4.8	3.6	2.9	6.9	07/1984
Excess			-0.3	-0.3	0.3	2.0	1.5	1.5	1.2	
<b>CORE PLUS</b>	<b>3,030,297,501</b>	<b>60.1</b>	<b>-0.1</b>	<b>0.1</b>	<b>-1.1</b>					
Bloomberg U.S. Aggregate			0.0	0.1	-1.5					
Excess			-0.1	0.0	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>
<b>Core Plus Bonds</b>					
<b>GOLDMAN SACHS</b>	<b>9.0%</b>	<b>9.6%</b>	<b>-0.0%</b>	<b>3.9%</b>	<b>3.0%</b>
Bloomberg U.S. Aggregate	7.5	8.7	0.0	3.5	2.6
Excess	1.5	0.9	-0.0	0.4	0.3
<b>NEUBERGER</b>	<b>9.9</b>	<b>9.0</b>	<b>-0.1</b>	<b>3.6</b>	<b>2.7</b>
Bloomberg U.S. Aggregate	7.5	8.7	0.0	3.5	2.6
Excess	2.4	0.3	-0.1	0.0	0.1
<b>WESTERN</b>	<b>10.9</b>	<b>11.1</b>	<b>-0.2</b>	<b>5.6</b>	<b>4.9</b>
Bloomberg U.S. Aggregate	7.5	8.7	0.0	3.5	2.6
Excess	3.4	2.4	-0.3	2.1	2.2

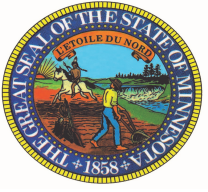
**CORE PLUS**

Bloomberg U.S. Aggregate

Excess

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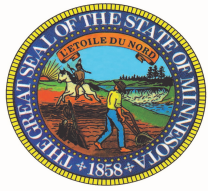
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# Return Seeking Bonds

## December 31, 2021

Minnesota State Board of Investment  
Quarter Ending December 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>
<b>Return Seeking Bonds Managers</b>										
<b>COLUMBIA CREDIT PLUS</b>	<b>\$936,073,433</b>	<b>23.2%</b>	<b>0.1%</b>	<b>-0.0%</b>	<b>1.1%</b>				<b>2.0%</b>	<b>12/2020</b>
Credit Plus Benchmark			0.1	0.2	0.0				0.1	12/2020
Excess			-0.0	-0.3	1.1				1.9	
<b>PIMCO CREDIT PLUS</b>	<b>816,971,904</b>	<b>20.3</b>	<b>0.2</b>	<b>0.5</b>	<b>0.8</b>				<b>1.5</b>	<b>12/2020</b>
Credit Plus Benchmark			0.1	0.2	0.0				0.1	12/2020
Excess			0.1	0.2	0.7				1.4	
<b>CREDIT PLUS</b>	<b>1,753,045,337</b>	<b>43.5</b>	<b>0.1</b>	<b>0.2</b>	<b>0.9</b>				<b>1.8</b>	<b>12/2020</b>
Credit Plus Benchmark			0.1	0.2	0.0				0.1	12/2020
Excess			0.0	-0.0	0.9				1.7	
<b>BLACKROCK OPPORTUNISTIC</b>	<b>505,299,008</b>	<b>12.5</b>	<b>-0.0</b>	<b>0.0</b>	<b>0.3</b>				<b>0.9</b>	<b>12/2020</b>
ICE BofA US 3-Month Treasury Bill			0.0	0.0	0.0				0.1	12/2020
Excess			-0.1	-0.0	0.2				0.8	
<b>ASHMORE EMERGING MARKET</b>	<b>271,996,943</b>	<b>6.7</b>	<b>-3.6</b>	<b>-8.3</b>	<b>-10.1</b>				<b>-10.1</b>	<b>01/2021</b>
JPM JEMB Sovereign-only 50-50			-1.5	-3.4	-5.3				-5.3	01/2021
Excess			-2.1	-5.0	-4.8				-4.8	
<b>TCW SECURITIZED CREDIT</b>	<b>302,433,528</b>	<b>7.5</b>	<b>0.6</b>	<b>0.9</b>					<b>0.9</b>	<b>07/2021</b>
ICE BofA US 3-Month Treasury Bill			0.0	0.0					0.0	07/2021
Excess			0.6	0.8					0.8	

Minnesota State Board of Investment  
Quarter Ending December 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>
<b>Return Seeking Bonds Managers</b>										
<b>PAYDEN RYDEL</b>	<b>\$308,367,771</b>	<b>7.7%</b>	<b>0.1%</b>	<b>0.4%</b>	<b>2.6%</b>				<b>2.6%</b>	<b>01/2021</b>
Multi-Asset Credit Benchmark			0.3	0.8	2.7				2.7	01/2021
Excess			-0.3	-0.4	-0.1				-0.1	
<b>PGIM</b>	<b>310,739,408</b>	<b>7.7</b>	<b>1.5</b>	<b>2.1</b>	<b>3.2</b>				<b>3.2</b>	<b>01/2021</b>
Multi-Asset Credit Benchmark			0.3	0.8	2.7				2.7	01/2021
Excess			1.2	1.3	0.5				0.5	
<b>MULTI-ASSET CREDIT</b>	<b>619,107,179</b>	<b>15.4</b>	<b>0.8</b>	<b>1.2</b>	<b>2.9</b>				<b>2.9</b>	<b>01/2021</b>
Multi-Asset Credit Benchmark			0.3	0.8	2.7				2.7	01/2021
Excess			0.5	0.4	0.2				0.2	
<b>KKR</b>	<b>315,246,552</b>	<b>7.8</b>	<b>0.9</b>	<b>1.9</b>	<b>4.7</b>				<b>4.7</b>	<b>01/2021</b>
ICE BofA US Cash Pay HY Constrained			0.7	1.6	5.3				5.3	01/2021
Excess			0.2	0.3	-0.6				-0.6	
<b>OAKTREE</b>	<b>263,101,289</b>	<b>6.5</b>	<b>0.8</b>	<b>1.7</b>	<b>4.5</b>				<b>4.5</b>	<b>01/2021</b>
ICE BofA US Cash Pay HY Constrained			0.7	1.6	5.3				5.3	01/2021
Excess			0.2	0.0	-0.8				-0.8	
<b>HIGH YIELD</b>	<b>578,347,841</b>	<b>14.4</b>	<b>0.9</b>	<b>1.8</b>	<b>4.6</b>				<b>4.6</b>	<b>01/2021</b>
ICE BofA US Cash Pay HY Constrained			0.7	1.6	5.3				5.3	01/2021
Excess			0.2	0.2	-0.7				-0.7	



	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
<b>Return Seeking Bonds</b>										
<b>CREDIT PLUS</b>	<b>\$1,753,045,337</b>	<b>43.5%</b>	<b>0.1%</b>	<b>0.2%</b>	<b>0.9%</b>				<b>1.8%</b>	<b>12/2020</b>
Credit Plus Benchmark			0.1	0.2	0.0				0.1	12/2020
Excess			0.0	-0.0	0.9				1.7	
<b>OPPORTUNISTIC FI</b>	<b>505,299,008</b>	<b>12.5</b>	<b>-0.0</b>	<b>0.0</b>	<b>0.3</b>				<b>0.9</b>	<b>12/2020</b>
ICE BofA US 3-Month Treasury Bill			0.0	0.0	0.0				0.1	12/2020
Excess			-0.1	-0.0	0.2				0.8	
<b>EMERGING MARKET DEBT</b>	<b>271,996,943</b>	<b>6.7</b>	<b>-3.6</b>	<b>-8.3</b>	<b>-10.1</b>				<b>-10.1</b>	<b>01/2021</b>
JPM JEMB Sovereign-only 50-50			-1.5	-3.4	-5.3				-5.3	01/2021
Excess			-2.1	-5.0	-4.8				-4.8	
<b>SECURITIZED CREDIT</b>	<b>302,433,528</b>	<b>7.5</b>	<b>0.6</b>	<b>0.9</b>					<b>0.8</b>	<b>06/2021</b>
ICE BofA US 3-Month Treasury Bill			0.0	0.0					0.0	06/2021
Excess			0.6	0.8					0.8	
<b>MULTI-ASSET CREDIT</b>	<b>619,107,179</b>	<b>15.4</b>	<b>0.8</b>	<b>1.2</b>	<b>2.9</b>				<b>2.9</b>	<b>01/2021</b>
Multi-Asset Credit Benchmark			0.3	0.8	2.7				2.7	01/2021
Excess			0.5	0.4	0.2				0.2	
<b>HIGH YIELD</b>	<b>578,347,841</b>	<b>14.4</b>	<b>0.9</b>	<b>1.8</b>	<b>4.6</b>				<b>4.6</b>	<b>01/2021</b>
ICE BofA US Cash Pay HY Constrained			0.7	1.6	5.3				5.3	01/2021
Excess			0.2	0.2	-0.7				-0.7	
<b>RETURN SEEKING BONDS</b>	<b>4,030,229,837</b>	<b>100.0</b>	<b>0.1</b>	<b>-0.0</b>	<b>0.9</b>				<b>1.6</b>	<b>12/2020</b>
Return Seeking Fixed Income Benchmark			0.1	0.2	0.8				1.3	12/2020
Excess			-0.0	-0.2	0.1				0.4	



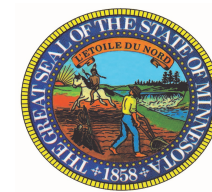


# Treasuries

## December 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>
<b>Treasuries Managers</b>										
<b>BLACKROCK</b>	<b>\$2,794,530,888</b>	<b>31.1%</b>	<b>1.1%</b>	<b>1.2%</b>	<b>-4.0%</b>	<b>6.0%</b>			<b>5.2%</b>	<b>02/2018</b>
Bloomberg Treasury 5+ Year			1.3	1.4	-3.8	6.2			5.4	02/2018
Excess			-0.2	-0.2	-0.2	-0.2			-0.2	
<b>GOLDMAN SACHS</b>	<b>2,986,771,158</b>	<b>33.2</b>	<b>1.0</b>	<b>1.2</b>	<b>-3.9</b>	<b>6.2</b>			<b>5.3</b>	<b>02/2018</b>
Bloomberg Treasury 5+ Year			1.3	1.4	-3.8	6.2			5.4	02/2018
Excess			-0.3	-0.3	-0.1	-0.0			-0.1	
<b>NEUBERGER</b>	<b>3,213,311,415</b>	<b>35.7</b>	<b>1.1</b>	<b>1.3</b>	<b>-3.4</b>	<b>6.3</b>			<b>5.4</b>	<b>02/2018</b>
Bloomberg Treasury 5+ Year			1.3	1.4	-3.8	6.2			5.4	02/2018
Excess			-0.2	-0.1	0.4	0.1			0.0	
<b>TOTAL TREASURIES</b>	<b>8,994,613,462</b>	<b>100.0</b>	<b>1.0</b>	<b>1.2</b>	<b>-3.7</b>	<b>6.2</b>			<b>5.3%</b>	<b>02/2018</b>
Bloomberg Treasury 5+ Year			1.3	1.4	-3.8	6.2			5.4%	02/2018
Excess			-0.2	-0.2	0.0	-0.0			-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>
<b>Treasuries Managers</b>					
<b>BLACKROCK</b>	<b>12.5%</b>	<b>10.4%</b>			
Bloomberg Treasury 5+ Year	12.8	10.4			
Excess	-0.3	-0.1			
<b>GOLDMAN SACHS</b>	<b>12.7</b>	<b>10.6</b>			
Bloomberg Treasury 5+ Year	12.8	10.4			
Excess	-0.1	0.1			
<b>NEUBERGER</b>	<b>12.8</b>	<b>10.4</b>			
Bloomberg Treasury 5+ Year	12.8	10.4			
Excess	-0.1	-0.0			
<b>TOTAL TREASURIES</b>	<b>12.7%</b>	<b>10.4%</b>			
Bloomberg Treasury 5+ Year	12.8%	10.4%			
Excess	-0.2%	0.0%			

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## Laddered Bonds + Cash

December 31, 2021

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

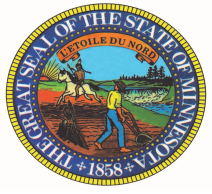


	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
<b>Laddered Bond and Cash Managers</b>									
<b>Neuberger Berman Ladder Bond</b>	<b>\$1,796,191,840</b>	<b>39.4%</b>	<b>-0.1%</b>	<b>0.0%</b>				<b>0.1%</b>	<b>11/2020</b>
ICE BofA US 3-Month Treasury Bill			0.0	0.0				0.1	11/2020
Excess			-0.1	-0.0				0.0	
<b>Goldman Sachs Ladder Bond</b>	<b>1,796,195,852</b>	<b>39.4</b>	<b>-0.1</b>	<b>0.1</b>				<b>0.1</b>	<b>11/2020</b>
ICE BofA US 3-Month Treasury Bill			0.0	0.0				0.1	11/2020
Excess			-0.1	0.0				0.0	
<b>Treasury Ladder Aggregate</b>	<b>3,592,387,692</b>	<b>78.8</b>	<b>-0.1</b>	<b>0.0</b>				<b>0.1</b>	<b>11/2020</b>
ICE BofA US 3-Month Treasury Bill			0.0	0.0				0.1	11/2020
Excess			-0.1	-0.0				0.0	
<b>Combined Funds STIF</b>	<b>943,371,504</b>	<b>20.7</b>	<b>0.0</b>	<b>0.1</b>	<b>1.0%</b>	<b>1.2%</b>	<b>0.7%</b>		
iMoneyNet Money Fund Average-All Taxable			0.0	0.0	0.7	0.8	0.4		
Excess			0.0	0.1	0.2	0.3	0.3		
<b>TEACHERS RETIREMENT CD REPO</b>	<b>23,060,292</b>	<b>0.5</b>	<b>0.0</b>	<b>0.1</b>	<b>1.2</b>	<b>1.3</b>			
ICE BofA US 3-Month Treasury Bill			0.0	0.0	1.0	1.1			
Excess			0.0	0.0	0.2	0.2			
<b>Laddered Bond + Cash</b>	<b>4,558,820,479</b>	<b>100.0</b>	<b>-0.1</b>	<b>0.0</b>	<b>1.0</b>	<b>1.2</b>	<b>0.8</b>		
ICE BofA US 3-Month Treasury Bill			0.0	0.0	1.0	1.1	0.6		
Excess			-0.1	-0.0	-0.0	0.0	0.1		



# Uninvested Private Markets

## December 31, 2021



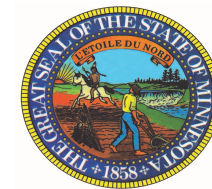
	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
<b>Uninvested Private Markets Managers</b>										
<b>NISA PRIVATE MKT UNINV OVERLAY</b>	<b>\$899,199,201</b>	<b>14.0%</b>	<b>11.2%</b>	<b>11.8%</b>	<b>28.1%</b>				<b>28.1%</b>	<b>01/2021</b>
S&P 500 INDEX (DAILY)			11.0	11.7	28.7				28.7	01/2021
Excess			0.1	0.1	-0.6				-0.6	
<b>BLACKROCK SP INDEX</b>	<b>5,532,994,914</b>	<b>86.0</b>	<b>11.1</b>	<b>11.7</b>	<b>28.9</b>				<b>28.9</b>	<b>01/2021</b>
S&P 500 INDEX (DAILY)			11.0	11.7	28.7				28.7	01/2021
Excess			0.1	0.1	0.2				0.2	
<b>UNINVESTED PRIVATE PMARKETS</b>	<b>6,432,194,116</b>	<b>100.0</b>	<b>11.1</b>	<b>11.7</b>	<b>28.6</b>				<b>28.6</b>	<b>01/2021</b>
S&P 500 INDEX (DAILY)			11.0	11.7	28.7				28.7	01/2021
Excess			0.1	0.0	-0.1				-0.1	





# Private Markets

## December 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	6.4%	16.4%	39.1%	16.9%	17.0%	13.9%	13.8%	13.8%	13.1%
Private Markets -Uninvested(1)	11.1	11.7	28.5						
Private Equity	5.9%	16.9%	44.5%	23.8%	22.3%	18.1%	15.7%	15.4%	15.7%
Private Credit	7.3%	13.4%	26.9%	11.8%	13.3%	13.2%	12.6%	12.7%	
Resources	6.5%	13.6%	27.8%	-2.4%	3.2%	2.4%	13.3%	12.6%	12.6%
Real Estate	9.4%	20.6%	29.6%	14.0%	12.7%	12.4%	9.4%	10.5%	8.6%

### 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.

(1) The Uninvested portion of the Private Markets allocation is invested in a combination of a passively managed S&P 500 Index strategy and a cash overlay strategy invested in equity derivatives and cash

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

Investments	Commitments	Contributions	Distributions	Remaining Commitment	Market Value	Investment Multiple	IRR	Vintage Year
<b>Private Equity</b>	<b>22,381,478,315</b>	<b>16,810,290,272</b>	<b>14,716,613,205</b>	<b>7,148,221,367</b>	<b>13,430,493,676</b>	<b>1.67</b>	<b>13.95</b>	
Adams Street Partners, LLC	285,440,000	147,314,692	88,411,532	138,125,308	139,179,212	1.54	13.45	
Adams Street Global Secondary Fund 5	100,000,000	77,114,692	65,670,831	22,885,308	39,760,044	1.37	7.14	2012
Adams Street Global Secondary Fund 6	100,000,000	70,200,000	22,740,701	29,800,000	94,628,500	1.67	42.12	2017
Adams Street Global Secondary Fund 7	85,440,000	0	0	85,440,000	4,790,668	0.00		2021
Advent International Group	355,000,000	297,283,913	307,053,636	64,475,449	360,690,340	2.25	20.75	
Advent International GPE VI-A, L.P.	50,000,000	52,993,313	103,400,194	0	5,713,664	2.06	16.66	2008
Advent International GPE VII, L.P.	90,000,000	84,690,641	121,395,551	5,400,000	44,853,065	1.96	15.03	2012
Advent International GPE VIII-B	100,000,000	94,900,002	73,062,483	5,099,998	140,736,483	2.25	25.59	2016
Advent International GPE IX	115,000,000	64,699,957	9,195,408	53,975,451	169,387,127	2.76	103.65	2019
Affinity Ventures	9,000,000	9,000,000	3,590,011	0	1,092,682	0.52	-10.68	
Affinity Ventures IV, L.P.	4,000,000	4,000,000	1,541,970	0	3,279	0.39	-38.56	2004
Affinity Ventures V, L.P.	5,000,000	5,000,000	2,048,042	0	1,089,403	0.63	-7.12	2008
Apax Partners	500,000,000	457,429,439	438,692,620	110,413,546	442,652,513	1.93	20.90	
APAX VIII - USD	200,000,000	233,892,465	335,200,854	11,285,376	91,032,096	1.82	16.07	2013
Apax IX USD L.P.	150,000,000	151,432,129	103,661,099	21,402,349	271,343,783	2.48	35.35	2016
Apax X USD L.P.	150,000,000	72,104,846	(169,333)	77,725,821	80,276,633	1.11	27.05	2019
Arsenal Capital Partners	175,000,000	59,579,360	2,572,916	117,872,804	75,118,508	1.30	17.49	
Arsenal Capital Partners V, L.P.	75,000,000	59,579,360	2,572,916	17,872,804	75,118,508	1.30	17.49	2019
Arsenal Capital Partners VI LP	100,000,000	0	0	100,000,000	0	0.00		2021
Asia Alternatives	399,000,000	96,205,529	10,585,653	310,428,730	103,996,168	1.19	12.80	
Asia Alternatives Capital Partners V	99,000,000	86,063,243	10,585,653	20,571,016	95,983,925	1.24	14.83	2017
MN Asia Investors	300,000,000	10,142,286	0	289,857,714	8,012,244	0.79	-27.04	2020
Banc Fund	276,801,387	285,710,477	236,753,119	0	233,468,801	1.65	11.32	
Banc Fund VIII, L.P.	98,250,000	98,250,000	205,046,223	0	6,080,304	2.15	12.74	2008
Banc Fund IX, L.P.	107,205,932	107,205,932	28,394,227	0	132,298,016	1.50	8.41	2014
Banc Fund X, L.P.	71,345,455	80,254,545	3,312,670	0	95,090,481	1.23	11.39	2018
BlackRock	501,774,870	506,392,392	4,457,327	34,324,007	683,321,802	1.36	35.71	
BlackRock Tempus Fund*	1,774,870	1,774,870	1,796,583	0	186,302	1.12	5.87	2015
BlackRock Long Term Capital, SCSP	500,000,000	504,617,522	2,660,745	34,324,007	683,135,500	1.36	36.39	2019

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

Investments	Commitments	Contributions	Distributions	Remaining Commitment	Market Value	Investment Multiple	IRR	Vintage Year
Blackstone Group L.P.	1,235,000,000	718,142,379	655,267,901	604,954,797	476,021,334	1.58	16.37	
Blackstone Capital Partners Asia II	270,000,000	0	0	270,000,000	0	0.00		2021
Blackstone Capital Partners IV, L.P.	70,000,000	84,459,884	200,562,452	1,832,302	1,039,731	2.39	37.02	2002
Blackstone Capital Partners V L.P.	140,000,000	152,406,707	243,424,491	7,027,560	3,205,729	1.62	8.03	2006
Blackstone Capital Partners VI, L.P.	100,000,000	106,447,971	139,191,740	11,175,309	46,446,134	1.74	12.48	2008
Blackstone Capital Partners VII	130,000,000	136,105,549	54,670,664	10,977,430	164,191,592	1.61	19.39	2015
Blackstone Capital Partners VIII LP	150,000,000	48,549,459	1,647,045	105,491,598	57,160,416	1.21	37.54	2019
Blackstone Growth	250,000,000	148,422,810	15,771,509	115,200,598	162,338,412	1.20	51.71	2020
Blackstone Supplemental Account - M	125,000,000	41,750,000	0	83,250,000	41,639,321	1.00	-0.62	2021
Blackstone Strategic Partners	815,500,000	641,533,016	747,548,822	251,665,221	293,455,911	1.62	12.20	
Strategic Partners III VC, L.P.	25,000,000	25,059,678	33,874,990	1,008,025	284,606	1.36	5.98	2004
Strategic Partners III-B, L.P.	100,000,000	79,629,077	118,509,586	12,304,709	210,560	1.49	6.35	2004
Strategic Partners IV VC, L.P.	40,500,000	42,141,930	61,740,454	2,280,812	2,950,538	1.54	9.22	2008
Strategic Partners IV-B	100,000,000	99,328,593	151,709,708	11,695,838	4,587,301	1.57	12.23	2008
Strategic Partners V, LP	100,000,000	86,990,760	132,472,411	21,261,697	10,991,070	1.65	18.75	2011
Strategic Partners VI, L.P.	150,000,000	102,248,069	120,356,510	54,093,766	40,539,181	1.57	15.95	2014
Strategic Partners VII, L.P.	150,000,000	109,444,381	89,135,151	56,312,272	107,256,333	1.79	23.14	2016
Strategic Partners VIII	150,000,000	96,690,527	39,750,012	92,708,103	126,636,322	1.72	64.83	2018
Bridgepoint	171,517,322	104,779,696	13,311,036	66,737,626	112,479,740	1.20	14.98	
Bridgepoint Europe VI L.P.	171,517,322	104,779,696	13,311,036	66,737,626	112,479,740	1.20	14.98	2018
Brookfield Asset Management Inc.	350,000,000	276,328,328	163,785,962	105,511,499	311,895,269	1.72	41.52	
Brookfield Capital Partners Fund IV	100,000,000	99,945,063	152,347,702	20,456,504	100,047,680	2.53	48.03	2015
Brookfield Capital Partners V L.P.	250,000,000	176,383,265	11,438,260	85,054,995	211,847,590	1.27	21.52	2018
CVC Capital Partners	392,123,020	435,638,955	540,973,576	26,866,441	279,638,780	1.88	17.04	
CVC European Equity Partners V, L.P.	133,940,455	153,884,098	294,886,647	1,624,193	5,275,725	1.95	16.79	2008
CVC Capital Partners VI	258,182,565	281,754,857	246,086,929	25,242,248	274,363,055	1.85	17.38	2013
Canyon Partners	125,000,000	85,000,000	8,750,000	48,750,000	94,881,463	1.22	22.58	
Canyon Distressed Opportunity Fund III	125,000,000	85,000,000	8,750,000	48,750,000	94,881,463	1.22	22.58	2020

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CarVal Investors	900,000,000	712,703,333	876,459,499	187,500,000	228,636,439	1.55	10.74	
CarVal Credit Value Fund I	100,000,000	95,000,000	213,343,831	5,000,000	492,573	2.25	18.71	2010
CVI Credit Value Fund A II	150,000,000	142,500,000	199,242,174	7,500,000	3,939,841	1.43	8.31	2012
CVI Credit Value Fund A III	150,000,000	142,500,000	142,972,726	7,500,000	47,697,343	1.34	8.61	2015
CVI Credit Value Fund IV	150,000,000	112,703,333	60	37,500,000	143,495,213	1.27	7.91	2017
CVI Credit Value Fund V	150,000,000	30,000,000	154,566	120,000,000	32,913,000	1.10	10.75	2020
CVI Global Value Fund, L.P.	200,000,000	190,000,000	320,746,143	10,000,000	98,469	1.69	9.53	2007
Cardinal Partners	10,000,000	10,000,000	39,196,082	0	30,447	3.92	10.61	
DSV Partners IV	10,000,000	10,000,000	39,196,082	0	30,447	3.92	10.61	1985
Carlyle Group	400,000,000	243,895,589	56,816,362	205,382,274	213,098,725	1.11	8.45	
Carlyle Partners VII, L.P.	150,000,000	145,344,820	4,603,692	9,258,872	155,256,062	1.10	8.14	2017
Carlyle Partners VIII	150,000,000	0	0	150,000,000	0	0.00		2021
Carlyle Strategic Partners IV, L.P.	100,000,000	98,550,769	52,212,670	46,123,402	57,842,663	1.12	8.84	2016
Chicago Growth Partners	60,000,000	58,347,626	123,371,040	1,652,374	479,452	2.12	19.54	
Chicago Growth Partners II, L.P.	60,000,000	58,347,626	123,371,040	1,652,374	479,452	2.12	19.54	2008
Court Square	500,000,000	436,299,153	476,198,027	104,074,563	290,884,456	1.76	14.52	
Court Square Capital Partners II, L.P.	175,000,000	170,029,204	295,744,454	16,757,741	9,237,662	1.79	12.54	2006
Court Square Capital Partners III, L.P.	175,000,000	187,335,558	172,980,330	8,846,824	188,944,387	1.93	19.39	2012
Court Square Capital Partners IV, L.P.	150,000,000	78,934,391	7,473,243	78,469,998	92,702,406	1.27	20.60	2018
Crescendo	101,500,000	103,101,226	57,982,654	0	308,589	0.57	-4.60	
Crescendo Ventures IV	101,500,000	103,101,226	57,982,654	0	308,589	0.57	-4.60	2000
GTCR	210,000,000	211,174,635	421,341,248	14,989,866	260,056,453	3.23	29.37	
GTCR Fund X	100,000,000	105,821,208	214,751,215	6,751,396	0	2.03	21.33	2010
GTCR XI	110,000,000	105,353,427	206,590,033	8,238,470	260,056,453	4.43	42.98	2013
Goldman, Sachs & Co.	549,800,000	430,287,415	420,794,586	163,847,156	291,206,752	1.65	15.12	
GS Capital Partners V, L.P.	100,000,000	74,319,006	191,435,136	1,041,099	588,782	2.58	18.23	2005
GS Capital Partners VI, L.P.	100,000,000	110,260,752	140,595,269	2,551,356	5,228,548	1.32	7.24	2007
GS China-US Cooperation Fund	99,800,000	30,114,445	0	69,860,000	35,357,523	1.17	11.54	2018
GS Vintage VII	100,000,000	82,623,489	42,288,697	56,376,033	93,952,871	1.65	20.38	2016
West Street Capital Partners VII, L.P.	150,000,000	132,969,723	46,475,484	34,018,668	156,079,027	1.52	20.08	2016
Goldner Hawn Johnson & Morrison	77,755,138	48,525,185	51,364,283	29,401,920	37,311,647	1.83	18.75	
GHJM TrailHead Fund	20,000,000	16,652,130	51,364,283	3,354,486	6,344,667	3.47	20.52	2012
Goldner Hawn Fund VII, L.P.	57,755,138	31,873,055	0	26,047,434	30,966,980	0.97	-3.15	2018

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Green Equity Investors	325,000,000	320,802,154	232,611,638	40,985,265	359,186,444	1.84	17.09	
Green Equity Investors VI, L.P.	200,000,000	224,085,897	232,474,764	12,564,648	258,788,761	2.19	17.22	2012
Green Equity Investors VIII	125,000,000	96,716,257	136,874	28,420,617	100,397,683	1.04	8.88	2020
HarbourVest*	21,654,422	20,931,698	24,762,578	809,378	8,167,837	1.57	13.57	
Dover Street VII Cayman Fund L.P.	2,198,112	2,074,080	1,773,483	132,416	126,974	0.92	-3.62	2014
HarbourVest Intl PE Partners V-Cayman	3,522,557	3,345,452	4,313,009	181,952	321,986	1.39	14.30	2014
Harbourvest Intl PE Partners VI-Cayman	4,236,144	4,039,458	4,808,849	199,010	3,428,789	2.04	17.48	2014
HarbourVest Partners VIII Cayman Buyout	4,506,711	4,387,189	5,574,478	156,000	643,816	1.42	13.51	2014
HarbourVest Partners VIII-Cayman Venture	7,190,898	7,085,519	8,292,759	140,000	3,646,273	1.68	13.52	2014
Hellman & Friedman	650,000,000	412,745,049	471,839,939	240,952,958	248,178,660	1.74	15.16	
Hellman & Friedman Capital Partners VI, L.P.	175,000,000	171,037,755	315,233,005	5,062,369	3,216,013	1.86	12.91	2007
Hellman & Friedman Capital Partners VII, L.P.	50,000,000	49,883,520	153,358,750	2,218,442	10,467,521	3.28	25.06	2009
Hellman & Friedman Investors IX, L.P.	175,000,000	162,041,946	3,248,184	13,453,975	205,142,485	1.29	26.39	2018
Hellman & Friedman Capital Partners X	250,000,000	29,781,828	0	220,218,172	29,352,642	0.99	-1.44	2021
IK Limited	507,875,675	416,321,584	429,343,125	103,906,531	258,924,653	1.65	15.78	
IK Fund VII	180,333,327	179,315,195	294,196,910	8,624,832	48,960,428	1.91	14.99	2013
IK Fund VIII	170,789,497	175,535,613	135,146,215	0	150,507,958	1.63	18.88	2016
IK Fund IX	156,752,851	61,470,776	0	95,281,698	59,456,267	0.97	-5.35	2019
Kohlberg, Kravis, Roberts & Co.	1,447,000,000	820,681,906	875,427,290	679,067,018	583,686,943	1.78	14.13	
KKR Millennium Fund	200,000,000	205,167,570	424,946,028	0	161,924	2.07	16.37	2002
KKR 2006 Fund L.P.	200,000,000	218,137,965	364,445,342	3,300,979	32,361,281	1.82	9.24	2006
KKR Americas Fund XII L.P.	150,000,000	140,374,688	43,868,169	21,076,513	227,141,640	1.93	35.12	2016
KKR Asian Fund III	100,000,000	85,255,519	34,665,449	23,925,794	135,085,830	1.99	39.25	2017
KKR Asian Fund IV	150,000,000	27,282,329	0	122,717,671	27,704,714	1.02	2.29	2020
KKR Europe V	100,000,000	62,058,946	5,620,274	40,868,303	74,904,899	1.30	23.85	2018
KKR Core Investments Partnership	97,000,000	58,481,119	1,882,028	41,101,528	62,402,885	1.10	14.43	2021
KKR MN Partnership L.P.	150,000,000	23,923,770	0	126,076,230	23,923,770	1.00		2021
KKR North America Fund XIII	300,000,000	0	0	300,000,000	0	0.00		2021
Lexington Partners	1,345,000,000	882,359,899	642,617,395	522,753,537	727,642,926	1.55	14.66	
Lexington Capital Partners VI-B, L.P.	100,000,000	98,374,022	142,607,132	1,634,703	4,775,369	1.50	7.98	2005
Lexington Capital Partners VII, L.P.	200,000,000	172,617,467	254,286,612	37,909,237	36,296,054	1.68	14.81	2009
Lexington Capital Partners VIII, L.P.	150,000,000	136,386,669	117,970,594	32,663,555	108,780,177	1.66	19.29	2014

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Lexington Capital Partners IX, L.P.	150,000,000	93,876,748	17,979,736	66,694,769	124,885,934	1.52	74.21	2018
Lexington Capital Partners X	100,000,000	0	0	100,000,000	0	0.00		2021
Lexington Co-Investment Partners IV	200,000,000	208,484,372	90,381,786	10,727,639	262,561,844	1.69	23.17	2017
Lexington Co-Investment Partners V	300,000,000	90,788,493	0	209,955,762	100,473,342	1.11	23.65	2020
Lexington Co-Investment Partners V Overage	45,000,000	12,870,000	0	32,130,000	13,112,908	1.02	3.23	2021
Lexington Middle Market Investors IV	100,000,000	68,962,128	19,391,535	31,037,872	76,757,298	1.39	33.51	2016
MHR Institutional Partners	75,000,000	72,746,892	19,816,608	22,011,136	73,617,641	1.28	9.13	
MHR Institutional Partners IV LP	75,000,000	72,746,892	19,816,608	22,011,136	73,617,641	1.28	9.13	2014
Madison Dearborn Capital Partners LLC	200,000,000	126,680,632	44,254,411	94,338,777	146,323,170	1.50	16.25	
Madison Dearborn Capital Partners VII, L.P.	100,000,000	94,966,742	36,628,967	20,200,000	111,341,465	1.56	14.67	2015
Madison Dearborn Capital Partners VIII-A, L.P.	100,000,000	31,713,890	7,625,444	74,138,777	34,981,705	1.34	49.32	2019
Marathon	200,000,000	97,906,171	6,185,200	108,000,000	118,198,840	1.27	39.56	
Marathon Distressed Credit Fund	200,000,000	97,906,171	6,185,200	108,000,000	118,198,840	1.27	39.56	2020
Merced Capital	278,737,500	288,144,755	260,544,521	0	75,928,187	1.17	3.55	
Merced Partners III	100,000,000	103,878,468	132,676,445	0	2,004,903	1.30	5.48	2010
Merced Partners IV	125,000,000	124,968,390	111,222,539	0	25,931,593	1.10	2.05	2013
Merced Partners V	53,737,500	59,297,897	16,645,537	0	47,991,691	1.09	2.21	2017
Neuberger Berman LLC	625,000,000	369,293,061	242,961,608	451,051,180	378,427,550	1.68	37.42	
Dyal Capital Partners III	175,000,000	196,839,631	173,362,071	109,247,334	145,228,703	1.62	27.70	2015
Dyal Capital Partners IV	250,000,000	137,453,431	69,238,627	176,803,846	164,013,402	1.70	65.34	2018
Dyal Capital Partners V	200,000,000	35,000,000	360,909	165,000,000	69,185,445	1.99	197.44	2020
Nordic Capital	501,061,322	400,098,484	264,506,025	177,725,354	468,968,449	1.83	21.62	
Nordic Capital Fund VIII	176,215,066	220,988,400	255,365,276	27,622,444	144,560,567	1.81	16.76	2013
Nordic Capital Fund X	153,962,277	28,392,180	0	125,570,097	32,400,299	1.14	33.84	2020
Nordic Capital IX Beta, L.P.	170,883,980	150,717,903	9,140,749	24,532,813	292,007,583	2.00	50.67	2017
North Sky Capital*	2,454,339	1,998,089	2,451,201	456,250	473,171	1.46	13.67	
North Sky Capital LBO Fund III, LP	1,070,259	720,259	986,393	350,000	112,971	1.53	14.57	2014
North Sky Capital Venture Fund III, LP	1,384,080	1,277,830	1,464,808	106,250	360,200	1.43	13.10	2014
Oak Hill Capital Management, Inc.	250,000,000	217,314,478	179,712,221	57,114,226	132,784,146	1.44	27.73	
Oak Hill Capital Partners IV Onshore LP	150,000,000	146,337,056	179,677,178	28,091,648	53,596,056	1.59	27.47	2016
Oak Hill Capital Partners V	100,000,000	70,977,422	35,043	29,022,578	79,188,090	1.12	32.18	2018

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Oaktree Capital Management, LLC	200,000,000	151,510,632	42,135,451	81,989,598	173,884,890	1.43	14.64	
Oaktree Special Situations Fund, L.P.	100,000,000	101,739,445	20,335,451	10,241,294	102,596,877	1.21	5.99	2014
Oaktree Special Situations Fund II, L.P.	100,000,000	49,771,187	21,800,000	71,748,304	71,288,013	1.87	113.01	2018
Paine & Partners, LLC	225,000,000	141,900,926	40,330,296	88,483,799	135,747,409	1.24	9.85	
Paine Schwartz Food Chain Fund IV	75,000,000	64,832,786	35,397,971	11,240,368	55,401,715	1.40	9.36	2014
Paine Schwartz Food Chain Fund V, L.P.	150,000,000	77,068,140	4,932,325	77,243,431	80,345,694	1.11	12.37	2018
Permal PE*	5,337,098	4,382,196	4,150,751	1,090,000	871,981	1.15	4.79	
Glouston Private Equity Opportunities IV	5,337,098	4,382,196	4,150,751	1,090,000	871,981	1.15	4.79	2014
Permira	459,437,361	419,540,501	358,680,136	79,992,861	581,934,358	2.24	24.64	
Permira V, L.P.	177,798,218	181,954,007	287,672,383	16,693,133	275,808,420	3.10	24.93	2013
Permira VI, L.P.	137,212,841	125,857,463	71,007,752	30,602,456	179,734,890	1.99	25.14	2016
Permira VII L.P.1	144,426,302	111,729,031	0	32,697,271	126,391,048	1.13	13.79	2019
Public Pension Capital Management	175,000,000	104,803,140	82,335,049	85,397,202	128,583,023	2.01	25.28	
Public Pension Capital, LLC	175,000,000	104,803,140	82,335,049	85,397,202	128,583,023	2.01	25.28	2014
Silver Lake Partners	435,000,000	428,646,514	517,828,074	31,465,901	412,148,171	2.17	16.27	
Silver Lake Partners II, L.P.	100,000,000	90,200,747	171,719,560	11,771,953	3,222	1.90	11.02	2004
Silver Lake Partners III, L.P.	100,000,000	93,757,540	191,856,230	9,528,468	27,039,743	2.33	18.62	2007
Silver Lake Partners IV	100,000,000	114,916,580	118,381,791	3,048,367	190,596,574	2.69	27.41	2012
Silver Lake Partners V, L.P.	135,000,000	129,771,647	35,870,492	7,117,113	194,508,632	1.78	29.97	2017
Split Rock	110,000,000	107,055,906	125,392,564	2,944,094	26,468,610	1.42	5.04	
Split Rock Partners LP	50,000,000	47,890,906	58,794,192	2,109,094	3,808,069	1.31	3.25	2005
Split Rock Partners II, LP	60,000,000	59,165,000	66,598,372	835,000	22,660,541	1.51	7.35	2008
Summit Partners	600,000,000	356,402,679	388,658,227	442,669,510	349,927,999	2.07	31.24	
Summit Partners Growth Equity Fund VIII	100,000,000	116,727,192	229,442,550	23,129,320	69,543,912	2.56	27.99	2011
Summit Partners Growth Equity Fund IX	100,000,000	130,700,488	139,311,534	108,611,046	159,447,936	2.29	42.31	2015
Summit Partners Growth Equity Fund X-A	150,000,000	108,974,999	19,904,143	60,929,144	120,936,151	1.29	39.72	2019
Summit Partners Growth Equity Fund XI	250,000,000	0	0	250,000,000	0	0.00		2021
TPG Capital	550,000,000	240,115,179	132,206,097	335,570,437	226,400,031	1.48	22.57	
TPG Growth V, L.P.	150,000,000	57,953,251	526,470	93,174,085	67,506,630	1.17	17.95	2021
TPG Partners VII, L.P.	100,000,000	99,851,997	113,041,264	8,011,667	70,468,231	1.84	19.91	2015
TPG Partners VIII	150,000,000	82,309,931	18,638,363	84,384,685	88,425,170	1.30	40.50	2018
TPG Tech Adjacencies II, L.P.	150,000,000	0	0	150,000,000	0	0.00		2021



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Thoma Bravo LLC	425,000,000	425,577,045	208,638,702	69,054,632	472,940,438	1.60	24.10	
Thoma Bravo Fund XII, L.P.	75,000,000	81,455,833	22,548,786	16,164,188	128,028,309	1.85	17.75	2016
Thoma Bravo Fund XIII, L.P.	150,000,000	166,084,959	79,031,939	30,926,697	215,519,141	1.77	47.05	2018
Thoma Bravo Fund XIV	150,000,000	128,036,253	37	21,963,747	128,956,962	1.01	1.27	2020
Thoma Cressey Fund VII, L.P.	50,000,000	50,000,000	107,057,940	0	436,026	2.15	23.58	2000
Thomas H. Lee Partners	400,000,000	226,694,658	178,567,472	198,887,065	269,141,633	1.97	35.38	
Thomas H. Lee Equity Fund VII, LP.	100,000,000	99,263,449	132,589,381	10,898,708	52,576,986	1.87	23.65	2015
Thomas H. Lee Equity Fund VIII, L.P.	150,000,000	127,431,209	45,978,091	37,988,357	216,564,647	2.06	78.30	2018
Thomas H. Lee Equity Fund IX	150,000,000	0	0	150,000,000	0	0.00		2021
Thomas, McNerney & Partners	80,000,000	78,125,000	123,481,847	1,875,000	4,403,460	1.64	8.30	
Thomas, McNerney & Partners I, L.P.	30,000,000	30,000,000	15,087,143	0	1,882,379	0.57	-8.90	2002
Thomas, McNerney & Partners II, L.P.	50,000,000	48,125,000	108,394,704	1,875,000	2,521,081	2.30	16.47	2006
Varde Fund	600,000,000	534,750,000	676,476,918	65,250,000	180,938,971	1.60	10.09	
Varde Fund IX, L.P.	100,000,000	100,000,000	216,221,047	0	0	2.16	15.01	2008
Varde Fund X, LP	150,000,000	150,000,000	251,421,642	0	10,202,793	1.74	10.12	2010
Varde Fund XI, LP	200,000,000	200,000,000	208,814,191	0	67,948,496	1.38	5.44	2013
Varde Fund XIII, L.P.	150,000,000	84,750,000	20,038	65,250,000	102,787,682	1.21	12.02	2018
Vestar Capital Partners	380,000,000	333,277,631	351,457,475	56,184,822	176,843,927	1.59	11.65	
Vestar Capital Partners IV, L.P.	55,000,000	55,652,024	102,293,320	57,313	374,894	1.84	14.63	1999
Vestar Capital Partners V, L.P.	75,000,000	76,797,458	98,533,182	0	3,421,462	1.33	3.98	2005
Vestar Capital Partners VI, LP	100,000,000	106,955,659	150,510,164	0	55,459,639	1.93	24.22	2011
Vestar Capital Partners VII, L.P.	150,000,000	93,872,491	120,808	56,127,509	117,587,933	1.25	16.45	2017
Vista Equity Partners	200,000,000	147,617,149	77,223	53,595,754	151,303,664	1.03	2.50	
Vista Equity Partners Perennial	200,000,000	147,617,149	77,223	53,595,754	151,303,664	1.03	2.50	2020

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Warburg Pincus	1,116,000,000	1,033,859,733	943,872,728	88,748,500	757,305,926	1.65	11.43	
Warburg Pincus China, L.P.	45,000,000	45,585,000	13,952,700	1,350,000	61,277,352	1.65	17.42	2016
Warburg Pincus China-Southeast Asia II	50,000,000	14,825,000	1,715,000	35,175,000	18,314,298	1.35	33.65	2019
Warburg Pincus Financial Sector	90,000,000	80,776,212	8,930,700	13,455,000	122,982,330	1.63	24.59	2017
Warburg Pincus Global Growth, L.P.	250,000,000	213,099,568	2,625,000	37,000,000	258,018,117	1.22	19.57	2018
Warburg Pincus Private Equity IX, L.P.	100,000,000	100,000,000	170,824,150	0	1,140,828	1.72	9.60	2005
Warburg Pincus Private Equity X, LP	150,000,000	150,000,000	265,629,491	0	3,739,961	1.80	9.52	2007
Warburg Pincus Private Equity XI, LP	200,000,000	200,342,452	246,872,748	0	108,688,847	1.77	13.10	2012
Warburg Pincus Private Equity XII, LP	131,000,000	129,231,500	69,780,687	1,768,500	182,751,770	1.95	20.62	2015
Warburg, Pincus Equity Partners, L.P.	100,000,000	100,000,000	163,542,253	0	392,423	1.64	10.02	1998
Wayzata Investment Partners	300,000,000	243,165,000	375,257,779	15,750,000	20,306,983	1.63	14.34	
Wayzata Opportunities Fund II, LLC	150,000,000	174,750,000	332,726,945	750,000	0	1.90	16.54	2007
Wayzata Opportunities Fund III	150,000,000	68,415,000	42,530,834	15,000,000	20,306,983	0.92	-2.07	2012
Wellspring Capital Partners	125,000,000	149,192,072	52,966,771	12,849,764	139,916,653	1.29	23.61	
Wellspring Capital Partners VI, L.P.	125,000,000	149,192,072	52,966,771	12,849,764	139,916,653	1.29	23.61	2016
Welsh, Carson, Anderson & Stowe	500,000,000	397,339,428	354,266,662	102,660,572	360,778,477	1.80	18.94	
Welsh, Carson, Anderson & Stowe XI, L.P.	100,000,000	100,000,000	150,512,105	0	16,267,410	1.67	11.65	2008
Welsh, Carson, Anderson & Stowe XII, L.P.	150,000,000	145,877,897	177,480,040	4,122,103	180,419,688	2.45	30.14	2014
Welsh, Carson, Anderson & Stowe XIII, L.P.	250,000,000	151,461,531	26,274,517	98,538,469	164,091,379	1.26	34.86	2018
Whitehorse Capital	300,000,000	195,868,793	86,018,142	144,488,512	161,332,854	1.26	31.12	
Whitehorse Liquidity Partners III	100,000,000	95,979,279	58,169,653	21,915,409	69,179,431	1.33	25.60	2019
Whitehorse Liquidity Partners IV	100,000,000	74,112,569	27,848,489	48,350,048	66,376,478	1.27	51.34	2020
Whitehorse Liquidity Partners V	100,000,000	25,776,945	0	74,223,055	25,776,945	1.00		2021
Wind Point Partners	100,000,000	59,086,107	1,912,585	42,831,081	57,796,577	1.01	1.35	
Wind Point Partners IX	100,000,000	59,086,107	1,912,585	42,831,081	57,796,577	1.01	1.35	2019
Windjammer Capital Investors	266,708,861	208,682,790	229,590,601	60,297,074	131,103,539	1.73	11.66	
Windjammer Mezzanine & Equity Fund II	66,708,861	55,215,684	85,036,800	1,013,936	65,319	1.54	8.95	2000
Windjammer Senior Equity Fund IV, L.P.	100,000,000	94,740,728	143,346,904	16,802,619	64,590,106	2.19	16.54	2012
Windjammer Senior Equity Fund V, L.P.	100,000,000	58,726,378	1,206,897	42,480,519	66,448,115	1.15	11.36	2017

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<b>Private Credit</b>	<b>4,014,874,281</b>	<b>2,887,800,232</b>	<b>2,213,806,291</b>	<b>1,598,971,388</b>	<b>1,564,872,515</b>	<b>1.31</b>	<b>10.09</b>	
Audax Group	350,000,000	185,329,327	180,637,770	182,205,508	49,746,218	1.24	9.51	
Audax Mezzanine Fund III, L.P.	100,000,000	104,871,591	130,353,666	782	3,849,034	1.28	9.04	2010
Audax Mezzanine Fund IV-A, L.P.	100,000,000	80,457,736	50,284,104	32,204,727	45,897,184	1.20	11.07	2015
Audax Mezzanine Fund V	150,000,000	0	0	150,000,000	0	0.00		2020
Avenue Capital Partners	200,000,000	200,977,328	72,265,702	0	201,309,688	1.36	6.94	
Avenue Energy Opportunities Fund, L.P.	100,000,000	100,977,328	48,424,215	0	75,726,230	1.23	3.85	2014
Avenue Energy Opportunities Fund II	100,000,000	100,000,000	23,841,487	0	125,583,458	1.49	11.93	2017
BlackRock	97,500,000	87,570,291	11,145,751	9,929,709	93,521,305	1.20	9.85	
BlackRock Middle Market Senior Fund	97,500,000	87,570,291	11,145,751	9,929,709	93,521,305	1.20	9.85	2018
Brookfield Asset Management Inc.	200,000,000	17,346,078	0	182,653,922	17,619,886	1.02		
Brookfield Real Estate Finance Fund VI	200,000,000	17,346,078	0	182,653,922	17,619,886	1.02		2021
Energy Capital Partners	28,087,500	21,414,484	9,451,244	16,124,260	11,879,922	1.00	-0.54	
Energy Capital Credit Solutions II-A	28,087,500	21,414,484	9,451,244	16,124,260	11,879,922	1.00	-0.54	2018
Gold Hill	65,852,584	65,852,584	113,654,899	0	3,615,262	1.78	11.87	
Gold Hill 2008	25,852,584	25,852,584	48,393,297	0	3,198,224	2.00	14.63	2008
Gold Hill Venture Lending	40,000,000	40,000,000	65,261,602	0	417,038	1.64	10.71	2004
Goldman, Sachs & Co.	250,000,000	261,176,828	315,988,287	47,422,591	1,226,215	1.21	6.80	
GS Mezzanine Partners 2006 Institutional	100,000,000	113,458,168	135,137,487	9,858,563	567,940	1.20	5.00	2006
GS Mezzanine Partners V, L.P.	150,000,000	147,718,660	180,850,800	37,564,028	658,275	1.23	9.08	2007
HPS Investment Partners	100,000,000	89,666,025	11,615,902	18,518,567	91,992,049	1.16	17.15	
HPS Mezzanine Partners 2019, L.P.	100,000,000	89,666,025	11,615,902	18,518,567	91,992,049	1.16	17.15	2019
Kohlberg, Kravis, Roberts & Co.	274,000,000	349,064,594	283,731,195	109,388,462	116,794,359	1.15	9.81	
KKR Lending Partner II L.P.	75,000,000	86,884,685	82,467,685	8,802,924	9,694,427	1.06	2.97	2015
KKR Lending Partners III L.P.	199,000,000	262,179,909	201,263,510	100,585,538	107,099,932	1.18	14.74	2017
LBC Credit Partners	200,000,000	170,748,496	109,829,893	81,914,878	109,663,144	1.29	16.93	
LBC Credit Partners IV, L.P.	100,000,000	111,000,028	99,354,374	36,445,534	53,213,554	1.37	16.31	2016
LBC Credit Partners V, L.P.	100,000,000	59,748,468	10,475,519	45,469,344	56,449,590	1.12	23.89	2019
Marathon	100,000,000	96,022,008	858,534	5,000,000	116,900,635	1.23	18.42	
Marathon Secured Private Strategies Fund II	100,000,000	96,022,008	858,534	5,000,000	116,900,635	1.23	18.42	2019

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Merit Capital Partners	320,232,500	233,068,983	269,245,537	87,096,717	112,643,906	1.64	11.41	
Merit Mezzanine Fund IV, L.P.	75,000,000	70,178,571	139,120,463	4,821,429	763,800	1.99	11.58	2004
Merit Mezzanine Fund V, LP	75,000,000	71,044,898	79,266,865	3,955,102	32,549,883	1.57	9.49	2009
Merit Mezzanine Fund VI	100,000,000	91,845,514	50,858,209	8,087,687	79,330,223	1.42	15.32	2016
Merit Mezzanine Fund VII	70,232,500	0	0	70,232,500	0	0.00		2020
Oaktree Capital Management, LLC	650,000,000	230,500,021	30,385,564	424,500,000	265,918,474	1.29	14.57	
Oaktree Opportunities Fund X, L.P.	50,000,000	46,500,021	26,169,660	8,500,000	38,210,768	1.38	9.35	2015
Oaktree Opportunities Fund Xb, L.P.	100,000,000	60,000,000	0	40,000,000	81,429,060	1.36	16.24	2015
Oaktree Opportunities Fund XI	300,000,000	90,000,000	438,597	210,000,000	105,214,229	1.17	30.26	2020
Oaktree Real Estate Debt III	200,000,000	34,000,000	3,777,307	166,000,000	41,064,417	1.32	19.03	2020
PIMCO BRAVO*	9,201,697	8,660,948	8,897,965	7,735,883	1,227,302	1.17	4.93	
PIMCO BRAVO Fund Onshore Feeder I	3,958,027	3,958,027	4,016,443	2,385,880	6,534	1.02	1.60	2014
PIMCO Bravo Fund OnShore Feeder II	5,243,670	4,702,921	4,881,522	5,350,003	1,220,768	1.30	5.50	2014
Prudential Global Investment Mgmt	600,000,000	468,774,854	508,311,565	175,514,408	150,872,485	1.41	10.44	
Prudential Capital Partners II, L.P.	100,000,000	97,930,132	145,671,152	11,049,052	3,907,329	1.53	9.26	2005
Prudential Capital Partners III, L.P.	100,000,000	102,778,757	174,115,441	13,731,310	2,171,871	1.72	14.07	2009
Prudential Capital Partners IV	100,000,000	112,326,556	113,850,945	2,136,397	33,695,075	1.31	8.35	2012
Prudential Capital Partners V, L.P.	150,000,000	147,909,672	74,674,027	6,427,387	103,298,672	1.20	8.38	2016
PGIM Capital Partners VI, L.P.	150,000,000	7,829,738	0	142,170,262	7,799,538	1.00	-0.45	2020
Summit Partners	95,000,000	100,002,497	133,679,035	22,177,023	7,059,836	1.41	9.27	
Summit Subordinated Debt Fund III, L.P.	45,000,000	44,088,494	60,443,093	2,250,000	3,857,092	1.46	8.81	2004
Summit Subordinated Debt Fund IV, L.P.	50,000,000	55,914,003	73,235,942	19,927,023	3,202,744	1.37	10.00	2008
TCW	200,000,000	174,519,135	127,021,901	56,449,308	84,475,756	1.21	8.64	
TCW Direct Lending LLC	100,000,000	83,599,652	86,302,217	25,329,409	18,980,637	1.26	8.12	2014
TCW Direct Lending VII	100,000,000	90,919,484	40,719,684	31,119,899	65,495,119	1.17	9.72	2018
TSSP	275,000,000	127,105,751	27,085,547	172,340,152	128,406,073	1.22	15.56	
Sixth Street Oppotunities Partners V	75,000,000	0	0	75,000,000	0	0.00		2021
Sixth Street TAO Partners (B), L.P.	50,000,000	42,105,468	13,697,256	21,591,788	39,935,472	1.27	12.83	2018
Sixth Street TAO Partners (D), L.P.	100,000,000	46,844,122	9,658,776	60,184,839	46,722,604	1.20	22.36	2018
TSSP Opportunities Partners IV (A), L.P.	50,000,000	38,156,161	3,729,515	15,563,525	41,747,998	1.19	15.20	2018

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<b>Real Assets</b>	<b>4,247,571,518</b>	<b>3,807,602,989</b>	<b>2,427,415,913</b>	<b>725,497,826</b>	<b>2,023,897,008</b>	<b>1.17</b>	<b>4.12</b>	
BlackRock	198,500,000	114,525,120	35,956,634	93,889,926	86,500,308	1.07	2.77	
BlackRock Global Renewable Power Fund II	98,500,000	97,789,849	35,775,666	10,625,197	70,663,302	1.09	3.17	2017
BlackRock Global Renewable Power Infrastructure II	100,000,000	16,735,271	180,968	83,264,729	15,837,005	0.96	-4.90	2019
EIG Global Energy Partners	450,000,000	469,824,098	357,552,577	77,704,481	151,545,522	1.08	2.09	
EIG Energy Fund XIV	100,000,000	113,459,470	95,309,310	2,761,129	4,578,083	0.88	-4.65	2007
EIG Energy Fund XV	150,000,000	161,870,879	150,201,781	22,871,323	26,974,930	1.09	2.21	2010
EIG Energy Fund XVI	200,000,000	194,493,749	112,041,487	52,072,029	119,992,508	1.19	4.93	2013
Encap Energy	400,000,000	423,893,117	343,249,404	11,165,163	165,963,689	1.20	6.24	
EnCap Energy Capital Fund VII, L.P.	100,000,000	105,406,230	137,949,713	0	3,236,851	1.34	14.47	2007
EnCap Energy Capital Fund VIII, L.P.	100,000,000	103,335,766	56,609,079	470,044	31,973,320	0.86	-3.61	2010
Encap Energy Fund IX	100,000,000	113,296,505	98,126,751	4,318,795	46,294,066	1.27	7.89	2012
EnCap Energy Capital Fund X, L.P.	100,000,000	101,854,615	50,563,861	6,376,323	84,459,452	1.33	8.59	2015
Energy & Minerals Group	680,000,000	664,096,296	367,088,248	57,575,279	531,200,944	1.35	7.38	
NGP Midstream & Resources, L.P.	100,000,000	103,565,615	179,560,149	17,857	7,256,874	1.80	13.41	2007
The Energy & Minerals Group Fund II, L.P.	100,000,000	106,674,084	104,295,500	170,365	106,206,612	1.97	13.20	2011
The Energy & Minerals Group Fund III, L.P.	200,000,000	201,327,783	22,410,545	1,284,543	104,430,794	0.63	-7.59	2014
The Energy & Minerals Group Fund IV, LP	150,000,000	160,664,225	56,342,489	14,023,899	167,361,031	1.39	9.56	2015
The Energy & Minerals Group Fund V	112,500,000	77,017,651	3,658,916	38,514,704	122,334,568	1.64	23.45	2019
The Energy & Minerals Group Fund V Accordion, LP	17,500,000	14,846,938	820,649	3,563,911	23,611,066	1.65	25.30	2019
Energy Capital Partners	450,000,000	402,323,741	344,296,573	139,311,970	225,581,229	1.42	11.01	
Energy Capital Partners II-A	100,000,000	85,722,480	112,434,332	29,749,110	5,790,984	1.38	9.05	2010
Energy Capital Partners III, L.P.	200,000,000	232,678,193	205,208,676	30,058,269	124,906,952	1.42	10.66	2013
Energy Capital Partners IV-A, LP	150,000,000	83,923,068	26,653,565	79,504,591	94,883,293	1.45	19.99	2017
Enervest Management Partners	100,000,000	98,460,385	64,090,705	9,633,313	71,313,447	1.38	8.17	
EnerVest Energy Institutional Fund XIV-A, L.P.	100,000,000	98,460,385	64,090,705	9,633,313	71,313,447	1.38	8.17	2015
First Reserve	500,000,000	542,153,951	266,236,300	8,684,211	130,608,661	0.73	-8.02	
First Reserve Fund XI, L.P.	150,000,000	150,292,121	100,059,903	0	186,939	0.67	-8.72	2006
First Reserve Fund XII, L.P.	150,000,000	165,617,044	83,728,049	0	6,849,122	0.55	-14.46	2008
First Reserve Fund XIII, L.P.	200,000,000	226,244,786	82,448,348	8,684,211	123,572,599	0.91	-3.75	2013

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Kohlberg, Kravis, Roberts & Co.	249,850,000	98,831,929	20,860,052	161,251,711	86,969,132	1.09	5.84	
KKR Global Infrastructure Investors III	149,850,000	98,831,929	20,860,052	61,251,711	86,969,132	1.09	5.84	2018
KKR Global Infrastructure Investors IV	100,000,000	0	0	100,000,000	0	0.00		2021
Merit Energy Partners	519,721,518	384,644,480	145,585,650	94,599,899	314,109,920	1.20	3.37	
Merit Energy Partners F-II, L.P.	100,000,000	59,522,861	32,328,014	0	6,351,293	0.65	-6.50	2006
Merit Energy Partners H	100,000,000	100,000,000	29,668,582	0	54,438,878	0.84	-2.73	2011
Merit Energy Partners I, L.P.	169,721,518	169,721,518	74,639,059	0	176,268,499	1.48	9.16	2014
Merit Energy Partners K, L.P.	150,000,000	55,400,101	8,949,995	94,599,899	77,051,250	1.55	32.86	2019
NGP	599,500,000	574,496,867	457,824,770	58,181,874	231,227,157	1.20	6.34	
Natural Gas Partners IX, LP	150,000,000	173,962,921	249,243,688	605,481	657,713	1.44	12.07	2007
NGP Natural Resources X, L.P.	150,000,000	148,720,924	125,225,975	1,279,076	18,008,046	0.96	-1.09	2011
NGP Natural Resources XI, L.P.	150,000,000	152,660,321	70,181,267	6,290,493	110,905,870	1.19	4.90	2014
NGP Natural Resources XII, L.P.	149,500,000	99,152,701	13,173,840	50,006,824	101,655,529	1.16	6.17	2017
Sheridan	100,000,000	34,353,005	24,675,000	13,500,000	28,876,999	1.56	12.44	
Sheridan Production Partners III-B, L.P.	100,000,000	34,353,005	24,675,000	13,500,000	28,876,999	1.56	12.44	2014

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<b>Real Estate</b>	<b>3,973,147,868</b>	<b>2,297,172,340</b>	<b>1,610,911,325</b>	<b>1,856,251,920</b>	<b>1,550,312,366</b>	<b>1.38</b>	<b>9.42</b>	
Angelo, Gordon & Co.	550,000,000	403,635,735	149,915,815	166,820,000	367,860,691	1.28	11.41	
AG Asia Realty Fund III, L.P.	50,000,000	47,587,261	44,875,000	6,196,250	21,004,011	1.38	12.79	2016
AG Asia Realty Fund IV, L.P.	100,000,000	59,786,100	7,250,000	41,937,500	63,821,371	1.19	12.73	2018
AG Europe Realty Fund II, L.P.	75,000,000	68,859,240	12,028,384	12,768,750	80,070,958	1.34	11.55	2018
AG Europe Realty Fund III	75,000,000	23,321,631	0	50,437,500	25,158,607	1.08	7.71	2020
AG Realty Fund IX	100,000,000	92,141,126	61,750,000	11,650,000	68,426,862	1.41	9.28	2014
AG Realty Fund X, L.P.	150,000,000	111,940,377	24,012,431	43,830,000	109,378,882	1.19	17.40	2018
Blackstone	924,500,000	756,183,656	767,259,655	300,400,168	465,566,571	1.63	13.22	
Blackstone Real Estate Partners Asia II	74,500,000	58,695,612	5,846,550	23,520,334	62,309,763	1.16	9.79	2017
Blackstone Real Estate Partners Asia III	100,000,000	0	0	100,000,000	0	0.00		2021
Blackstone Real Estate Partners V	100,000,000	104,213,007	205,535,477	4,174,052	3,380,342	2.00	10.83	2006
Blackstone Real Estate Partners VI, L.P.	100,000,000	109,477,567	217,421,377	4,907,906	2,817,848	2.01	13.08	2007
Blackstone Real Estate Partners VII, LP	100,000,000	111,820,752	150,549,044	11,131,179	49,834,005	1.79	15.44	2011
Blackstone Real Estate Partners IX, L.P.	300,000,000	201,738,475	44,258,441	133,773,366	224,661,680	1.33	29.53	2018
Blackstone Real Estate VIII.TE.1 L.P.	150,000,000	170,238,243	143,648,767	22,893,331	122,562,933	1.56	15.90	2015
Blackstone Strategic Partners	75,000,000	77,552,384	65,205,458	1,002,319	1,997,988	0.87	-2.09	
Strategic Partners III RE, L.P.	25,000,000	25,987,864	15,252,523	9,006	92,349	0.59	-6.46	2005
Strategic Partners IV RE, L.P.	50,000,000	51,564,520	49,952,935	993,313	1,905,640	1.01	0.09	2008
Brookfield Asset Management Inc.	300,000,000	0	0	300,000,000	0	0.00		
Brookfield Strategic Real Estate Partners IV	300,000,000	0	0	300,000,000	0	0.00		2021
Carlyle Group	450,000,000	95,296,372	71,739,971	408,163,883	55,145,157	1.33	24.10	
Carlyle Realty Partners VIII, L.P.	150,000,000	95,296,372	71,739,971	108,163,883	55,145,157	1.33	24.10	2017
Carlyle Realty Partners IX	300,000,000	0	0	300,000,000	0	0.00		2021
Kohlberg, Kravis, Roberts & Co.	125,000,000	31,908,294	0	93,091,706	31,908,294	1.00		
KKR Real Estate Partners Americas III	125,000,000	31,908,294	0	93,091,706	31,908,294	1.00		2021
Landmark Partners	249,500,000	79,444,165	38,201,701	175,882,096	64,276,227	1.29	15.97	
Landmark Real Estate Partners VIII	149,500,000	79,444,165	38,201,701	75,882,096	64,276,227	1.29	15.97	2016
Landmark Real Estate Partners IX	100,000,000	0	0	100,000,000	0	0.00		2021
Lubert Adler	174,147,868	83,117,934	62,415,347	92,414,787	50,300,947	1.36	14.75	
Lubert-Adler Real Estate Fund VII-B	74,147,868	67,585,213	62,415,347	7,414,787	35,368,792	1.45	15.36	2017
Lubert-Adler Recovery and Enhancement Capital Fund	100,000,000	15,532,721	0	85,000,000	14,932,155	0.96	-6.88	2021

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

Investments	Commitments	Contributions	Distributions	Remaining Commitment	Market Value	Investment Multiple	IRR	Vintage Year
Oaktree Capital Management, LLC	200,000,000	29,475,519	19,370,464	190,000,000	20,406,770	1.35	140.43	
Oaktree Real Estate Opportunities Fund VIII	200,000,000	29,475,519	19,370,464	190,000,000	20,406,770	1.35	140.43	2020
Rockpoint	200,000,000	155,995,868	42,520,337	60,014,581	145,619,392	1.21	8.69	
Rockpoint Real Estate Fund V, L.P.	100,000,000	98,683,417	42,509,110	17,327,032	80,199,236	1.24	7.35	2014
Rockpoint Real Estate Fund VI, L.P.	100,000,000	57,312,451	11,227	42,687,549	65,420,157	1.14	22.80	2019
Rockwood	200,000,000	140,704,192	52,114,821	60,960,204	119,467,619	1.22	8.98	
Rockwood Capital RE Partners X, L.P.	100,000,000	94,027,411	52,020,270	7,657,118	66,406,663	1.26	8.17	2015
Rockwood Capital RE Partners XI	100,000,000	46,676,781	94,552	53,303,086	53,060,956	1.14	15.79	2019
Silverpeak Real Estate Partners	225,000,000	143,858,221	106,300,929	7,502,176	8,106,491	0.80	-3.61	
Silverpeak Legacy Pension Partners II	75,000,000	73,062,894	92,027,822	7,502,176	482,839	1.27	4.18	2005
Silverpeak Legacy Pension Partners III	150,000,000	70,795,327	14,273,108	0	7,623,652	0.31	-11.64	2008
TA Associates Realty	300,000,000	300,000,000	235,866,827	0	219,656,218	1.52	13.99	
Realty Associates Fund X	100,000,000	100,000,000	160,292,466	0	1,000,181	1.61	12.58	2012
Realty Associates Fund XI	100,000,000	100,000,000	72,569,658	0	94,548,637	1.67	13.74	2015
Realty Associates Fund XII	100,000,000	100,000,000	3,004,703	0	124,107,400	1.27	30.79	2018
<b>Total</b>	<b>34,617,071,982</b>	<b>25,802,865,834</b>	<b>20,968,746,733</b>	<b>11,328,942,501</b>	<b>18,569,575,564</b>	<b>1.53</b>	<b>12.18</b>	<b>2018</b>
<i>Difference**</i>					51,286,241			
<i>Private Markets Total with Difference</i>					<b>18,620,861,805</b>			

<i>Private Markets Portfolio Status</i>	<i>Managers</i>	<i>Funds</i>
PRIVATE EQUITY	59	179
PRIVATE CREDIT	18	41
REAL ASSETS	11	33
REAL ESTATE	13	33
<b>Total</b>	<b>101</b>	<b>286</b>

**Notes**

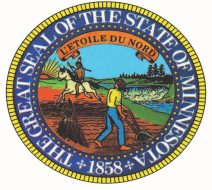
None of the data presented herein has been reviewed or approved by either the general partner or investment manager. The performance and valuation data presented herein is not a guarantee or prediction of future results. Ultimately, the actual performance and value of any investment is not known until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

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

## December 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.

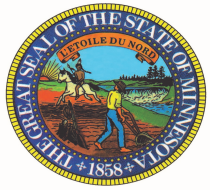
### Investment Option Descriptions

- 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	\$120,431,414	5.6%	15.1%	18.0%	12.7%	11.4%	01/1980
U.S. ACTIVELY MANAGED FUND	100,873,647	7.7	23.4	27.4	19.4	16.9	07/1986
U.S. STOCK INDEX FUND	497,072,504	9.3	26.2	26.1	18.1	16.4	07/1986
BROAD INTERNATIONAL STOCK FUND	162,714,305	2.1	9.0	14.1	10.1	7.9	09/1994
BOND FUND	123,928,832	-0.1	-1.1	6.0	4.4	3.7	07/1986
MONEY MARKET FUND	599,667,632	0.0	0.1	1.1	1.3	0.8	07/1986
STABLE VALUE FUND	1,684,667,943	0.5	1.9	2.4	2.3	2.2	11/1994
VOLUNTEER FIREFIGHTER ACCOUNT	158,323,573	3.5	9.7	14.1	10.1	8.8	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

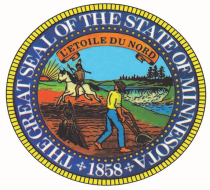
The primary investment objective of the Balanced Fund is to gain exposure to publicly traded U.S. equities, bond and cash in a diversified investment portfolio. The Fund seeks to maximize long-term real rates of return, while limiting short-run portfolio return volatility. The Balanced Fund is invested 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% Bloomberg U.S. Aggregate/5% 3 Month T-Bills.

	<u>Ending Market Value</u>	<u>Last Qtr</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>
<b>BALANCED FUND</b>	<b>\$120,431,414</b>	<b>5.6%</b>	<b>15.1%</b>	<b>18.0%</b>	<b>12.7%</b>	<b>11.4%</b>
SIF BALANCED FUND BENCHMARK		5.6%	14.3%	17.2%	12.2%	10.9%
Excess		0.0%	0.9%	0.8%	0.5%	0.5%

### U.S. Actively Managed Fund

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

	<u>Ending Market Value</u>	<u>Last Qtr</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>
<b>U.S. ACTIVELY MANAGED FUND</b>	<b>100,873,647</b>	<b>7.7</b>	<b>23.4</b>	<b>27.4</b>	<b>19.4</b>	<b>16.9</b>
Russell 3000		9.3	25.7	25.8	18.0	16.3
Excess		-1.6	-2.2	1.6	1.4	0.6



## Supplemental Investment Fund Performance

### U.S. Stock Index Fund

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

	<u>Ending Market Value</u>	<u>Last Qtr</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>
<b>U.S. STOCK INDEX FUND</b>	<b>\$497,072,504</b>	<b>9.3%</b>	<b>26.2%</b>	<b>26.1%</b>	<b>18.1%</b>	<b>16.4%</b>
Russell 3000		9.3%	25.7%	25.8%	18.0%	16.3%
Excess		-0.0%	0.5%	0.3%	0.2%	0.1%

### Broad International Stock Fund

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

	<u>Ending Market Value</u>	<u>Last Qtr</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>
<b>BROAD INTERNATIONAL STOCK FUND</b>	<b>162,714,305</b>	<b>2.1</b>	<b>9.0</b>	<b>14.1</b>	<b>10.1</b>	<b>7.9</b>
International Equity Benchmark		1.8	7.8	13.1	9.6	7.3
Excess		0.3	1.2	1.0	0.6	0.7



## Supplemental Investment Fund Performance

### Bond Fund

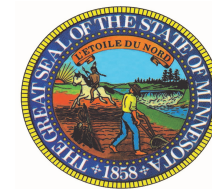
The investment objective of the Bond Fund is to exceed the return of the broad domestic bond market by investing in fixed income securities. The Bond Fund invests primarily in high-quality, government and corporate bonds that have intermediate to long-term maturities, usually 3 to 20 years. The Bond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

	<u>Ending Market Value</u>	<u>Last Qtr</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>
<b>BOND FUND</b>	<b>\$123,928,832</b>	<b>-0.1%</b>	<b>-1.1%</b>	<b>6.0%</b>	<b>4.4%</b>	<b>3.7%</b>
Bloomberg U.S. Aggregate		0.0%	-1.5%	4.8%	3.6%	2.9%
Excess		-0.1%	0.5%	1.2%	0.8%	0.9%

### Money Market Fund

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

	<u>Ending Market Value</u>	<u>Last Qtr</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>
<b>MONEY MARKET FUND</b>	<b>599,667,632</b>	<b>0.0</b>	<b>0.1</b>	<b>1.1</b>	<b>1.3</b>	<b>0.8</b>
ICE BofA US 3-Month Treasury Bill		0.0	0.0	1.0	1.1	0.6
Excess		0.0	0.1	0.1	0.1	0.1



## Supplemental Investment Fund Performance

### Stable Value Fund

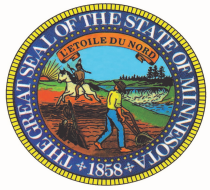
The investment objectives of the Stable Value Fund are to protect investors from loss of their original investment and to provide competitive interest rates using somewhat longer-term investments than typically found in a money market fund. The Fund is invested in a well-diversified portfolio of high-quality 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>
<b>STABLE VALUE FUND</b>	<b>\$1,684,667,943</b>	<b>0.5%</b>	<b>1.9%</b>	<b>2.4%</b>	<b>2.3%</b>	<b>2.2%</b>
Fixed Interest Blended Benchmark		0.3%	0.9%	1.4%	1.8%	1.5%
Excess		0.2%	1.0%	1.0%	0.5%	0.7%

### 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 U.S. Aggregate, 5% 3 Month T-Bills.

	<u>Ending Market Value</u>	<u>Last Qtr</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>
<b>VOLUNTEER FIREFIGHTER ACCOUNT</b>	<b>158,323,573</b>	<b>3.5</b>	<b>9.7</b>	<b>14.1</b>	<b>10.1</b>	<b>8.8</b>
SIF Volunteer Firefighter Account BM		3.5	9.0	13.3	9.6	8.3
Excess		-0.1	0.7	0.9	0.6	0.6

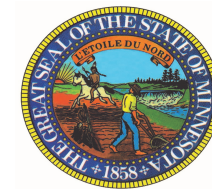


## Mutual Funds

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 County 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	\$768,954,143	9.2%	25.7%				07/2019
VANGUARD INSTITUTIONAL INDEX PLUS	1,961,877,557	11.0	28.7	26.1%	18.5%	16.5%	07/1999
VANGUARD DIVIDEND GROWTH	1,007,262,260	11.6	24.8	22.4	17.0		10/2016
VANGUARD MID CAP INDEX	828,658,173	8.0	24.5	24.5	15.9	15.1	01/2004
T. ROWE PRICE SMALL-CAP STOCK	1,098,600,663	3.4	16.8	25.0	17.0	16.2	04/2000
FIDELITY DIVERSIFIED INTERNATIONAL	395,662,215	4.0	13.1	20.7	13.6	10.6	07/1999
VANGUARD TOTAL INTERNATIONAL STOCK INDEX	377,275,052	2.1	8.7	13.7	9.9	7.7	07/2011
VANGUARD BALANCED INDEX	1,563,292,465	5.5	14.2	17.4	12.4	11.0	12/2003
DODGE & COX INCOME	338,050,726	-0.4	-0.9	6.0	4.4	4.1	07/1999
VANGUARD TOTAL BOND MARKET INDEX	371,146,681	-0.2	-1.7	4.8	3.6	2.9	12/2003
2025 FUND	251,230,080	3.0	9.7	12.5	9.0	8.3	07/2011
2030 FUND	212,405,875	3.9	10.9	15.2	10.8	9.6	07/2011
2035 FUND	167,569,455	4.4	11.5	16.8	11.9	10.4	07/2011
2040 FUND	131,032,481	4.6	12.3	17.8	12.6	11.0	07/2011
2045 FUND	120,455,924	4.9	13.3	18.6	13.1	11.4	07/2011
2050 FUND	99,232,623	5.1	14.1	19.4	13.5	11.7	07/2011
2055 FUND	63,817,055	5.2	14.6	19.7	13.7	11.7	07/2011
2060 FUND	51,683,721	5.2	14.6	19.7	13.7	11.7	07/2011
2065 FUND	4,168,457	5.2	14.6				04/2020
INCOME FUND	252,691,911	2.4	8.0	10.3	7.2	5.8	07/2011
TD Ameritrade SDB	94,351,662						
TD Ameritrade SDB Roth	2,991,411						





## 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 S&P U.S. Dividend Growers Index, over time.

### MID CAP EQUITY

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

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

### SMALL CAP EQUITY

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

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

### INTERNATIONAL EQUITY

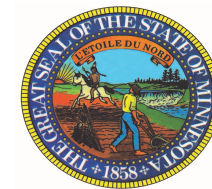
#### **Fidelity Diversified International (active)**

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

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

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

	Ending Market Value	Last Qtr	1 Year	3 Year	5 Year	Option Since
<b>Large Cap US Equity</b>						
<b>VANGUARD TOTAL STOCK MARKET INSTITUTIONAL INDEX PLUS</b>	<b>\$768,954,143</b>	<b>9.2%</b>	<b>25.7%</b>			<b>07/2019</b>
CRSP US Total Market Index		9.2	25.7			07/2019
Excess		0.0	0.0			
<b>VANGUARD INSTITUTIONAL INDEX PLUS</b>	<b>1,961,877,557</b>	<b>11.0</b>	<b>28.7</b>	<b>26.1%</b>	<b>18.5%</b>	<b>07/1999</b>
S&P 500		11.0	28.7	26.1	18.5	07/1999
Excess		-0.0	-0.0	-0.0	-0.0	
<b>VANGUARD DIVIDEND GROWTH</b>	<b>1,007,262,260</b>	<b>11.6</b>	<b>24.8</b>	<b>22.4</b>	<b>17.0</b>	<b>10/2016</b>
DIVIDEND GROWTH SPLICED INDEX		12.3	23.7	22.9	17.3	10/2016
Excess		-0.8	1.1	-0.5	-0.4	
<b>Mid Cap US Equity</b>						
<b>VANGUARD MID CAP INDEX</b>	<b>828,658,173</b>	<b>8.0</b>	<b>24.5</b>	<b>24.5</b>	<b>15.9</b>	<b>01/2004</b>
CRSP US Mid Cap Index		8.0	24.5	24.5	15.9	01/2004
Excess		-0.0	0.0	-0.0	0.0	
<b>Small Cap US Equity</b>						
<b>T. ROWE PRICE SMALL-CAP STOCK</b>	<b>1,098,600,663</b>	<b>3.4</b>	<b>16.8</b>	<b>25.0</b>	<b>17.0</b>	<b>04/2000</b>
Russell 2000		2.1	14.8	20.0	12.0	04/2000
Excess		1.2	2.0	5.0	4.9	
<b>International Equity</b>						
<b>FIDELITY DIVERSIFIED INTERNATIONAL</b>	<b>395,662,215</b>	<b>4.0</b>	<b>13.1</b>	<b>20.7</b>	<b>13.6</b>	<b>07/1999</b>
MSCI EAFE FREE (NET)		2.7	11.3	13.5	9.5	07/1999
Excess		1.3	1.8	7.1	4.0	
<b>VANGUARD TOTAL INTERNATIONAL STOCK INDEX</b>	<b>377,275,052</b>	<b>2.1</b>	<b>8.7</b>	<b>13.7</b>	<b>9.9</b>	<b>07/2011</b>
FTSE Global All Cap ex US Index Net		1.7	8.7	13.6	9.7	07/2011
Excess		0.4	-0.0	0.1	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% Bloomberg 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 Bloomberg 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 Bloomberg U.S. Aggregate.

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

A fund that invests in short-term debt instruments which is expected to outperform the return on 3 Month T-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**

<b>VANGUARD BALANCED INDEX</b>	<b>\$1,563,292,465</b>	<b>5.5%</b>	<b>14.2%</b>	<b>17.4%</b>	<b>12.4%</b>	<b>12/2003</b>
Vanguard Balanced Fund Benchmark		5.5	14.2	17.5	12.4	12/2003
Excess		-0.0	-0.0	-0.1	-0.0	

#### **Fixed Income**

<b>DODGE &amp; COX INCOME</b>	<b>338,050,726</b>	<b>-0.4</b>	<b>-0.9</b>	<b>6.0</b>	<b>4.4</b>	<b>07/1999</b>
Bloomberg U.S. Aggregate		0.0	-1.5	4.8	3.6	07/1999
Excess		-0.4	0.6	1.2	0.8	

<b>VANGUARD TOTAL BOND MARKET INDEX</b>	<b>371,146,681</b>	<b>-0.2</b>	<b>-1.7</b>	<b>4.8</b>	<b>3.6</b>	<b>12/2003</b>
Bloomberg U.S. Aggregate		0.0	-1.5	4.8	3.6	12/2003
Excess		-0.3	-0.1	0.0	0.0	

<b>MONEY MARKET FUND</b>	<b>599,667,632</b>	<b>0.0</b>	<b>0.1</b>	<b>1.1</b>	<b>1.3</b>	<b>07/1986</b>
ICE BofA US 3-Month Treasury Bill		0.0	0.0	1.0	1.1	07/1986
Excess		0.0	0.1	0.1	0.1	

#### **Stable Value**

<b>STABLE VALUE FUND</b>	<b>1,684,667,943</b>	<b>0.5</b>	<b>1.9</b>	<b>2.4</b>	<b>2.3</b>	<b>11/1994</b>
Fixed Interest Blended Benchmark		0.3	0.9	1.4	1.8	11/1994
Excess		0.2	1.0	1.0	0.5	

(1) Prior to 09/20/2021 the benchmark was NASDAQ US Dividend Achievers Select.

(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 IML.

(4) Prior to 01/01/2013 the benchmark was 60% MSCI US Broad Market Index and 40% Bloomberg 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	\$251,230,080	3.0%	9.7%	12.5%	9.0%	07/2011		2050 FUND	\$99,232,623	5.1%	14.1%	19.4%	13.5%	07/2011
2025 FUND BENCHMARK		3.0	9.8	12.5	9.0	07/2011		2050 FUND BENCHMARK		4.9	14.1	19.4	13.5	07/2011
Excess		0.0	-0.0	0.0	0.0			Excess		0.2	-0.0	-0.0	-0.0	
2030 FUND	212,405,875	3.9	10.9	15.2	10.8	07/2011		2055 FUND	63,817,055	5.2	14.6	19.7	13.7	07/2011
2030 FUND BENCHMARK		3.8	11.0	15.2	10.8	07/2011		2055 FUND BENCHMARK		5.0	14.6	19.8	13.7	07/2011
Excess		0.1	-0.0	0.0	0.0			Excess		0.2	-0.0	-0.0	-0.0	
2035 FUND	167,569,455	4.4	11.5	16.8	11.9	07/2011		2060 FUND	51,683,721	5.2	14.6	19.7	13.7	07/2011
2035 FUND BENCHMARK		4.3	11.5	16.8	11.9	07/2011		2060 FUND BENCHMARK		5.0	14.6	19.8	13.7	07/2011
Excess		0.1	-0.0	0.0	-0.0			Excess		0.2	-0.0	-0.0	-0.0	
2040 FUND	131,032,481	4.6	12.3	17.8	12.6	07/2011		2065 FUND	4,168,457	5.2	14.6			04/2020
2040 FUND BENCHMARK		4.5	12.4	17.8	12.6	07/2011		2065 FUND BENCHMARK		5.0	14.6			04/2020
Excess		0.1	-0.0	0.0	0.0			Excess		0.2	-0.0			
2045 FUND	120,455,924	4.9	13.3	18.6	13.1	07/2011		INCOME FUND	252,691,911	2.4	8.0	10.3	7.2	07/2011
2045 FUND BENCHMARK		4.8	13.3	18.6	13.1	07/2011		INCOME FUND BENCHMARK		2.4	8.1	10.3	7.2	07/2011
Excess		0.2	-0.0	-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 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% Bloomberg U.S. 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.

**SOCIAL CHOICE EQUITY ALLOCATION** - An actively managed fund that seeks to provide a favorable long-term total return that reflects the investment performance of the overall U.S. equity market while giving special consideration to companies whose activities are consistent with certain environmental, social and governance criteria.



**MINNESOTA COLLEGE SAVINGS PLAN**

**Performance Statistics for the Period Ending: December 31, 2021**

**Total = \$1,920 Million**

Fund Name	Ending Market	3 Months	1 Year	Annualized				Inception Date
				3 Years	5 Years	10 Years	Since Inception	
2038/2039 Enrollment Option	\$4,936,571	6.34%					5.70%	6/11/2021
2038-2039 Custom Benchmark		5.86%					5.73%	
2036/2037 Enrollment Option	\$55,870,195	6.07%	16.90%				16.55%	10/28/2019
2036-2037 Custom Benchmark		5.70%	16.18%				15.80%	
2034/2035 Enrollment Option	\$48,218,480	5.76%	16.09%				15.82%	10/28/2019
2034-2035 Custom Benchmark		5.42%	15.40%				15.15%	
2032/2033 Enrollment Option	\$55,865,321	5.41%	15.12%				15.24%	10/28/2019
2032-2033 Custom Benchmark		5.11%	14.52%				14.57%	
2030/2031 Enrollment Option	\$68,088,676	4.80%	13.55%				14.04%	10/28/2019
2030-2031 Custom Benchmark		4.58%	13.10%				13.43%	
2028/2029 Enrollment Option	\$86,573,019	4.04%	11.43%				12.25%	10/28/2019
2028-2029 Custom Benchmark		3.81%	10.91%				11.58%	
2026/2027 Enrollment Option	\$119,486,337	3.23%	9.21%				10.56%	10/28/2019
2026-2027 Custom Benchmark		3.10%	8.83%				9.98%	
2024/2025 Enrollment Option	\$165,176,766	2.47%	7.21%				8.88%	10/28/2019
2024-2025 Custom Benchmark		2.35%	6.74%				8.19%	
2022/2023 Enrollment Option	\$192,173,297	1.68%	5.04%				6.48%	10/28/2019
2022-2023 Custom Benchmark		1.51%	4.32%				5.67%	
In School Option	\$311,603,690	1.36%	3.80%				5.33%	10/28/2019
In School Custom Benchmark		1.19%	3.13%				4.30%	

**MINNESOTA COLLEGE SAVINGS PLAN**

**Performance Statistics for the Period Ending: December 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	\$344,055,996	7.83%	21.97%	21.40%	15.01%	13.24%	8.39%	10/ 1/2001
BB: U.S. and International Equity Option		7.86%	22.45%	21.20%	14.80%	13.28%	9.11%	
Moderate Allocation Option	\$100,384,948	4.73%	12.99%	15.18%	10.71%	9.12%	6.63%	8/ 2/2007
BB: Moderate Allocation Option		4.85%	13.29%	15.05%	10.61%	9.26%	7.16%	
100% Fixed-Income Option	\$21,069,387	0.24%	0.18%	5.18%	3.62%	2.57%	3.67%	8/16/2007
BB: 100% Fixed-Income Option		0.34%	0.46%	5.50%	3.94%	2.98%	4.26%	
International Equity Index Option	\$9,223,830	2.40%	9.12%	13.08%	9.74%		6.14%	6/18/2013
BB: International Equity Index Option		1.89%	8.45%	13.12%	9.69%		6.29%	
Money Market Option	\$13,421,555	0.00%	0.00%	0.79%	0.92%	0.47%	0.51%	11/ 1/2007
BB: Money Market Option		0.00%	0.01%	0.69%	0.79%	0.41%	0.46%	
Principal Plus Interest Option	\$125,547,521	0.31%	1.38%	1.75%	1.71%	1.55%	2.40%	10/10/2001
Citigroup 3-Month U.S. Treasury Bill		0.01%	0.05%	0.96%	1.11%	0.60%	1.24%	
Aggressive Allocation Option	\$74,197,640	6.26%	17.37%	18.17%	12.88%		9.99%	8/12/2014
BB: Aggressive Allocation Option		6.36%	17.81%	18.15%	12.73%		9.93%	
Conservative Allocation Option	\$18,260,021	2.47%	6.68%	9.19%	6.67%		5.20%	8/18/2014
BB: Conservative Allocation Option		2.51%	6.63%	9.13%	6.60%		5.23%	
Equity and Interest Accumulation Option	\$7,370,130	4.65%	12.94%	13.24%	9.70%		7.92%	8/18/2014
BB: Equity and Interest Accumulation Option		4.62%	12.33%	13.20%	9.59%		7.82%	
U.S. Large Cap Equity Option	\$95,852,538	10.96%	10.96%	10.96%	10.96%	10.96%	10.96%	8/12/2014
BB: U.S. Large Cap Equity Option		11.03%	11.03%	11.03%	11.03%	11.03%	11.03%	
Social Choice Equity Option	\$566,223	9.42%					10.30%	6/11/2021
BB: Social Choice Equity Option		9.28%					10.40%	
Matching Grant	\$1,812,792	0.31%	1.38%	1.75%	1.71%	1.55%	2.40%	3/22/2002
Citigroup 3-Month U.S. Treasury Bill		0.01%	0.05%	0.96%	1.11%	0.60%	1.24%	

# MINNESOTABLE<sup>plan</sup>

A member of The National ABLE Alliance

Performance as of  
12/31/21

Total Market Value: \$ 26,378,921

<u>Fund Name</u>	<u>Market Value</u>	<u>% of Plan</u>	<u>1 Month</u>	<u>3 Months</u>	<u>YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Inception</u>	<u>Inception Date</u>
Aggressive Option	\$ 2,288,157	8.67%	3.09	5.28	17.24	17.24	19.06	12.94		12.80	12/15/16
ABLE Aggressive Custom Benchmark			3.33	5.38	17.61	17.61	19.52	13.38		13.31	
<b>Variance</b>			<b>(0.24)</b>	<b>(0.10)</b>	<b>(0.37)</b>	<b>(0.37)</b>	<b>(0.46)</b>	<b>(0.44)</b>		<b>(0.51)</b>	
Moderately Aggressive Option	\$ 2,551,456	9.67%	2.57	4.45	14.34	14.34	16.68	11.38		11.28	12/15/16
ABLE Moderately Aggressive Custom Benchmark			2.77	4.53	14.74	14.74	17.10	11.78		11.75	
<b>Variance</b>			<b>(0.20)</b>	<b>(0.08)</b>	<b>(0.40)</b>	<b>(0.40)</b>	<b>(0.42)</b>	<b>(0.40)</b>		<b>(0.47)</b>	
Growth Option	\$ 3,594,391	13.63%	2.05	3.57	11.55	11.55	14.24	9.73		9.69	12/15/16
ABLE Growth Custom Benchmark			2.21	3.69	11.91	11.91	14.63	10.14		10.14	
<b>Variance</b>			<b>(0.16)</b>	<b>(0.12)</b>	<b>(0.36)</b>	<b>(0.36)</b>	<b>(0.39)</b>	<b>(0.41)</b>		<b>(0.45)</b>	
Moderate Option	\$ 3,044,386	11.54%	1.51	2.71	8.74	8.74	11.73	8.09		8.08	12/15/16
ABLE Moderate Custom Benchmark			1.65	2.83	9.12	9.12	12.13	8.46		8.49	
<b>Variance</b>			<b>(0.14)</b>	<b>(0.12)</b>	<b>(0.38)</b>	<b>(0.38)</b>	<b>(0.40)</b>	<b>(0.37)</b>		<b>(0.41)</b>	
Moderately Conservative Option	\$ 3,056,717	11.59%	0.98	1.83	5.95	5.95	8.40	5.90		5.91	12/15/16
ABLE Moderately Conservative Custom Benchmark			1.10	1.92	6.12	6.12	8.68	6.20		6.23	
<b>Variance</b>			<b>(0.12)</b>	<b>(0.09)</b>	<b>(0.17)</b>	<b>(0.17)</b>	<b>(0.28)</b>	<b>(0.30)</b>		<b>(0.32)</b>	
Conservative Option	\$ 4,570,527	17.33%	0.26	0.61	2.12	2.12	3.88	2.94		2.95	12/15/16
ABLE Conservative Custom Benchmark			0.36	0.68	2.19	2.19	4.03	3.12		3.14	
<b>Variance</b>			<b>(0.10)</b>	<b>(0.07)</b>	<b>(0.07)</b>	<b>(0.07)</b>	<b>(0.15)</b>	<b>(0.18)</b>		<b>(0.19)</b>	
Checking Option	\$ 7,273,287	27.57%									03/30/17

## MINNESOTA ACHIEVE A BETTER LIFE EXPERIENCE

The Minnesota Achieve a Better Life Experience Plan (ABI)  
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.

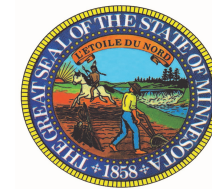
## RISK BASED ALLOCATIONS

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

## December 31, 2021



## Quarterly Report

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# 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

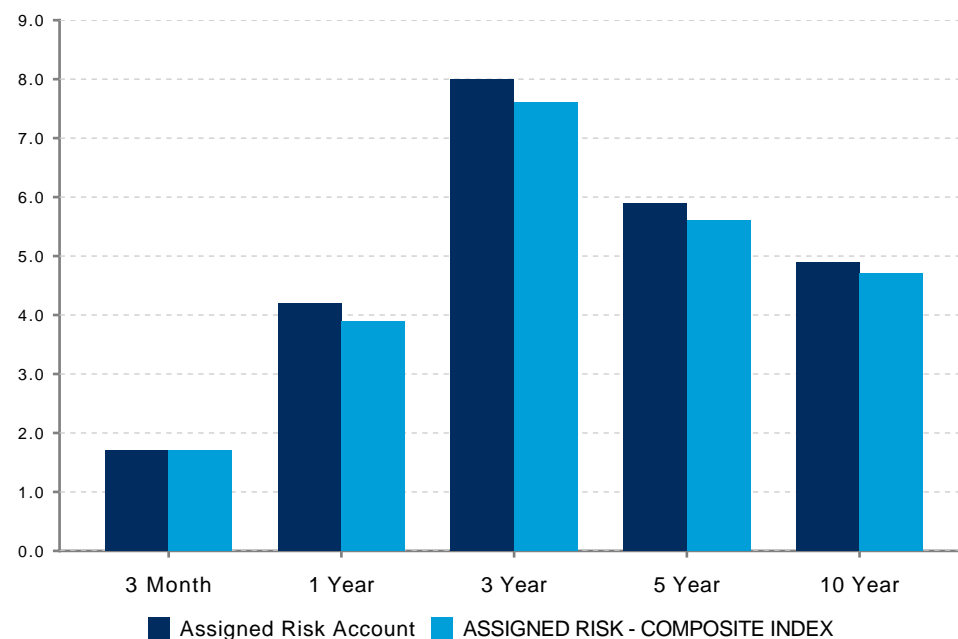
The Assigned Risk plan has two investment objectives: to minimize the mismatch between assets and liabilities and to provide sufficient liquidity for the payment of ongoing claims and operating expenses.

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

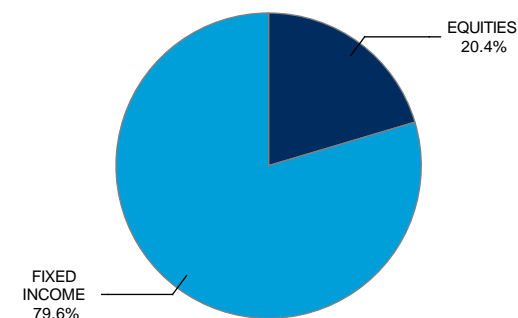
The equity segment is passively managed to track the performance of the S&P 500.

The fixed income benchmark is the Bloomberg U.S. Government Intermediate 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% fixed income and 20% equities. 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	\$281,624,513	1.7%	4.2%	8.0%	5.9%	4.9%
EQUITIES	57,557,829	11.0	28.7	26.1	18.6	16.3
FIXED INCOME	224,066,684	-0.7	-1.6	3.1	2.4	1.7
ASSIGNED RISK - COMPOSITE INDEX		1.7	3.9	7.6	5.6	4.7
Excess		0.0	0.3	0.4	0.3	0.2
S&P 500		11.0	28.7	26.1	18.5	16.6
Bloomberg U.S. Government: Intermediate		-0.6	-1.7	3.0	2.3	1.7



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.



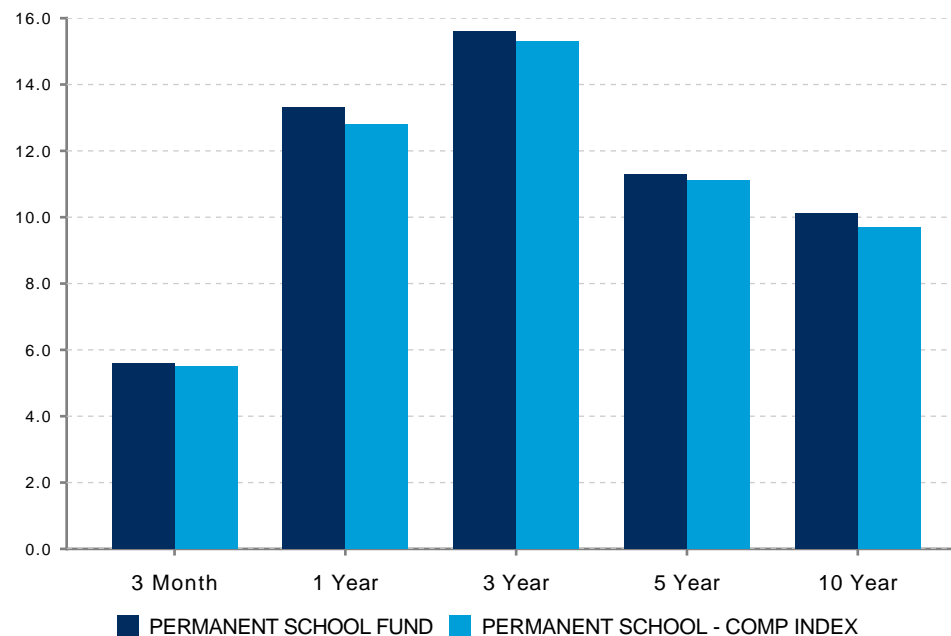
## Non-Retirement

### Permanent School Fund

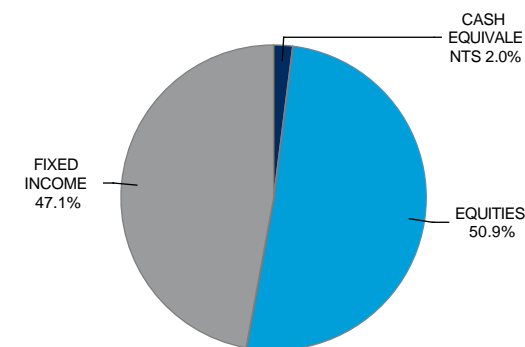
The investment objective of the Permanent School Fund is to produce a growing level of spendable income, within the constraints of maintaining adequate portfolio quality and liquidity. The income from the portfolio is transferred to the school endowment fund and distributed to Minnesota's public schools.

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 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	\$2,056,618,329	5.6%	13.3%	15.6%	11.3%	10.1%
CASH EQUIVALENTS	40,281,360	0.0	0.1	1.0	1.2	0.7
EQUITIES	1,046,792,787	11.0	28.7	26.1	18.5	16.5
FIXED INCOME	969,544,181	-0.2	-1.5	5.3	4.0	3.6
PERMANENT SCHOOL - COMP INDEX		5.5	12.8	15.3	11.1	9.7
Excess		0.1	0.5	0.3	0.3	0.4
S&P 500		11.0	28.7	26.1	18.5	16.6
Bloomberg U.S. Aggregate		0.0	-1.5	4.8	3.6	2.9



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.



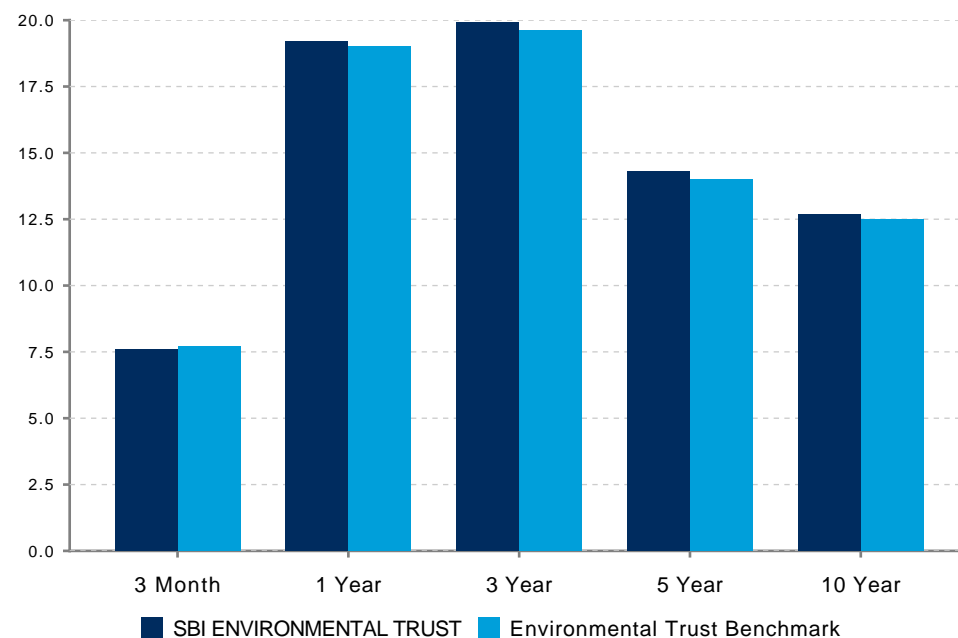
## Non-Retirement

### Environmental Trust Fund

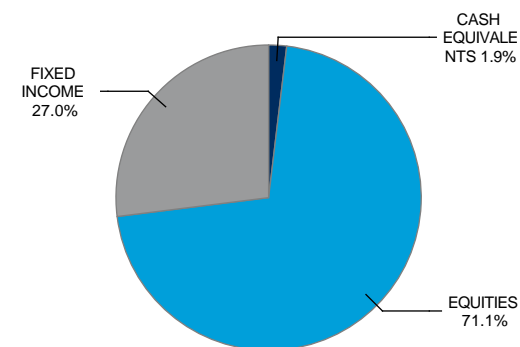
The objective of the Environmental Trust Fund is to increase the market value of the Fund over time in order to increase the annual amount made available for spending within the constraints of maintaining adequate portfolio quality and liquidity.

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 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.



	Ending Market Value	Last Qtr	1 Year	3 Year	5 Year	10 Year
SBI ENVIRONMENTAL TRUST	\$1,759,271,518	7.6%	19.2%	19.9%	14.3%	12.7%
CASH EQUIVALENTS	32,656,849	0.0	0.1	1.0	1.2	0.7
EQUITIES	1,252,015,396	11.0	28.7	26.1	18.5	16.5
FIXED INCOME	474,599,273	-0.2	-1.5	5.3	4.0	3.6
Environmental Trust Benchmark		7.7	19.0	19.6	14.0	12.5
Excess		-0.1	0.2	0.3	0.2	0.2
S&P 500		11.0	28.7	26.1	18.5	16.6
Bloomberg U.S. Aggregate		0.0	-1.5	4.8	3.6	2.9



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.

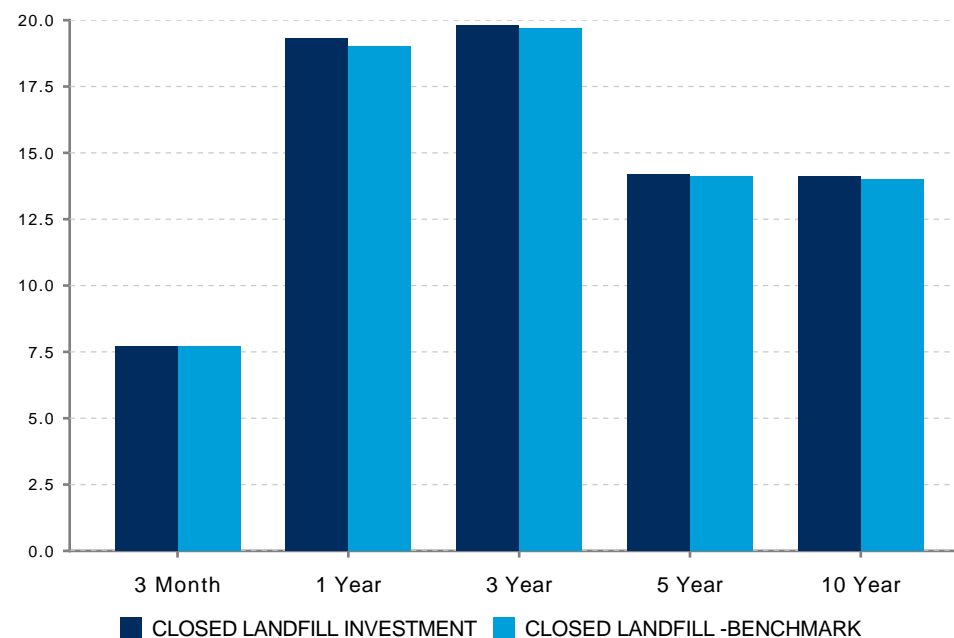


## Non-Retirement

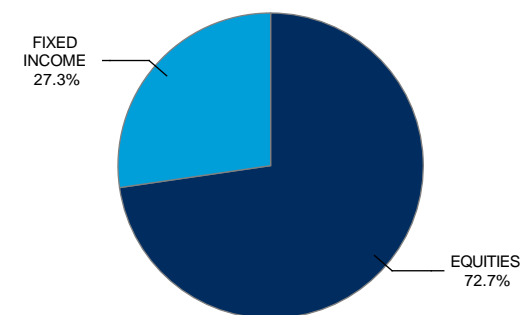
### Closed Landfill Investment Fund

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 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.

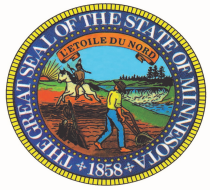


	Ending Market Value	Last Qtr	1 Year	3 Year	5 Year	10 Year
CLOSED LANDFILL INVESTMENT	\$140,233,911	7.7%	19.3%	19.8%	14.2%	14.1%
EQUITIES	101,896,107	11.0	28.7	26.1	18.5	16.5
FIXED INCOME	38,337,804	-0.2	-1.5	5.3	4.0	
CLOSED LANDFILL -BENCHMARK		7.7	19.0	19.7	14.1	14.0
Excess		0.0	0.4	0.1	0.1	0.0
S&P 500		11.0	28.7	26.1	18.5	16.6
Bloomberg U.S. Aggregate		0.0	-1.5	4.8	3.6	2.9



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 December 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>
<b>NON RETIREMENT EQUITY INDEX - MELLON</b>	<b>3,426,797,377</b>	<b>11.0</b>	<b>11.7</b>	<b>28.7</b>	<b>26.1</b>	<b>18.5</b>	<b>16.5</b>	<b>10.8</b>	<b>07/1993</b>
S&P 500 INDEX (DAILY)		11.0	11.7	28.7	26.1	18.5	16.6	10.8	07/1993
Excess		-0.0	-0.0	-0.0	0.0	0.0	-0.0	0.1	
<b>NON RETIREMENT FIXED INCOME - PRUDENTIAL</b>	<b>1,677,983,382</b>	<b>-0.2</b>	<b>-0.0</b>	<b>-1.5</b>	<b>5.3</b>	<b>4.0</b>	<b>3.6</b>	<b>5.8</b>	<b>07/1994</b>
Bloomberg U.S. Aggregate		0.0	0.1	-1.5	4.8	3.6	2.9	5.3	07/1994
Excess		-0.2	-0.1	0.0	0.5	0.4	0.7	0.5	
<b>RBC</b>	<b>224,066,687</b>	<b>-0.7</b>	<b>-0.7</b>	<b>-1.6</b>	<b>3.1</b>	<b>2.4</b>	<b>1.7</b>	<b>4.7</b>	<b>07/1991</b>
RBC Custom Benchmark		-0.6	-0.6	-1.7	3.0	2.3	1.7	4.7	07/1991
Excess		-0.1	-0.1	0.1	0.1	0.1	0.1	-0.1	
MET COUNCIL OPEB BOND POOL	101,318,759	-0.6	-0.6	-0.4	2.3				
<b>NON RETIREMENT CASH ACCOUNT</b>	<b>104,968,986</b>	<b>0.0</b>	<b>0.0</b>	<b>0.1</b>	<b>1.0</b>				
ICE BofA US 3-Month Treasury Bill		0.0	0.0	0.0	1.0				
Excess		0.0	0.0	0.0	-0.0				

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 U.S. Government Intermediate 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.

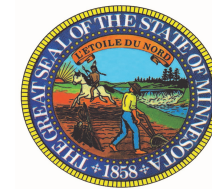
Prior to 12/1/17 the Non Retirement Equity Index and Non Retirement Fixed Income accounts were managed internally by SBI staff.

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

## December 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.

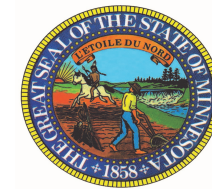
Beginning in January 2003, the Treasurer's Cash Pool is measured against the iMoneyNet, All Taxable Money Fund Report Average.

	<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	20,446,361,995	-0.2	-0.0	1.2	1.3	0.7
iMoneyNet Money Fund Average-All Taxable		0.0	0.0	0.7	0.8	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	69,575,362	0.5	0.4	3.5	3.2	



## Addendum

### Benchmark Definitions

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

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

#### **Benchmark DM:**

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

#### **Benchmark EM:**

Since 6/1/08 the emerging markets managers' benchmark, "Benchmark EM," is the Standard (large + mid) MSCI Emerging Markets Free (net). From 10/1/07 through 5/31/08 the benchmark was the Provisional Standard MSCI Emerging Markets Free (net). From 1/1/01 to 9/30/07 the benchmark was the MSCI Emerging Markets Free (net), 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:**

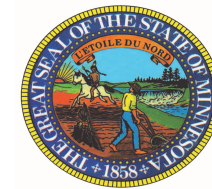
The Composite Index performance is calculated by multiplying the beginning of month Composite weights by the monthly returns of the asset class benchmarks. Asset class weights for Private Markets - Invested and Private Markets - Uninvested are reset at the start of each month. From 1/1/2018-2/28/2019 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:**

The Core Bonds Benchmark is the Bloomberg U.S. Aggregate. Prior to 2016 this index was called the Barclays Agg. 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 US Corporate Bond Index, 30% Bloomberg 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:

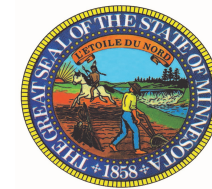
33.33% ICE BofA High Yield, 33.33% S&P LSTA Leveraged Loan, and 33.33% JPM EMBI Global Diversified Index.

### Passive Domestic Equity Benchmark:

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

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### **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 U.S. Aggregate Index/ 40% Bloomberg Treasury 5+ Years Index/ 20% ICE BofA US 3-Month Treasury Bill. From 4/1/2019-6/30/2020 it was 50% Bloomberg Aggregate and 50% Bloomberg 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.

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