

Comprehensive Performance Report

December 31, 2023





Description of SBI Investment Programs

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

Combined Funds

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

Fire Plans + Other Retirement Plans

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

Participant Directed Investment Program

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

Non-Retirement Funds

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

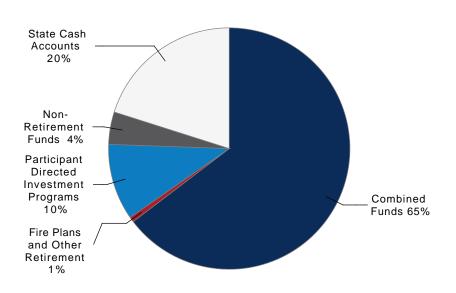
The State Cash accounts are cash balances of state government funds including the State General Fund. Most accounts are invested by SBI staff through a short-term pooled fund referred to as the Treasurer's Cash Pool. It contains the cash balances of special or dedicated accounts necessary for the operation 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

COMBINED FUNDS	<u>\$ Millions</u> \$89,307
Fire Plans + Other Retirement Plans	972
Participant Directed Investment Program	14,118
State Deferred Compensation Plan	9,627
Health Care Savings Plan	1,917
Unclassified Employees Retirement Plan	379
Hennepin County Supplemental Retirement Plan	169
PERA Defined Contribution Plan	94
Minnesota College Savings Plan	1,890
Minnesota Achieving a Better Life Experience Plan	42
Non-Retirement Funds	5,998
Assigned Risk Plan	273
Permanent School Fund	1,995
Environmental Trust Fund	1,714
Closed Landfill Investment Fund	136
Miscellaneous Trust Funds	981
Other Postemployment Benefits Accounts	899
State Cash	27,766
Invested Treasurer's Cash	26,851
Other State Cash Accounts	915
TOTAL SBI AUM	138,161



Note: Differentials within column amounts may occur due to rounding





Quarterly Report

Table of Contents		Performance Reporting Legend
Combined Funds	5	Manager Level Data
Domestic Equity		
International Equity		Aggregate Level Data
Fixed Income		Sub-Asset Class Level Data
Private Markets		Asset Class Level Data
Treasuries		
Participant Directed Investment Program	89	
Supplemental Investment Fund		
Deferred Compensation Program		
Minnesota College Savings Plan		
Minnesota Achieve a Better Life Experience		
Non-Retirement Funds	105	
Assigned Risk Plan		Note:
Permanent School Fund		Throughout this report performance is calculated net of investment management
Environmental Trust Fund		fees, gross of administrative fees. Aggregates include terminated managers, and returns for all periods greater than one year are annualized. Inception Date and
Closed Landfill Investment Fund		Since Inception Returns refer to the date of retention by the SBI. FYTD refers to
Non-Retirement Managers		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. Some
	112	aggregate inception to date return are based portfolio management decisions to re-
State Cash Accounts	113	group manager accounts in different or newly created aggregates.
Invested Treasurer's Cash		
Other State Cash Accounts		
Addendum	115	





Combined Funds

December 31, 2023





Combined Funds Summary

Combined Funds Change in Market Value (\$Millions)

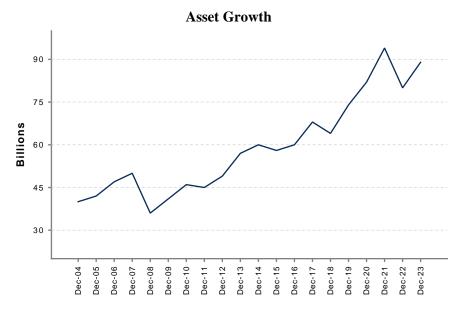
•	One Quarter
Combined Funds	
Beginning Market Value	\$83,036
Net Contributions	46
Investment Return	6,225
Ending Market Value	89,307

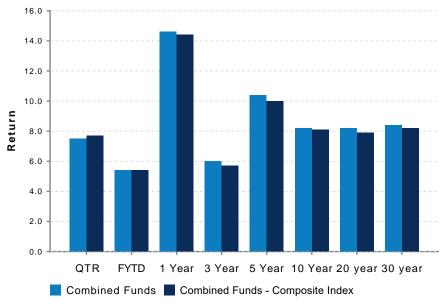
The change in market value of the Combined Funds since the end of last quarter is due to net contributions and investment returns.

Performance (Net of Fees)

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

	<u>Qtr</u>	FYTD	<u>1 Yr</u>	<u>3 Yr</u>	<u>5 Yr</u>	<u>10 Yr</u>	<u>20 Yr</u>	<u>30 Yr</u>
Combined Funds	7.5%	5.4%	14.6%	6.0%	10.4%	8.2%	8.2%	8.4%
Combined Funds - Composite Index	7.7%	5.4%	14.4%	5.7%	10.0%	8.1%	7.9%	8.2%
Excess	-0.2%	0.0%	0.2%	0.3%	0.4%	0.2%	0.2%	0.2%









Combined Funds Summary

Asset Mix

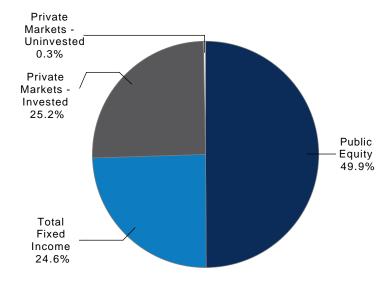
The Combined Funds actual asset mix relative to the Strategic Asset Allocation Policy Target is shown below. Any uninvested portion of the Private Markets allocation is held in Public Equity.

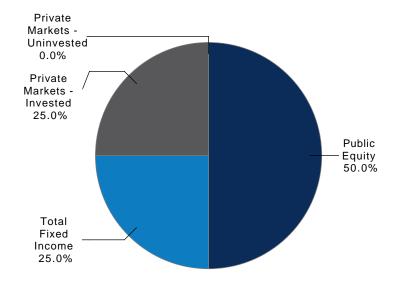
	(Millions)	Actual Mix	Policy Target
Public Equity	\$44,605	49.9%	50.0%
Total Fixed Income	21,933	24.6	25.0
Private Markets - Total	22,768	25.5	25.0
Private Markets - Invested	22,544	25.2	
Private Markets - Uninvested	224	0.3	
TOTAL	89,307	100.0	

Composite Index Comparison

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

	Policy Weight	Market Index
Public Equity	50.0%	Public Equity Benchmark
Total Fixed Income	25.0	Total Fixed Income Benchmark
Private Markets - Invested	25.0	Private Markets
Private Markets - Uninvested	0.0	









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).

	Market Value	Actual Weight	Policy Weight	Last Qtr	FYTD	1 Year	3 Year	5 Year	10 Year	20 Year	30 Year
Public Equity	\$44.6	49.9%	50.0%	11.0%	7.4%	22.5%	6.5%	12.8%	9.3%	8.6%	8.9%
Public Equity Benchmark				11.3	7.5	22.5	6.3	12.5			
Excess				-0.3	-0.1	-0.0	0.2	0.4			
Domestic Equity	29.5	33.1	33.5	12.2	8.6	26.0	8.5	15.3	11.4	9.6	9.7
Domestic Equity Benchmark				12.1	8.4	26.0	8.5	15.1	11.5	9.7	9.9
Excess				0.1	0.1	0.1	-0.0	0.1	-0.1	-0.1	-0.1
International Equity	14.1	15.7	16.5	8.6	5.3	15.6	2.8	8.2	4.5	6.2	5.9
International Equity Benchmark				9.8	5.6	15.6	1.5	7.1	3.8	5.7	5.2
Excess				-1.1	-0.3	-0.1	1.3	1.1	0.6	0.5	0.7
Global Equity	1.0	1.1	0.0	12.0	3.5	22.6	-1.0				
MSCI AC World Index (net)				11.0	7.3	22.2	5.7				
Excess				1.0	-3.8	0.4	-6.7				

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.

	Market Value	Actual Weight	Policy Weight	Last Qtr	FYTD	1 Year	3 Year	5 Year	10 Year	20 Year	30 Year
Total Fixed Income	\$21.9	24.6%	25.0%	6.9%	3.1%	6.3%	-3.3%	2.0%	2.5%	3.7%	4.9%
Total Fixed Income Benchmark				6.6%	2.4%	4.8%	-3.8%	1.5%	2.0%	3.3%	4.5%
Excess				0.3%	0.7%	1.5%	0.5%	0.6%	0.5%	0.4%	0.4%
Core/Core Plus	\$4.6	5.1%	5.0	7.4%	3.9%	7.0%	-3.1%	1.8%	2.4%	3.6%	4.8%
Core Bonds Benchmark				6.8%	3.4%	5.5%	-3.3%	1.1%	1.8%	3.2%	4.4%
Excess				0.6%	0.5%	1.5%	0.2%	0.7%	0.5%	0.5%	0.4%
Return Seeking Fixed Income	\$4.3	4.8%	5.0	7.0%	5.6%	9.8%	-0.7%				
Bloomberg U.S. Aggregate				6.8%	3.4%	5.5%	-3.3%				
Excess				0.1%	2.2%	4.2%	2.7%				
Treasury Protection	\$8.8	9.8%	10.0	9.1%	1.3%	4.2%	-7.3%	-0.2%			
Bloomberg Treasury 5+ Year				9.0%	1.2%	3.7%	-7.4%	-0.2%			
Excess				0.1%	0.1%	0.5%	0.1%	0.0%			
Laddered Bond + Cash	\$4.3	4.8%	5.0	1.4%	2.8%	5.2%	2.1%	1.8%	1.3%	1.7%	3.1%
ICE BofA US 3-Month Treasury E	Bill			1.4%	2.7%	5.0%	2.2%	1.9%	1.3%	1.5%	2.5%
Excess				0.0%	0.1%	0.2%	-0.1%	-0.0%	0.1%	0.2%	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									
	Last Qtr	FYTD	1 Year	3 Year	5 Year	10 Year	20 Year	25 Year	30 Year
Private Markets - Invested	1.6%	3.8%	8.0%	16.4%	12.6%	12.3%	14.0%	13.0%	13.4%
Private Markets -Uninvested(1)	1.3%	2.9%	5.9%	3.9%					
Private Equity	1.7%	4.8%	10.8%	17.1%	16.1%	15.9%	16.2%	14.6%	15.5%
Private Credit	2.1%	4.9%	8.5%	15.8%	11.3%	12.8%	12.9%	12.5%	
Resources	4.6%	3.1%	2.4%	16.8%	3.0%	2.0%	13.0%	12.7%	12.9%
Real Estate	-2.2%	-3.5%	-7.2%	12.9%	10.5%	11.3%	9.3%	9.3%	9.5%

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 Private Markets is currently cash. Prior to 11/02/2022. The Uninvested portion of the Private Markets allocation was invested in a combination of a passively managed S&P 500 Index strategy and a cash overlay strategy invested in equity derivatives and cash. Source: State Street Bank



Quarterly Report



Asset Class & Manager Performance December 31, 2023

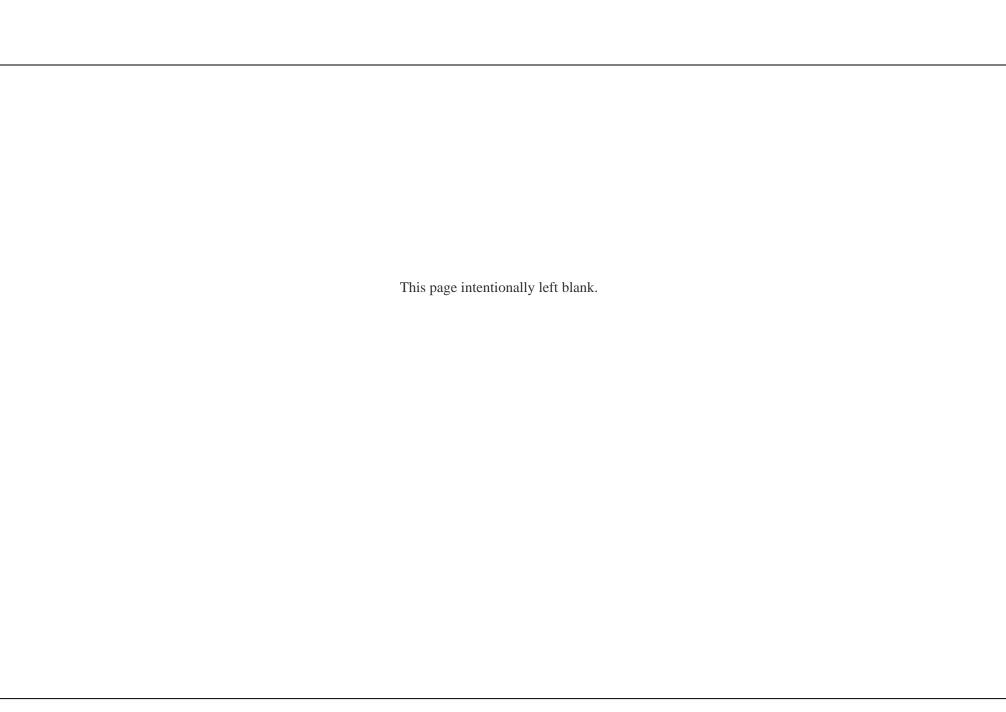
The assets of the Combined Funds are allocated to public equity, fixed income, private markets, and cash. Each asset class may be further differentiated by geography, management style, and/or strategy. Managers are hired to manage the assets accordingly. This diversification is intended to reduce wide 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.







Domestic Equity December 31, 2023





	Ending Market Value	Portfolio Weight	Last Qtr	Fiscal YTD	1 Year	3 Year	5 Year	10 Year	Since Inception	Inception Date
Total Domestic Equity										
ACTIVE DOMESTIC EQUITY AGGREGATE (1)	\$2,919,480,806	9.7%	13.4%	8.6%	20.9%	4.1%	12.9%	9.6%	8.3%	06/1996
Active Domestic Equity Benchmark			12.9	8.2	19.4	5.0	12.2	9.5	8.8	06/1996
Excess			0.5	0.4	1.5	-0.9	0.7	0.1	-0.5	
SEMI PASSIVE DOMESTIC EQUITY AGGREGATE (2)	3,499,808,751	11.6	12.3	9.2	27.5	10.1	16.1	12.1	9.2	06/1996
Semi Passive Domestic Equity Benchmark			12.0	8.4	26.5	9.0	15.5	11.8	9.1	06/1996
Excess			0.3	0.7	1.0	1.1	0.6	0.3	0.1	
PASSIVE DOMESTIC EQUITY AGGREGATE (3)	23,772,051,104	78.7	12.0	8.5	26.5	9.0	15.5	11.7	9.3	06/1996
Passive Domestic Equity Benchmark			12.0	8.4	26.5	8.9	15.4	11.7	9.4	06/1996
Excess			0.0	0.0	0.0	0.0	0.0	0.0	-0.1	
TRANSITION ASSESSMENT	70									
TRANSITION AGGREGATE DOMESTIC EQUITY (4)	70									
TOTAL DOMESTIC EQUITY (5)	30,191,340,731	100.0	12.2	8.6	26.0	8.5	15.3	11.4	10.7	01/1984
Domestic Equity Benchmark			12.1	8.4	26.0	8.5	15.1	11.5	10.8	01/1984
Excess			0.1	0.1	0.1	-0.0	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.



	2023 Calendar Return	2022 Calendar Return	2021 Calendar Return	2020 Calendar Return	2019 Calendar Return
Total Domestic Equity					
ACTIVE DOMESTIC EQUITY AGGREGATE (1)	20.9%	-21.3%	18.5%	27.3%	27.6%
Active Domestic Equity Benchmark	19.4	-19.4	20.3	19.8	28.2
Excess	1.5	-1.9	-1.7	7.5	-0.6
SEMI PASSIVE DOMESTIC EQUITY AGGREGATE (2)	27.5	-18.7	28.8	21.0	30.9
Semi Passive Domestic Equity Benchmark	26.5	-19.1	26.5	21.0	31.4
Excess	1.0	0.4	2.3	0.0	-0.5
PASSIVE DOMESTIC EQUITY AGGREGATE (3)	26.5	-19.2	26.5	20.8	31.3
Passive Domestic Equity Benchmark	26.5	-19.1	26.4	20.8	31.3
Excess	0.0	-0.0	0.1	0.0	0.0

TRANSITION AGGREGATE DOMESTIC EQUITY (4)

TOTAL DOMESTIC EQUITY (5)	26.0	-19.4	25.8	21.7	30.7
Domestic Equity Benchmark	26.0	-19.2	25.7	20.8	30.8
Excess	0.1	-0.2	0.1	0.9	-0.1



⁽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.



	Ending Market Value	Portfolio Weight	Last Qtr	Fiscal YTD	1 Year	3 Year	5 Year	10 Year	Since Inception	Inception Date
Active Large Cap Growth										
SANDS	\$212,437,294	0.7%	22.9%	13.2%	52.0%	-6.8%	13.1%	10.9%	10.9%	01/2005
Russell 1000 Growth			14.2	10.6	42.7	8.9	19.5	14.9	11.6	01/2005
Excess			8.7	2.6	9.3	-15.6	-6.4	-4.0	-0.7	
WINSLOW	213,433,529	0.7	17.9	14.1	43.7	7.4	18.0	13.9	11.8	01/2005
Russell 1000 Growth			14.2	10.6	42.7	8.9	19.5	14.9	11.6	01/2005
Excess			3.7	3.5	1.0	-1.5	-1.5	-0.9	0.3	
RUSSELL 1000 GROWTH AGGREGATE (1)	425,870,823	1.4	20.3	13.7	47.7	-0.7	19.5	14.7	11.4	11/2003
Russell 1000 Growth			14.2	10.6	42.7	8.9	19.5	14.9	11.4	11/2003
Excess			6.2	3.1	5.1	-9.6	-0.0	-0.2	-0.1	



⁽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.



	2023 Calendar Return	2022 Calendar Return	2021 Calendar Return	2020 Calendar Return	2019 Calendar Return
Active Large Cap Growth					
SANDS	52.0%	-49.3%	5.2%	71.0%	33.5%
Russell 1000 Growth	42.7	-29.1	27.6	38.5	36.4
Excess	9.3	-20.2	-22.4	32.5	-2.8
WINSLOW	43.7	-31.0	24.8	37.6	34.2
Russell 1000 Growth	42.7	-29.1	27.6	38.5	36.4
Excess	1.0	-1.8	-2.8	-0.9	-2.2
RUSSELL 1000 GROWTH AGGREGATE (1)	47.7	-41.3	12.8	81.3	37.3
Russell 1000 Growth	42.7	-29.1	27.6	38.5	36.4
Excess	5.1	-12.1	-14.8	42.8	0.9



⁽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.



	Ending Market Value	Portfolio Weight	Last Qtr	Fiscal YTD	1 Year	3 Year	5 Year	10 Year	Since Inception	Inception Date
Semi-Passive Large Cap										
BLACKROCK	\$1,739,898,232	5.8%	12.4%	9.1%	26.9%	9.5%	15.7%	12.3%	10.5%	01/1995
Semi Passive Domestic Equity Benchmark			12.0	8.4	26.5	9.0	15.5	11.8	10.1	01/1995
Excess			0.5	0.6	0.4	0.6	0.1	0.5	0.4	
J.P. MORGAN	1,759,910,519	5.8	12.2	9.2	28.1	10.7	16.6	12.5	10.5	01/1995
Semi Passive Domestic Equity Benchmark			12.0	8.4	26.5	9.0	15.5	11.8	10.1	01/1995
Excess			0.2	0.8	1.6	1.7	1.1	0.7	0.4	
SEMI-PASSIVE DOMESTIC EQUITY AGGREGATE	3,499,808,751	11.6	12.3	9.2	27.5	10.1	16.1	12.1	9.2	06/1996
Semi Passive Domestic Equity Benchmark			12.0	8.4	26.5	9.0	15.5	11.8	9.1	06/1996
Excess			0.3	0.7	1.0	1.1	0.6	0.3	0.1	





	2023 Calendar Return	2022 Calendar Return	2021 Calendar Return	2020 Calendar Return	2019 Calendar Return
Semi-Passive Large Cap					
BLACKROCK	26.9%	-19.2%	28.3%	20.7%	30.4%
Semi Passive Domestic Equity Benchmark	26.5	-19.1	26.5	21.0	31.4
Excess	0.4	-0.1	1.8	-0.3	-1.0
J.P. MORGAN	28.1	-18.1	29.3	21.2	31.3
Semi Passive Domestic Equity Benchmark	26.5	-19.1	26.5	21.0	31.4
Excess	1.6	1.0	2.8	0.3	-0.1
SEMI-PASSIVE DOMESTIC EQUITY AGGREGATE	27.5	-18.7	28.8	21.0	30.9
Semi Passive Domestic Equity Benchmark	26.5	-19.1	26.5	21.0	31.4
Excess	1.0	0.4	2.3	0.0	-0.5





	Ending Market Value	Portfolio Weight	Last Qtr	Fiscal YTD	1 Year	3 Year	5 Year	10 Year	Since Inception	Inception Date
Active Large Cap Value										
BARROW HANLEY	\$374,482,057	1.2%	9.3%	8.4%	12.0%	13.1%	13.4%	9.7%	8.8%	04/2004
Russell 1000 Value			9.5	6.0	11.5	8.9	10.9	8.4	7.9	04/2004
Excess			-0.2	2.4	0.5	4.2	2.5	1.3	0.9	
LSV	328,843,058	1.1	8.8	6.7	10.5	10.3	11.0	8.7	8.8	04/2004
Russell 1000 Value			9.5	6.0	11.5	8.9	10.9	8.4	7.9	04/2004
Excess			-0.7	0.6	-0.9	1.5	0.1	0.3	0.8	
RUSSELL 1000 VALUE AGGREGATE	703,325,114	2.3	9.1	7.6	11.3	11.8	12.6	9.3	8.9	10/2003
Russell 1000 Value			9.5	6.0	11.5	8.9	10.9	8.4	8.6	10/2003
Excess			-0.4	1.5	-0.2	2.9	1.7	0.9	0.3	





	2023 Calendar Return	2022 Calendar Return	2021 Calendar Return	2020 Calendar Return	2019 Calendar Return
Active Large Cap Value					
BARROW HANLEY	12.0%	1.1%	27.7%	2.4%	26.9%
Russell 1000 Value	11.5	-7.5	25.2	2.8	26.5
Excess	0.5	8.6	2.5	-0.4	0.4
LSV	10.5	-6.3	29.7	-1.3	26.9
Russell 1000 Value	11.5	-7.5	25.2	2.8	26.5
Excess	-0.9	1.3	4.5	-4.1	0.4
RUSSELL 1000 VALUE AGGREGATE	11.3	-2.6	28.8	1.6	27.4
Russell 1000 Value	11.5	-7.5	25.2	2.8	26.5
Excess	-0.2	4.9	3.7	-1.2	0.9





	Ending Market Value	Portfolio Weight	Last Qtr	Fiscal YTD	1 Year	3 Year	5 Year	10 Year	Since Inception	Inception Date
Active Small Cap Growth										
ARROWMARK	\$192,262,598	0.6%	15.7%	4.7%	19.9%	-0.8%	7.4%		10.0%	11/2016
Russell 2000 Growth			12.7	4.5	18.7	-3.5	9.2		9.4	11/2016
Excess			3.0	0.2	1.3	2.7	-1.8		0.6	
HOOD RIVER	199,425,859	0.7	15.9	5.9	21.9	3.1	17.1		14.8	11/2016
Russell 2000 Growth			12.7	4.5	18.7	-3.5	9.2		9.4	11/2016
Excess			3.2	1.4	3.3	6.6	7.8		5.4	
RICE HALL JAMES	179,144,462	0.6	13.5	4.0	14.3	-0.0	7.9		9.8	11/2016
Russell 2000 Growth			12.7	4.5	18.7	-3.5	9.2		9.4	11/2016
Excess			0.7	-0.4	-4.3	3.5	-1.3		0.4	
WELLINGTON	224,701,635	0.7	11.7	4.8	18.5	-4.0	9.8		9.5	11/2016
Russell 2000 Growth			12.7	4.5	18.7	-3.5	9.2		9.4	11/2016
Excess			-1.0	0.3	-0.1	-0.5	0.6		0.1	
RUSSELL 2000 GROWTH AGGREGATE	795,534,555	2.6	14.1	4.8	18.7	-0.6	10.6	6.9%	7.6	11/2003
Russell 2000 Growth			12.7	4.5	18.7	-3.5	9.2	7.2	8.4	11/2003
Excess			1.4	0.3	0.1	2.9	1.4	-0.3	-0.8	





	2023 Calendar Return	2022 Calendar Return	2021 Calendar Return	2020 Calendar Return	2019 Calendar Return
Active Small Cap Growth					
ARROWMARK	19.9%	-23.3%	6.1%	21.9%	20.1%
Russell 2000 Growth	18.7	-26.4	2.8	34.6	28.5
Excess	1.3	3.1	3.2	-12.8	-8.4
HOOD RIVER	21.9	-27.7	24.2	61.7	24.3
Russell 2000 Growth	18.7	-26.4	2.8	34.6	28.5
Excess	3.3	-1.4	21.4	27.0	-4.2
RICE HALL JAMES	14.3	-24.4	15.6	23.8	18.0
Russell 2000 Growth	18.7	-26.4	2.8	34.6	28.5
Excess	-4.3	2.0	12.8	-10.8	-10.5
WELLINGTON	18.5	-28.5	4.3	33.1	35.6
Russell 2000 Growth	18.7	-26.4	2.8	34.6	28.5
Excess	-0.1	-2.1	1.4	-1.5	7.1
RUSSELL 2000 GROWTH AGGREGATE	18.7	-26.3	12.4	35.4	24.6
Russell 2000 Growth	18.7	-26.4	2.8	34.6	28.5
Excess	0.1	0.0	9.5	0.8	-3.9





	Ending Market Value	Portfolio Weight	Last Qtr	Fiscal YTD	1 Year	3 Year	5 Year	10 Year	Since Inception	Inception Date
Active Small Cap Value										
GOLDMAN SACHS	\$204,847,210	0.7%	13.6%	10.1%	11.9%	6.7%	8.9%	6.6%	8.6%	01/2004
Russell 2000 Value			15.3	11.8	14.6	7.9	10.0	6.8	7.7	01/2004
Excess			-1.7	-1.7	-2.8	-1.2	-1.1	-0.1	0.9	
HOTCHKIS AND WILEY	204,514,884	0.7	11.0	11.4	18.8	18.7	14.8	8.6	9.0	01/2004
Russell 2000 Value			15.3	11.8	14.6	7.9	10.0	6.8	7.7	01/2004
Excess			-4.3	-0.5	4.2	10.7	4.8	1.9	1.4	
MARTINGALE	173,784,044	0.6	14.5	13.7	20.7	16.2	12.6	8.4	8.3	01/2004
Russell 2000 Value			15.3	11.8	14.6	7.9	10.0	6.8	7.7	01/2004
Excess			-0.7	1.9	6.1	8.2	2.6	1.7	0.6	
PEREGRINE	206,731,316	0.7	12.1	7.9	9.2	7.1	9.8	6.5	9.3	07/2000
Russell 2000 Value			15.3	11.8	14.6	7.9	10.0	6.8	9.0	07/2000
Excess			-3.1	-3.9	-5.4	-0.8	-0.2	-0.3	0.4	
RUSSELL 2000 VALUE AGGREGATE	789,877,454	2.6	12.7	10.5	14.2	10.9	10.9	7.2	8.9	10/2003
Russell 2000 Value			15.3	11.8	14.6	7.9	10.0	6.8	8.4	10/2003
Excess			-2.6	-1.4	-0.5	3.0	0.9	0.5	0.5	





	2023 Calendar Return	2022 Calendar Return	2021 Calendar Return	2020 Calendar Return	2019 Calendar Return
Active Small Cap Value					
GOLDMAN SACHS	11.9%	-14.4%	27.0%	2.4%	23.2%
Russell 2000 Value	14.6	-14.5	28.3	4.6	22.4
Excess	-2.8	0.1	-1.3	-2.3	0.8
HOTCHKIS AND WILEY	18.8	3.1	36.5	-0.2	19.7
Russell 2000 Value	14.6	-14.5	28.3	4.6	22.4
Excess	4.2	17.6	8.2	-4.8	-2.7
MARTINGALE	20.7	-8.0	41.3	-4.6	21.1
Russell 2000 Value	14.6	-14.5	28.3	4.6	22.4
Excess	6.1	6.4	13.0	-9.2	-1.3
PEREGRINE	9.2	-12.5	28.6	7.3	21.1
Russell 2000 Value	14.6	-14.5	28.3	4.6	22.4
Excess	-5.4	2.0	0.3	2.7	-1.3
RUSSELL 2000 VALUE AGGREGATE	14.2	-9.4	31.8	1.5	21.3
Russell 2000 Value	14.6	-14.5	28.3	4.6	22.4
Excess	-0.5	5.1	3.5	-3.1	-1.1





	Ending Market Value	Portfolio Weight	Last Qtr	Fiscal YTD	1 Year	3 Year	5 Year	10 Year	Since Inception	Inception Date
Active All Cap										
ZEVENBERGEN (1)	\$204,872,859	0.7%	15.6%	9.2%	66.6%	-12.7%	16.6%	12.3%	11.2%	04/1994
Zevenbergen Custom Benchmark			14.1	10.3	41.2	9.9	20.2	15.2		04/1994
Excess			1.5	-1.1	25.4	-22.6	-3.6	-2.9		
ACTIVE RUSSELL 3000 GROWTH (2)	204,872,859	0.7	15.6	9.2	66.6	-12.7			-12.7	01/2021
Russell 3000 Growth TR			14.1	10.3	41.2	8.1			8.1	01/2021
Excess			1.5	-1.1	25.4	-20.8			-20.8	



 $^{(1)\} Effective\ 1/1/2021, the\ SBI\ changed\ the\ Zevenbergen\ Benchmark\ to\ the\ Russell\ 3000\ Growth.\ Prior\ to\ this\ date\ it\ was\ the\ Russell\ 1000\ Growth.$

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



	2023 Calendar Return	2022 Calendar Return	2021 Calendar Return	2020 Calendar Return	2019 Calendar Return
Active All Cap					
ZEVENBERGEN (1)	66.6%	-55.7%	-9.7%	126.2%	43.0%
Zevenbergen Custom Benchmark	41.2	-29.0	32.3	38.5	36.4
Excess	25.4	-26.8	-42.0	87.7	6.7
ACTIVE RUSSELL 3000 GROWTH (2)	66.6	-55.7	-9.7		
Russell 3000 Growth TR	41.2	-29.0	25.8		
Excess	25.4	-26.8	-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.



	Ending Market Value	Portfolio Weight	Last Qtr	Fiscal YTD	1 Year	3 Year	5 Year	10 Year	Since Inception	Inception Date
Total Passive Domestic Equity										
BLACKROCK RUSSELL 1000	\$22,868,764,961	75.7%	12.0%	8.5%	26.6%	9.0%	15.5%		13.8%	11/2016
RUSSELL 1000 (DAILY)			12.0	8.4	26.5	9.0	15.5		13.8	11/2016
Excess			0.0	0.0	0.0	0.0	-0.0		-0.0	
BLACKROCK RUSSELL 2000	76,791,749	0.3	14.0	8.0	16.7	2.7	10.4		7.8	11/2018
RUSSELL 2000 (DAILY)			14.0	8.2	16.9	2.2	10.0		7.3	11/2018
Excess			0.0	-0.2	-0.3	0.5	0.4		0.5	
BLACKROCK RUSSELL 3000 (1)	826,494,395	2.7	12.1	8.5	26.0	8.7	15.4	11.6%	9.9	07/1995
Passive Manager Benchmark			12.1	8.4	26.0	8.5	15.2	11.5	9.8	07/1995
Excess			0.1	0.1	0.1	0.2	0.2	0.1	0.1	
PASSIVE DOMESTIC EQUITY AGGREGATE (2)	23,772,051,104	78.7	12.0	8.5	26.5	9.0	15.5	11.7	9.3	06/1996
Passive Domestic Equity Benchmark			12.0	8.4	26.5	8.9	15.4	11.7	9.4	06/1996
Excess			0.0	0.0	0.0	0.0	0.0	0.0	-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.

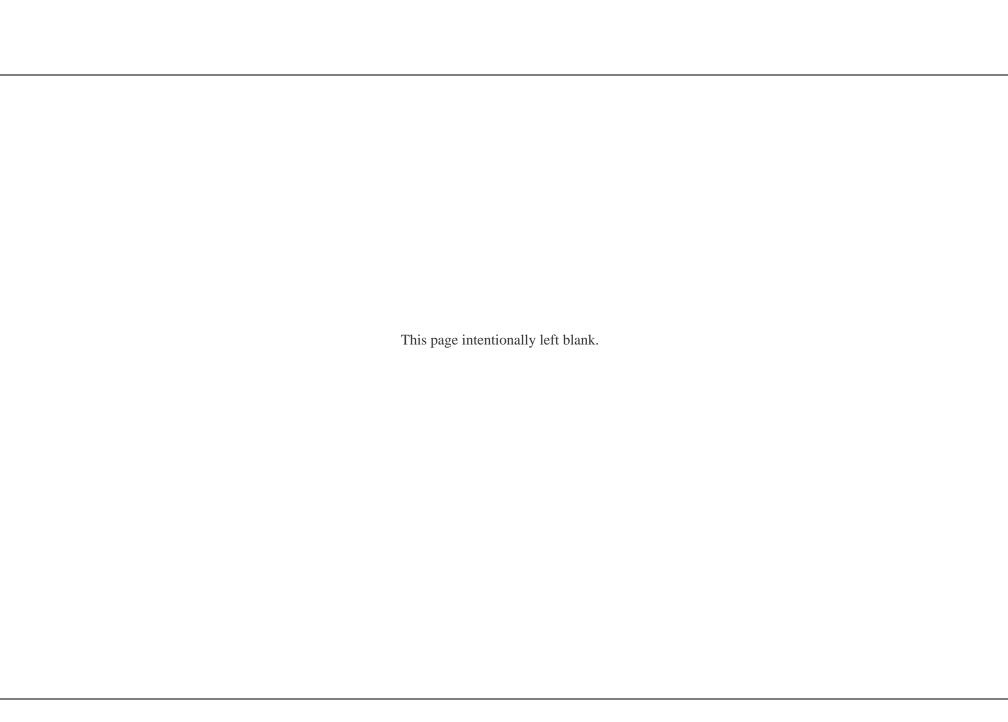


	2023 Calendar Return	2022 Calendar Return	2021 Calendar Return	2020 Calendar Return	2019 Calendar Return
Total Passive Domestic Equity					
BLACKROCK RUSSELL 1000	26.6%	-19.2%	26.5%	20.9%	31.4%
RUSSELL 1000 (DAILY)	26.5	-19.1	26.5	21.0	31.4
Excess	0.0	-0.0	0.1	-0.0	0.0
BLACKROCK RUSSELL 2000	16.7	-19.9	16.0	20.8	25.2
RUSSELL 2000 (DAILY)	16.9	-20.4	14.8	20.0	25.5
Excess	-0.3	0.6	1.2	0.8	-0.3
BLACKROCK RUSSELL 3000 (1)	26.0	-19.2	26.2	21.2	31.1
Passive Manager Benchmark	26.0	-19.2	25.7	20.9	31.0
Excess	0.1	0.0	0.5	0.3	0.0
PASSIVE DOMESTIC EQUITY AGGREGATE (2)	26.5	-19.2	26.5	20.8	31.3
Passive Domestic Equity Benchmark	26.5	-19.1	26.4	20.8	31.3
Excess	0.0	-0.0	0.1	0.0	0.0



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

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





International Equity December 31, 2023





	Ending Market Value	Portfolio Weight	Last Qtr	Fiscal YTD	1 Year	3 Year	5 Year	10 Year	Since Inception	Inception Date
Total International Equity										
DEVELOPED MARKETS (1)	\$10,174,601,074		9.0%	5.9%	17.8%	6.1%	9.9	5.2	5.2	01/1997
BENCHMARK DM			10.5	6.0	17.9	4.4	8.5	4.3	4.3	01/1997
Excess			-1.5	-0.0	-0.1	1.7	1.4	0.9	0.9	
EMERGING MARKETS (2)	3,499,725,746	24.6%	7.8	4.1	10.2	-5.0	4.0%	2.5%	5.2	11/1996
BENCHMARK EM			7.9	4.7	9.8	-5.1	3.7	2.7	5.4	11/1996
Excess			-0.1	-0.6	0.4	0.1	0.3	-0.2	-0.2	
ACWI EX-US AGGREGATE	414,108,580	2.9	9.5	5.5	17.9	5.1			5.1	01/2021
MSCI AC WORLD ex US (NET) - DAILY			9.8	5.6	15.6	1.5			1.5	01/2021
Excess			-0.3	-0.1	2.3	3.6			3.6	
CHINA ONLY AGGREGATE	138,720,682	1.0	-2.4	-3.2	-10.0	-12.9			-12.9	01/2021
MSCI China A			-4.1	-7.5	-13.5	-12.9			-12.9	01/2021
Excess			1.7	4.3	3.5	-0.0			-0.0	
TRANSITION AGGREGATE INTERNATIONAL EQUITY (3)	1,813,312	0.0								
TOTAL INTERNATIONAL EQUITY (4)	14,228,969,394	100.0	8.6	5.3	15.6	2.8	8.2	4.4	6.4	10/1992
International Equity Benchmark			9.8	5.6	15.6	1.5	7.1	3.8	5.8	10/1992
Excess			-1.1	-0.3	-0.1	1.3	1.1	0.6	0.6	

⁽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.



	2023 Calendar Return	2022 Calendar Return	2021 Calendar Return	2020 Calendar Return	2019 Calendar Return
Total International Equity					
DEVELOPED MARKETS (1)	17.8%	-10.7%	13.5%	8.9	23.3
BENCHMARK DM	17.9	-14.3	12.6	7.6	22.5
Excess	-0.1	3.6	0.9	1.3	0.8
EMERGING MARKETS (2)	10.2	-21.1	-1.5	17.9%	20.3%
BENCHMARK EM	9.8	-20.1	-2.5	18.3	18.4
Excess	0.4	-1.0	1.1	-0.4	1.9
ACWI EX-US AGGREGATE	17.9	-12.6	12.8		
MSCI AC WORLD ex US (NET) - DAILY	15.6	-16.0	7.8		
Excess	2.3	3.4	4.9		
CHINA ONLY AGGREGATE	-10.0	-24.5	-2.9		
MSCI China A	-13.5	-25.9	3.2		
Excess	3.5	1.4	-6.1		

TRANSITION AGGREGATE INTERNATIONAL EQUITY (3)

TOTAL INTERNATIONAL EQUITY (4)	15.6	-13.7	8.9	11.4	22.4
International Equity Benchmark	15.6	-16.0	7.8	10.5	21.5
Excess	-0.1	2.3	1.1	0.8	0.9

⁽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.



	Ending Market Value	Portfolio Weight	Last Qtr	Fiscal YTD	1 Year	3 Year	5 Year	10 Year	Since Inception	Inception Date
Active Developed Markets										
ACADIAN	\$555,513,346	3.9%	8.7%	6.4%	12.4%	3.7%	8.2%	6.7%	6.4%	07/2005
BENCHMARK DM			10.5	6.0	17.9	4.4	8.5	4.3	5.2	07/2005
Excess			-1.8	0.5	-5.5	-0.7	-0.2	2.4	1.3	
COLUMBIA	487,497,135	3.4	11.3	6.0	21.1	5.6	11.8	6.4	4.1	03/2000
BENCHMARK DM			10.5	6.0	17.9	4.4	8.5	4.3	3.9	03/2000
Excess			0.8	0.0	3.2	1.1	3.3	2.1	0.2	
FIDELITY	478,960,182	3.4	10.0	5.1	18.0	3.3	10.1	5.2	6.6	07/2005
BENCHMARK DM			10.5	6.0	17.9	4.4	8.5	4.3	5.2	07/2005
Excess			-0.5	-0.8	0.1	-1.2	1.6	0.9	1.4	
JP MORGAN	358,561,738	2.5	11.6	4.8	17.1	2.4	9.5	4.6	5.4	07/2005
BENCHMARK DM			10.5	6.0	17.9	4.4	8.5	4.3	5.2	07/2005
Excess			1.1	-1.2	-0.9	-2.0	1.1	0.3	0.2	
MARATHON	408,562,394	2.9	9.3	6.2	18.2	5.4	9.3	5.3	7.8	11/1993
BENCHMARK DM			10.5	6.0	17.9	4.4	8.5	4.3	5.2	11/1993
Excess			-1.2	0.3	0.3	1.0	0.8	1.0	2.6	





	2023 Calendar Return	2022 Calendar Return	2021 Calendar Return	2020 Calendar Return	2019 Calendar Return
And a Brook at 186 Lar		2022 Calendar Return	2021 Calendar Return	2020 Calendar Return	2019 Calendar Return
Active Developed Markets	S				
ACADIAN	12.4%	-12.5%	13.6%	11.7%	19.1%
BENCHMARK DM	17.9	-14.3	12.6	7.6	22.5
Excess	-5.5	1.8	0.9	4.2	-3.4
COLUMBIA	21.1	-15.0	14.2	15.0	28.9
BENCHMARK DM	17.9	-14.3	12.6	7.6	22.5
Excess	3.2	-0.7	1.6	7.4	6.4
FIDELITY	18.0	-17.4	13.0	15.4	27.1
BENCHMARK DM	17.9	-14.3	12.6	7.6	22.5
Excess	0.1	-3.2	0.4	7.8	4.6
JP MORGAN	17.1	-19.0	13.3	14.2	28.5
BENCHMARK DM	17.9	-14.3	12.6	7.6	22.5
Excess	-0.9	-4.7	0.7	6.6	6.0
MARATHON	18.2	-12.1	12.8	7.6	23.5
BENCHMARK DM	17.9	-14.3	12.6	7.6	22.5
Excess	0.3	2.2	0.2	0.1	1.0





	Ending Market Value	Portfolio Weight	1 Qtr	Fiscal YTD	1 Year	3 Year	5 Year	10 Year	Since Inception	Inception Date
Total Developed Markets										
Active Developed Markets Aggregate (1)	\$2,293,019,553	16.1%	10.1%	6.0%	17.6%	3.9%	9.4%	5.1%	5.7%	06/1996
BENCHMARK DM			10.5%	6.0%	17.9%	4.4%	8.5%	4.3%	2.6%	06/1996
Excess			-0.4%	-0.0%	-0.4%	-0.5%	0.9%	0.8%	3.1%	
SSGA DEVELOPED MARKETS PASSIVE	\$7,894,476,655	55.5%	10.6%	6.1%	18.5%	4.9%	9.0%	4.8%		
BENCHMARK DM			10.5%	6.0%	17.9%	4.4%	8.5%	4.3%		
Excess			0.1%	0.1%	0.5%	0.5%	0.5%	0.4%		
RECORD CURRENCY (2)	-\$12,895,135	-0.1%	-1.5%	-0.2%	-0.5%	1.5%				10/2020
DEVELOPED MARKETS TOTAL (3)	\$10,174,601,074		9.0%	5.9%	17.8%	6.1%	9.9	5.2	5.2	01/1997
BENCHMARK DM			10.5%	6.0%	17.9%	4.4%	8.5	4.3	4.3	01/1997
Excess			-1.5%	-0.0%	-0.1%	1.7%	1.4	0.9	0.9	

⁽³⁾ 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.



⁽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 Equity with Currency Management and without.



	2023 Calendar Return	2022 Calendar Return	2021 Calendar Return	2020 Calendar Return	2019 Calendar Return
Total Developed Markets					
Active Developed Markets Aggregate	17.6%	-15.2%	12.5%	12.2%	24.4%
BENCHMARK DM	17.9%	-14.3%	12.6%	7.6%	22.5%
Excess	-0.4%	-0.9%	-0.1%	4.6%	1.9%
SSGA DEVELOPED MARKETS PASSIVE	18.5%	-13.8%	13.0%	8.2%	23.0%
BENCHMARK DM	17.9%	-14.3%	12.6%	7.6%	22.5%
Excess	0.5%	0.5%	0.4%	0.6%	0.5%
DEVELOPED MARKETS TOTAL	17.8%	-10.7%	13.5%	8.9	23.3
BENCHMARK DM	17.9%	-14.3%	12.6%	7.6	22.5
Excess	-0.1%	3.6%	0.9%	1.3	0.8





	Ending Market Value	Portfolio Weight	Last Qtr	Fiscal YTD	1 Year	3 Year	5 Year	10 Year	Since Inception	Inception Dat
Active Emerging Markets										
MARTIN CURRIE	\$376,655,404	2.6%	7.7%	-0.3%	5.8%	-8.8%	4.1%		4.4%	04/2017
BENCHMARK EM			7.9	4.7	9.8	-5.1	3.7		3.5	04/2017
Excess			-0.1	-5.0	-4.1	-3.7	0.4		0.9	
MACQUARIE	379,543,361	2.7	12.2	6.8	16.0	-5.9	5.0		4.7	04/2017
	379,543,301	2.1								
BENCHMARK EM			7.9	4.7	9.8	-5.1	3.7		3.5	04/2017
Excess			4.3	2.1	6.1	-0.8	1.3		1.2	
MORGAN STANLEY	475,929,265	3.3	9.1	4.8	10.8	-4.4	4.0	2.7%	7.8	01/2001
BENCHMARK EM			7.9	4.7	9.8	-5.1	3.7	2.7	7.6	01/2001
Excess			1.2	0.1	1.0	0.7	0.3	0.1	0.2	
NEUBERGER BERMAN	332,604,648	2.3	6.6	2.1	5.9	-8.0	1.3		1.6	04/2017
BENCHMARK EM	332,004,040	2.3	7.9	4.7	9.8	- 5.0 -5.1	3.7		3.5	04/2017
Excess			-1.3	-2.6	-3.9	-2.9	-2.4		-1.9	04/2017
2,0000			1.0	2.0	0.0	2.0	2.7		1.5	
PZENA	565,292,788	4.0	6.2	7.4	19.7	6.6	8.1		6.5	04/2017
BENCHMARK EM			7.9	4.7	9.8	-5.1	3.7		3.5	04/2017
Excess			-1.6	2.7	9.9	11.7	4.4		3.0	
ROCK CREEK	311,939,089	2.2	5.4	2.5	5.0	-7.1	3.6		2.4	04/2017
BENCHMARK EM			7.9	4.7	9.8	-5.1	3.7		3.5	04/2017
Excess			-2.5	-2.2	-4.9	-2.0	-0.0		-1.1	





	2023 Calendar Return	2022 Calendar Return	2021 Calendar Return	2020 Calendar Return	2019 Calendar Return
Active Emerging Markets					
MARTIN CURRIE	5.8%	-25.7%	-3.5%	26.5%	27.3%
BENCHMARK EM	9.8	-20.1	-2.5	18.3	18.4
Excess	-4.1	-5.6	-1.0	8.2	8.8
MACQUARIE	16.0	-26.5	-2.2	24.2	23.2
BENCHMARK EM	9.8	-20.1	-2.5	18.3	18.4
Excess	6.1	-6.4	0.3	5.9	4.7
MORGAN STANLEY	10.8	-23.8	3.5	15.7	20.4
BENCHMARK EM	9.8	-20.1	-2.5	18.3	18.4
Excess	1.0	-3.7	6.0	-2.6	1.9
NEUBERGER BERMAN	5.9	-22.1	-5.6	14.2	19.7
BENCHMARK EM	9.8	-20.1	-2.5	18.3	18.4
Excess	-3.9	-2.0	-3.1	-4.1	1.3
PZENA	19.7	-7.4	9.3	7.7	13.4
BENCHMARK EM	9.8	-20.1	-2.5	18.3	18.4
Excess	9.9	12.7	11.8	-10.6	-5.1
ROCK CREEK	5.0	-19.4	-5.2	22.0	22.3
BENCHMARK EM	9.8	-20.1	-2.5	18.3	18.4
Excess	-4.9	0.7	-2.7	3.7	3.9





	Ending Market Value	Portfolio Weight	Last Qtr	Fiscal YTD	1 Year	3 Year	5 Year	10 Year	Since Inception	Inception Date
Total Emerging Markets										
ACTIVE EMERGING MARKETS AGGREGATE	\$2,441,964,554	17.2%	7.8%	4.0%	10.6%	-4.8%	4.2%	2.3%	3.3%	01/2012
BENCHMARK EM			7.9	4.7	9.8	-5.1	3.7	2.7	3.4	01/2012
Excess			-0.0	-0.7	0.8	0.2	0.6	-0.4	-0.1	
SSGA EMERGING MARKETS PASSIVE	1,057,761,192	7.4	7.6	4.3	9.4	-5.4	3.4	2.6	3.4	01/2012
BENCHMARK EM			7.9	4.7	9.8	-5.1	3.7	2.7	3.4	01/2012
Excess			-0.3	-0.4	-0.4	-0.3	-0.3	-0.1	-0.1	
EMERGING MARKETS TOTAL	3,499,725,746	24.6	7.8	4.1	10.2	-5.0	4.0	2.5	5.2	11/1996
BENCHMARK EM			7.9	4.7	9.8	-5.1	3.7	2.7	5.4	11/1996
Excess			-0.1	-0.6	0.4	0.1	0.3	-0.2	-0.2	



	2023 Calendar Return	2022 Calendar Return	2021 Calendar Return	2020 Calendar Return	2019 Calendar Return
Total Emerging Markets					
ACTIVE EMERGING MARKETS AGGREGATE	10.6%	-21.4%	-0.9%	17.6%	21.4%
BENCHMARK EM	9.8	-20.1	-2.5	18.3	18.4
Excess	0.8	-1.3	1.6	-0.7	3.0
SSGA EMERGING MARKETS PASSIVE	9.4	-20.4	-2.9	18.3	18.1
BENCHMARK EM	9.8	-20.1	-2.5	18.3	18.4
Excess	-0.4	-0.3	-0.3	0.0	-0.3
EMERGING MARKETS TOTAL	10.2	-21.1	-1.5	17.9	20.3
BENCHMARK EM	9.8	-20.1	-2.5	18.3	18.4
Excess	0.4	-1.0	1.1	-0.4	1.9



	Ending Market Value	Portfolio Weight	Last Qtr	Fiscal YTD	1 Year	3 Year	5 Year	10 Year	Since Inception	Inception Date
Active ACWI ex-US										
EARNEST PARTNERS ACWI EX US	\$414,108,580	2.9%	9.5%	5.5%	17.9%	5.1%			5.1%	01/2021
MSCI AC WORLD ex US (NET) - DAILY			9.8%	5.6%	15.6%	1.5%			1.5%	01/2021
Excess			-0.3%	-0.1%	2.3%	3.6%			3.6%	
TOTAL ACWI EX-US AGGREGATE	\$414,108,580	2.9%	9.5%	5.5%	17.9%	5.1%			5.1%	01/2021
MSCI AC WORLD ex US (NET) - DAILY			9.8%	5.6%	15.6%	1.5%			1.5%	01/2021
Excess			-0.3%	-0.1%	2.3%	3.6%			3.6%	



	2023 Calendar Return	2022 Calendar Return	2021 Calendar Return	2020 Calendar Return	2019 Calendar Return
Active ACWI ex-US					
EARNEST PARTNERS ACWI EX US	17.9%	-12.6%	12.8%		
MSCI AC WORLD ex US (NET) - DAILY	15.6	-16.0	7.8		
Excess	2.3	3.4	4.9		
TOTAL ACWI EX-US AGGREGATE	17.9	-12.6	12.8		
MSCI AC WORLD ex US (NET) - DAILY	15.6	-16.0	7.8		
Excess	2.3	3.4	4.9		

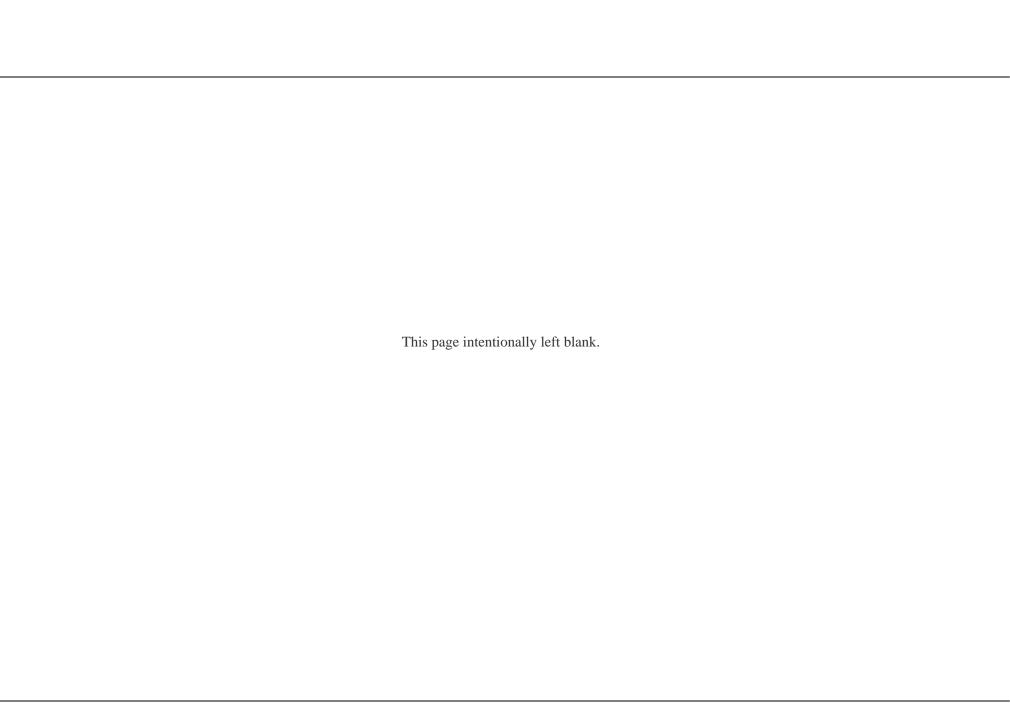


	Ending Market Value	Portfolio Weight	Last Qtr	Fiscal YTD	1 Year	3 Year	5 Year	10 Year	Since Inception	Inception Date
China Only Managers										
EARNEST PARTNERS CHINA	\$138,720,682	1.0%	-2.4%	-3.2%	-10.0%	-12.9%			-12.9%	01/2021
MSCI China A			-4.1	-7.5	-13.5	-12.9			-12.9	01/2021
Excess			1.7	4.3	3.5	-0.0			-0.0	
CHINA ONLY AGGREGATE	138,720,682	1.0	-2.4	-3.2	-10.0	-12.9			-12.9	01/2021
MSCI China A			-4.1	-7.5	-13.5	-12.9			-12.9	01/2021
Excess			1.7	4.3	3.5	-0.0			-0.0	





	2023 Calendar Return	2022 Calendar Return	2021 Calendar Return	2020 Calendar Return	2019 Calendar Return
China Only Managers					
EARNEST PARTNERS CHINA	-10.0%	-24.5%	-2.9%		
MSCI China A	-13.5	-25.9	3.2		
Excess	3.5	1.4	-6.1		
CHINA ONLY AGGREGATE	-10.0	-24.5	-2.9		
MSCI China A	-13.5	-25.9	3.2		
Excess	3.5	1.4	-6.1		





Global Equity December 31, 2023



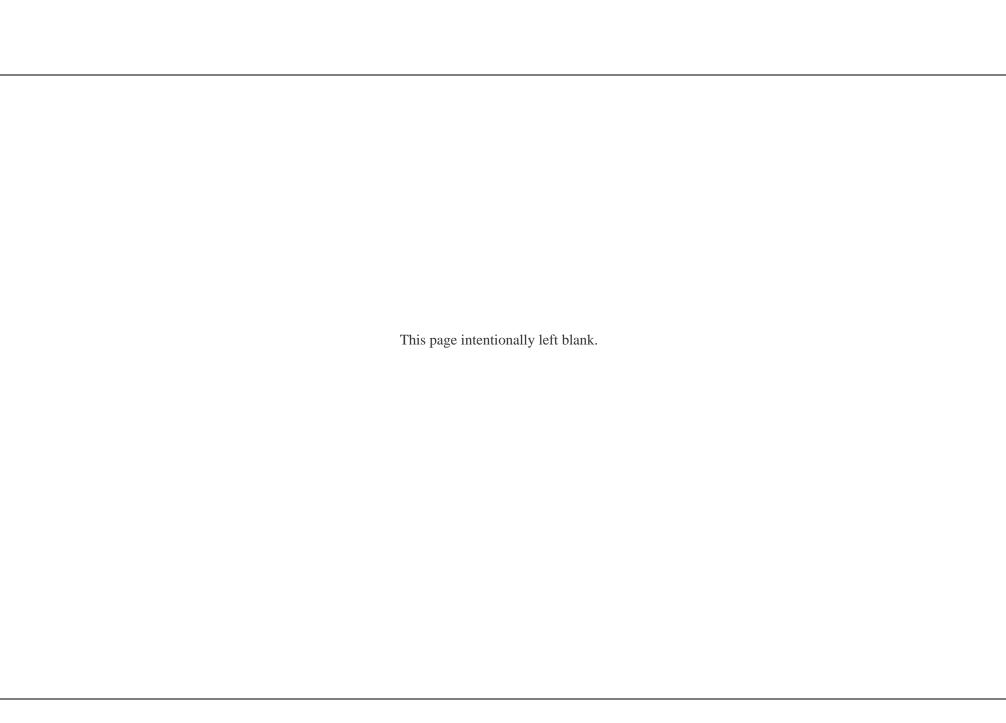


	Ending Market Value	Portfolio Weight	Last Qtr	Fiscal YTD	1 Year	3 Year	5 Year	10 Year	Since Inception	Inception Date
Global Equity Managers										
ARIEL INVESTMENTS	\$389,706,885	39.1%	8.3%	4.3%	14.1%	6.5%			6.5%	01/2021
MSCI AC WORLD NET USD DAILY			11.0	7.3	22.2	5.7			5.7	01/2021
Excess			-2.7	-2.9	-8.1	0.7			0.7	
BAILLIE GIFFORD	238,692,422	23.9	16.4	6.9	38.0	-8.9			-8.9	01/2021
MSCI AC WORLD NET USD DAILY			11.0	7.3	22.2	5.7			5.7	01/2021
Excess			5.4	-0.3	15.8	-14.7			-14.7	
MARTIN CURRIE INVESTMENTS - GLOBAL EQ	368,490,804	37.0	13.6	0.5	23.8	-2.1			-2.1	01/2021
MSCI AC WORLD NET USD DAILY			11.0	7.3	22.2	5.7			5.7	01/2021
Excess			2.6	-6.8	1.6	-7.9			-7.9	
GLOBAL EQUITY	996,890,111	100.0	12.0	3.5	22.6	-1.0			-1.0	01/2021
MSCI AC WORLD NET USD DAILY			11.0	7.3	22.2	5.7			5.7	01/2021
Excess			1.0	-3.8	0.4	-6.7			-6.7	





	2023 Calendar Return	2022 Calendar Return	2021 Calendar Return	2020 Calendar Return	2019 Calendar Return
Global Equity Managers					
ARIEL INVESTMENTS	14.1%	-5.6%	12.1%		
MSCI AC WORLD NET USD DAILY	22.2	-18.4	18.5		
Excess	-8.1	12.8	-6.5		
BAILLIE GIFFORD	38.0	-46.9	3.1		
MSCI AC WORLD NET USD DAILY	22.2	-18.4	18.5		
Excess	15.8	-28.5	-15.5		
MARTIN CURRIE INVESTMENTS - GLOBAL EQ	23.8	-32.9	12.8		
MSCI AC WORLD NET USD DAILY	22.2	-18.4	18.5		
Excess	1.6	-14.5	-5.8		
GLOBAL EQUITY	22.6	-27.7	9.6		
MSCI AC WORLD NET USD DAILY	22.2	-18.4	18.5		
Excess	0.4	-9.4	-8.9		





Core/Core Plus Bonds December 31, 2023





	Ending Market Value	Portfolio Weight	Last Qtr	Fiscal YTD	1 Year	3 Year	5 Year	10 Year	Since Inception	Inception Date
Bonds										
CORE (1)	\$1,961,099,372	41.0%	7.2%	4.1%	7.3%	-2.3%			-1.6%	11/2020
Bloomberg U.S. Aggregate			6.8	3.4	5.5	-3.3			-2.8	11/2020
Excess			0.4	0.8	1.7	1.0			1.2	
CORE PLUS (1)	2,822,495,254	59.0	7.6	3.7	6.8	-3.6			-2.7	11/2020
Bloomberg U.S. Aggregate			6.8	3.4	5.5	-3.3			-2.8	11/2020
Excess			0.8	0.4	1.3	-0.3			0.1	
TRANSITION AGGREGATE CORE BONDS (2)	20,155									
TOTAL CORE/CORE PLUS BONDS (3)	4,783,614,781	100.0	7.4	3.9	7.0	-3.1	1.8%	2.4%	6.7	07/1984
Bloomberg U.S. Aggregate			6.8	3.4	5.5	-3.3	1.1	1.8	6.4	07/1984
Excess			0.6	0.5	1.5	0.2	0.7	0.5	0.4	

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



⁽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.



	2023 Calendar Return	2022 Calendar Return	2021 Calendar Return	2020 Calendar Return	2019 Calendar Return
Bonds					
CORE (1)	7.3%	-12.3%	-1.0%		
Bloomberg U.S. Aggregate	5.5	-13.0	-1.5		
Excess	1.7	0.7	0.5		
CORE PLUS (1)	6.8	-15.2	-1.1		
Bloomberg U.S. Aggregate	5.5	-13.0	-1.5		
Excess	1.3	-2.2	0.4		

TRANSITION AGGREGATE CORE BONDS (2)

TOTAL CORE/CORE PLUS BONDS (3)	7.0	-14.1	-1.1	9.7%	9.7%
Bloomberg U.S. Aggregate	5.5	-13.0	-1.5	7.5	8.7
Excess	1.5	-1.1	0.5	2.2	1.0

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



⁽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.



	Ending Market Value	Portfolio Weight	Last Qtr	Fiscal YTD	1 Year	3 Year	5 Year	10 Year	Since Inception	Inception Date
Active Core										
DODGE & COX	\$1,036,339,307	21.7%	7.3%	4.6%	8.0%	-1.7%	2.7%	2.8%	5.2%	02/2000
Bloomberg U.S. Aggregate			6.8	3.4	5.5	-3.3	1.1	1.8	4.1	02/2000
Excess			0.5	1.2	2.5	1.6	1.5	1.0	1.1	
BLACKROCK	924,760,065	19.3	7.0	3.6	6.4	-3.1	1.5	2.0	4.4	04/1996
Bloomberg U.S. Aggregate			6.8	3.4	5.5	-3.3	1.1	1.8	4.3	04/1996
Excess			0.2	0.2	0.9	0.2	0.4	0.2	0.1	
CORE	1,961,099,372	41.0	7.2	4.1	7.3	-2.3			-1.6	11/2020
Bloomberg U.S. Aggregate			6.8	3.4	5.5	-3.3			-2.8	11/2020
Excess			0.4	0.8	1.7	1.0			1.2	



⁽¹⁾ Prior to 12/1/2020 the Core managers were categorized as Active or Semi-Passive. For information on the historical performance of the previous groupings refer to the 9/30/2020 Comprehensive Performance Report.



	2023 Calendar Return	2022 Calendar Return	2021 Calendar Return	2020 Calendar Return	2019 Calendar Return
Active Core					
DODGE & COX	8.0%	-11.3%	-0.7%	9.4%	9.6%
Bloomberg U.S. Aggregate	5.5	-13.0	-1.5	7.5	8.7
Excess	2.5	1.7	0.8	1.8	0.9
BLACKROCK	6.4	-13.4	-1.3	8.3	9.3
Bloomberg U.S. Aggregate	5.5	-13.0	-1.5	7.5	8.7
Excess	0.9	-0.4	0.2	0.8	0.6
CORE	7.3	-12.3	-1.0		
Bloomberg U.S. Aggregate	5.5	-13.0	-1.5		
Excess	1.7	0.7	0.5		





	Ending Market Value	Portfolio Weight	Last Qtr	Fiscal YTD	1 Year	3 Year	5 Year	10 Year	Since Inception	Inception Date
Core Plus Bonds										
GOLDMAN SACHS	\$926,360,733	19.4%	7.0%	3.4%	6.3%	-3.4%	1.5%	2.1%	4.8%	07/1993
Bloomberg U.S. Aggregate			6.8	3.4	5.5	-3.3	1.1	1.8	4.4	07/1993
Excess			0.2	-0.0	0.8	-0.1	0.4	0.3	0.3	
NEUBERGER	912,010,266	19.1	7.5	4.0	6.7	-2.9	1.8	2.2	5.7	07/1988
Bloomberg U.S. Aggregate			6.8	3.4	5.5	-3.3	1.1	1.8	5.4	07/1988
Excess			0.6	0.6	1.2	0.4	0.7	0.4	0.3	
WESTERN	984,124,254	20.6	8.3	3.9	7.4	-4.4	1.5	2.5	7.4	07/1984
Bloomberg U.S. Aggregate			6.8	3.4	5.5	-3.3	1.1	1.8	6.4	07/1984
Excess			1.4	0.5	1.8	-1.1	0.4	0.7	1.0	
CORE PLUS	2,822,495,254	59.0	7.6	3.7	6.8	-3.6			-2.7	11/2020
Bloomberg U.S. Aggregate			6.8	3.4	5.5	-3.3			-2.8	11/2020
Excess			0.8	0.4	1.3	-0.3			0.1	

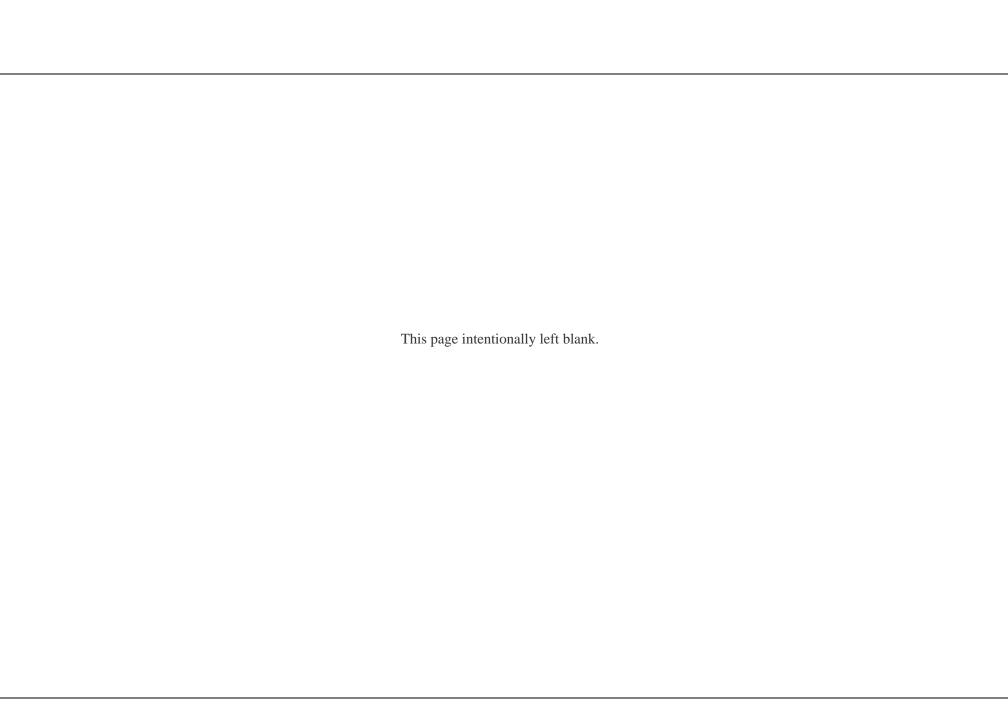


⁽¹⁾ Prior to 12/1/2020 the Core managers were categorized as Active or Semi-Passive. For information on the historical performance of the previous groupings refer to the 9/30/2020 Comprehensive Performance Report.



	2023 Calendar Return	2022 Calendar Return	2021 Calendar Return	2020 Calendar Return	2019 Calendar Return
Core Plus Bonds					
GOLDMAN SACHS	6.3%	-13.9%	-1.5%	9.0%	9.6%
Bloomberg U.S. Aggregate	5.5	-13.0	-1.5	7.5	8.7
Excess	0.8	-0.9	0.0	1.5	0.9
NEUBERGER	6.7	-13.8	-0.6	9.9	9.0
Bloomberg U.S. Aggregate	5.5	-13.0	-1.5	7.5	8.7
Excess	1.2	-0.8	1.0	2.4	0.3
WESTERN	7.4	-17.6	-1.3	10.9	11.1
Bloomberg U.S. Aggregate	5.5	-13.0	-1.5	7.5	8.7
Excess	1.8	-4.6	0.3	3.4	2.4
CORE PLUS	6.8	-15.2	-1.1		
Bloomberg U.S. Aggregate	5.5	-13.0	-1.5		
Excess	1.3	-2.2	0.4		







Return Seeking Bonds December 31, 2023





	Ending Market Value	Portfolio Weight	Last Qtr	Fiscal YTD	1 Year	3 Year	5 Year	10 Year	Since Inception	Inception Date
Return Seeking Bonds Managers										
COLUMBIA CREDIT PLUS	\$892,503,085	20.6%	8.5%	4.9%	9.0%	-2.2%			-1.9%	12/2020
Credit Plus Benchmark			8.0	5.1	8.6	-2.2			-2.1	12/2020
Excess			0.6	-0.3	0.5	-0.1			0.2	
PIMCO CREDIT PLUS	865,499,769	20.0	7.8	5.0	8.4	-1.9			-1.6	12/2020
Credit Plus Benchmark			8.0	5.1	8.6	-2.2			-2.1	12/2020
Excess			-0.2	-0.2	-0.1	0.3			0.5	
CREDIT PLUS	1,758,002,854	40.6	8.2	4.9	8.7	-2.1			-1.7	12/2020
Credit Plus Benchmark	, , ,		8.0	5.1	8.6	-2.2			-2.1	12/2020
Excess			0.2	-0.2	0.2	0.1			0.3	
BLACKROCK OPPORTUNISTIC	515,804,123	11.9	4.9	5.2	7.7	0.7			0.9	12/2020
ICE BofA US 3-Month Treasury	2.4,22.4,		1.4	2.7	5.0	2.2			2.1	12/2020
Excess			3.6	2.5	2.7	-1.4			-1.2	
ACUMODE EMERGING MARKET	200 700 040	7.1	10.1	5.0	40.0	0.0			-6,2	04/0004
ASHMORE EMERGING MARKET	308,703,213	7.1		5.9	10.9	-6.2				01/2021
JPM JEMB Sovereign-only 50-50			8.6	5.6	11.9	-3.3			-3.3	01/2021
Excess			1.5	0.3	-1.0	-2.8			-2.8	
TCW SECURITIZED CREDIT	413,525,572	9.6	3.1	3.6	7.1				1.2	07/2021
ICE BofA US 3-Month Treasury Bill			1.4	2.7	5.0				2.6	07/2021
Excess			1.7	0.9	2.1				-1.4	





	2023 Calendar Return	2022 Calendar Return	2021 Calendar Return	2020 Calendar Return	2019 Calendar Retur
Return Seeking Bonds Managers					
COLUMBIA CREDIT PLUS	9.0%	-15.3%	1.1%		
Credit Plus Benchmark	8.6	-13.7	0.0		
Excess	0.5	-1.6	1.1		
PIMCO CREDIT PLUS	8.4	-13.6	0.8		
Credit Plus Benchmark	8.6	-13.7	0.0		
Excess	-0.1	0.1	0.7		
CREDIT PLUS	8.7	-14.5	0.9		
Credit Plus Benchmark	8.6	-13.7	0.0		
Excess	0.2	-0.7	0.9		
BLACKROCK OPPORTUNISTIC	7.7	-5.4	0.3		
ICE BofA US 3-Month Treasury Bill	5.0	1.5	0.0		
Excess	2.7	-6.8	0.2		
ASHMORE EMERGING MARKET	10.9	-17.2	-10.1		
JPM JEMB Sovereign-only 50-50	11.9	-14.8	-5.3		
Excess	-1.0	-2.4	-4.8		
TCW SECURITIZED CREDIT	7.1	-4.6			
ICE BofA US 3-Month Treasury Bill	5.0	1.5			
Excess	2.1	-6.1			



	Ending Market Value	Portfolio Weight	Last Qtr	Fiscal YTD	1 Year	3 Year	5 Year	10 Year	Since Inception	Inception Date
Return Seeking Bonds Managers										
PAYDEN RYGEL	\$311,090,629	7.2%	6.3%	6.6%	11.7%	1.2%			1.2%	01/2021
Multi-Asset Credit Benchmark			6.4	6.8	12.3	1.2			1.2	01/2021
Excess			-0.0	-0.2	-0.6	-0.1			-0.1	
PGIM	361,264,587	8.3	7.0	7.1	12.3	0.8			0.8	01/2021
Multi-Asset Credit Benchmark			6.4	6.8	12.3	1.2			1.2	01/2021
Excess			0.6	0.3	-0.0	-0.4			-0.4	
MULTI-ASSET CREDIT	672,355,216	15.5	6.7	6.9	12.0	1.0			1.0	01/2021
Multi-Asset Credit Benchmark			6.4	6.8	12.3	1.2			1.2	01/2021
Excess			0.3	0.1	-0.3	-0.2			-0.2	
KKR	331,183,873	7.7	6.5	7.2	13.9	2.0			2.0	01/2021
ICE BofA US Cash Pay HY Constrained			7.1	7.7	13.4	2.0			2.0	01/2021
Excess			-0.5	-0.5	0.5	-0.0			-0.0	
OAKTREE	328,143,182	7.6	6.9	7.5	12.4	2.1			2.1	01/2021
ICE BofA US Cash Pay HY Constrained	320,140,102	7.0	7.1	7.7	13.4	2.0			2.0	01/2021
Excess			-0.2	-0.1	-1.0	0.1			0.1	
HIGH YIELD	659,327,055	15.2	6.7	7.4	13.2	2.0			2.0	01/2021
ICE BofA US Cash Pay HY Constrained			7.1	7.7	13.4	2.0			2.0	01/2021
Excess			-0.4	-0.3	-0.2	0.0			0.0	





	2023 Calendar Return	2022 Calendar Return	2021 Calendar Return	2020 Calendar Return	2019 Calendar Return
Return Seeking Bonds Managers					
PAYDEN RYGEL	11.7%	-9.6%	2.6%		
Multi-Asset Credit Benchmark	12.3	-10.0	2.7		
Excess	-0.6	0.4	-0.1		
PGIM	12.3	-11.5	3.2		
Multi-Asset Credit Benchmark	12.3	-10.0	2.7		
Excess	-0.0	-10.0	0.5		
Excess	-0.0	-1.5	0.5		
MULTI-ASSET CREDIT	12.0	-10.6	2.9		
Multi-Asset Credit Benchmark	12.3	-10.0	2.7		
Excess	-0.3	-0.6	0.2		
KKR	13.9	-11.0	4.7		
ICE BofA US Cash Pay HY Constrained	13.4	-11.1	5.3		
Excess	0.5	0.1	-0.6		
OAKTREE	12.4	-9.5	4.5		
ICE BofA US Cash Pay HY Constrained	13.4	-11.1	5.3		
Excess	-1.0	1.6	-0.8		
HIGH YIELD	13.2	-10.3	4.6		
ICE BofA US Cash Pay HY Constrained	13.4	-11.1	5.3		
Excess	-0.2	0.8	-0.7		





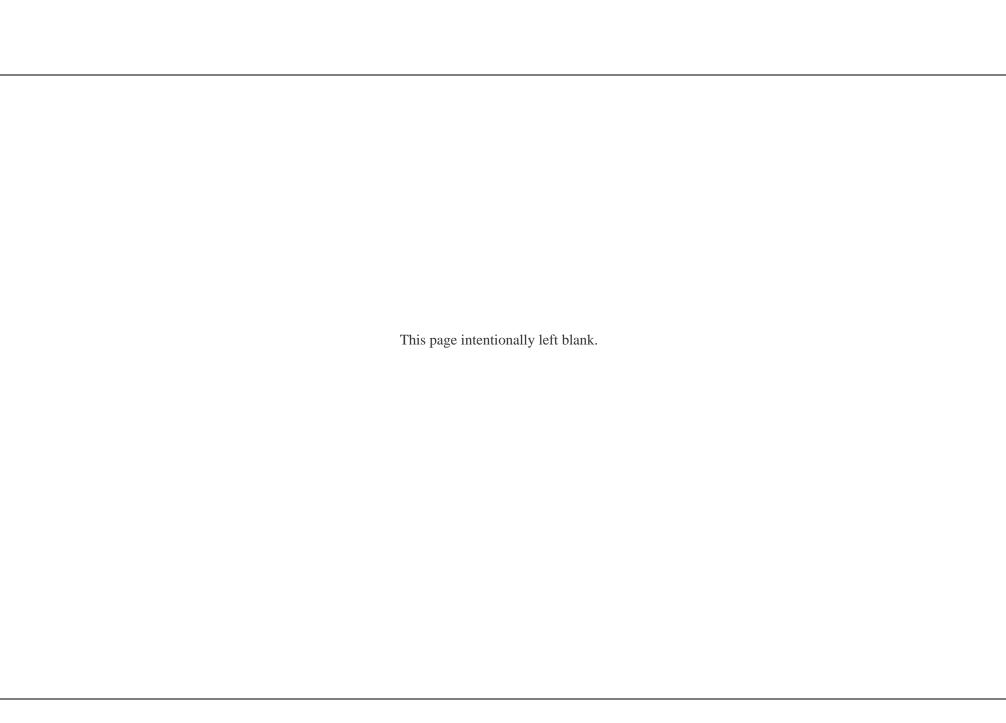
	Ending Market Value	Portfolio Weight	Last Qtr	Fiscal YTD	1 Year	3 Year	5 Year	10 Year	Since Inception	Inception Date
Return Seeking Bonds										
CREDIT PLUS	\$1,758,002,854	40.6%	8.2%	4.9%	8.7%	-2.1%			-1.7%	12/2020
Credit Plus Benchmark			8.0	5.1	8.6	-2.2			-2.1	12/2020
Excess			0.2	-0.2	0.2	0.1			0.3	
OPPORTUNISTIC FI	515,804,123	11.9	4.9	5.2	7.7	0.7			0.9	12/2020
ICE BofA US 3-Month Treasury Bill			1.4	2.7	5.0	2.2			2.1	12/2020
Excess			3.6	2.5	2.7	-1.4			-1.2	
EMERGING MARKET DEBT	308,703,213	7.1	10.1	5.9	10.9	-6.2			-6.2	01/2021
JPM JEMB Sovereign-only 50-50			8.6	5.6	11.9	-3.3			-3.3	01/2021
Excess			1.5	0.3	-1.0	-2.8			-2.8	
SECURITIZED CREDIT	413,525,572	9.6	3.1	3.6	7.1				1.2	06/2021
ICE BofA US 3-Month Treasury Bill			1.4	2.7	5.0				2.5	06/2021
Excess			1.7	0.9	2.1				-1.3	
MULTI-ASSET CREDIT	672,355,216	15.5	6.7	6.9	12.0	1.0			1.0	01/2021
Multi-Asset Credit Benchmark			6.4	6.8	12.3	1.2			1.2	01/2021
Excess			0.3	0.1	-0.3	-0.2			-0.2	
HIGH YIELD	659,327,055	15.2	6.7	7.4	13.2	2.0			2.0	01/2021
ICE BofA US Cash Pay HY Constrained			7.1	7.7	13.4	2.0			2.0	01/2021
Excess			-0.4	-0.3	-0.2	0.0			0.0	
RETURN SEEKING BONDS (1)	4,327,863,749	100.0	7.0	5.6	9.8	-0.6			-0.3	12/2020
Return Seeking Fixed Income Benchmark			6.2	5.3	9.3	-0.2			-0.0	12/2020
Excess			8.0	0.3	0.5	-0.4			-0.3	





	2023 Calendar Return	2022 Calendar Return	2021 Calendar Return	2020 Calendar Return	2019 Calendar Return
Return Seeking Bonds					
CREDIT PLUS	8.7%	-14.5%	0.9%		
Credit Plus Benchmark	8.6	-13.7	0.0		
Excess	0.2	-0.7	0.9		
OPPORTUNISTIC FI	7.7	-5.4	0.3		
ICE BofA US 3-Month Treasury Bill	5.0	1.5	0.0		
Excess	2.7	-6.8	0.2		
EMERGING MARKET DEBT	10.9	-17.2	-10.1		
JPM JEMB Sovereign-only 50-50	11.9	-14.8	-5.3		
Excess	-1.0	-2.4	-4.8		
SECURITIZED CREDIT	7.1	-4.6			
CE BofA US 3-Month Treasury Bill	5.0	1.5			
Excess	2.1	-6.1			
MULTI-ASSET CREDIT	12.0	-10.6	2.9		
Multi-Asset Credit Benchmark	12.3	-10.0	2.7		
Excess	-0.3	-0.6	0.2		
HIGH YIELD	13.2	-10.3	4.6		
CE BofA US Cash Pay HY Constrained	13.4	-11.1	5.3		
Excess	-0.2	0.8	-0.7		
RETURN SEEKING BONDS (1)	9.8	-11.3	0.9		
Return Seeking Fixed Income Benchmark	9.3	-9.8	0.8		
Excess	0.5	-1.6	0.1		







Treasuries December 31, 2023





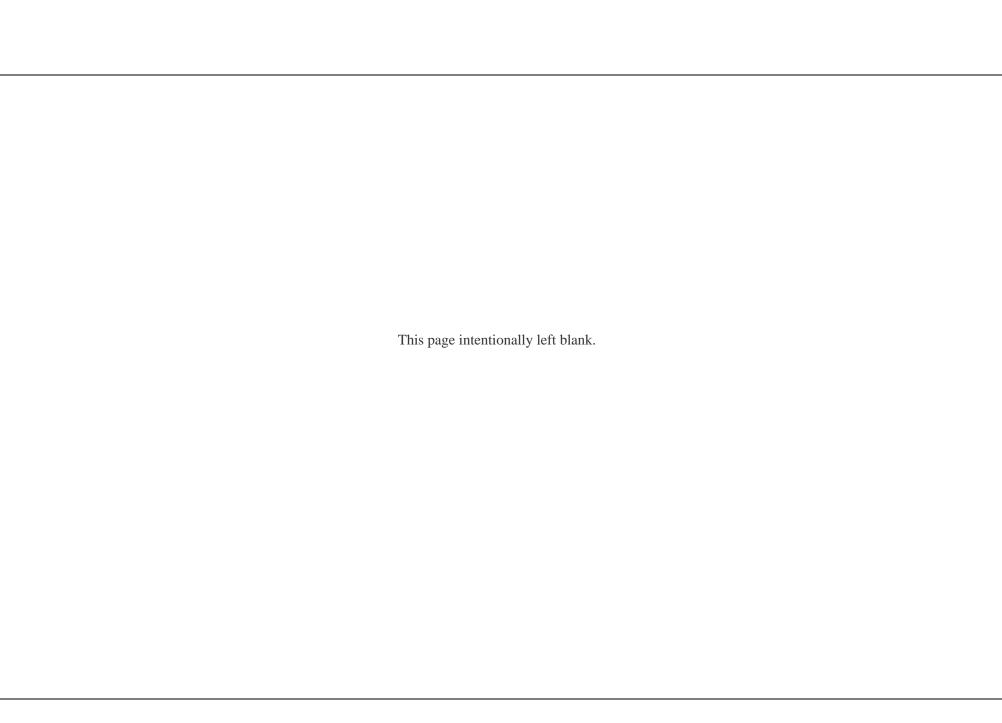
	Ending Market Value	Portfolio Weight	Last Qtr	Fiscal YTD	1 Year	3 Year	5 Year	10 Year	Since Inception	Inception Date
Treasuries Managers										
BLACKROCK	\$2,925,486,669	33.4%	9.1%	1.2%	4.1%	-7.4%	-0.3%		0.1%	02/2018
Bloomberg Treasury 5+ Year			9.0	1.2	3.7	-7.4	-0.2		0.2	02/2018
Excess			0.1	-0.0	0.5	-0.1	-0.1		-0.1	
GOLDMAN SACHS	2,585,630,620	29.5	9.0	1.4	4.4	-7.3	-0.1		0.3	02/2018
Bloomberg Treasury 5+ Year			9.0	1.2	3.7	-7.4	-0.2		0.2	02/2018
Excess			-0.1	0.1	0.7	0.1	0.1		0.0	
NEUBERGER	3,239,904,238	37.0	9.2	1.3	4.1	-7.2	-0.1		0.3	02/2018
Bloomberg Treasury 5+ Year			9.0	1.2	3.7	-7.4	-0.2		0.2	02/2018
Excess			0.2	0.1	0.4	0.1	0.1		0.0	
TOTAL TREASURIES	8,751,021,526	100.0	9.1	1.3	4.2	-7.3	-0.2		0.2	02/2018
Bloomberg Treasury 5+ Year			9.0	1.2	3.7	-7.4	-0.2		0.2	02/2018
Excess			0.1	0.1	0.5	0.1	0.0		-0.0	





	2023 Calendar Return	2022 Calendar Return	2021 Calendar Return	2020 Calendar Return	2019 Calendar Return
Treasuries Managers					
BLACKROCK	4.1%	-20.6%	-4.0%	12.5%	10.4%
Bloomberg Treasury 5+ Year	3.7	-20.3	-3.8	12.8	10.4
Excess	0.5	-0.3	-0.2	-0.3	-0.1
GOLDMAN SACHS	4.4	-20.6	-3.9	12.7	10.6
Bloomberg Treasury 5+ Year	3.7	-20.3	-3.8	12.8	10.4
Excess	0.7	-0.3	-0.1	-0.1	0.1
NEUBERGER	4.1	-20.5	-3.4	12.8	10.4
Bloomberg Treasury 5+ Year	3.7	-20.3	-3.8	12.8	10.4
Excess	0.4	-0.2	0.4	-0.1	-0.0
TOTAL TREASURIES	4.2	-20.6	-3.7	12.7	10.4
Bloomberg Treasury 5+ Year	3.7	-20.3	-3.8	12.8	10.4
Excess	0.5	-0.3	0.0	-0.2	0.0







Laddered Bonds + Cash December 31, 2023





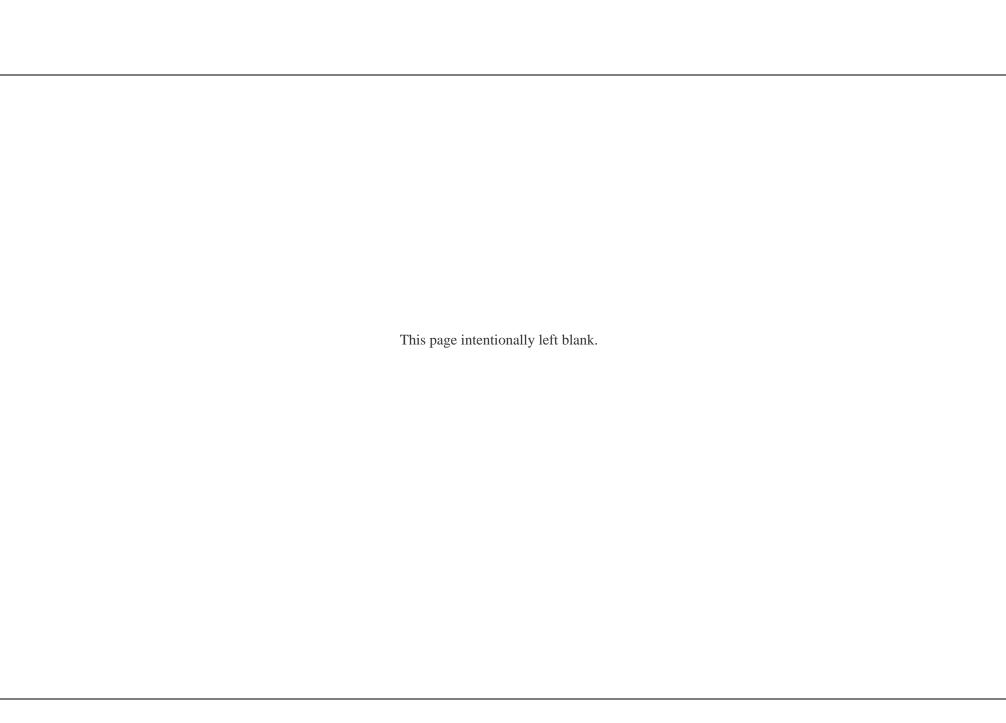
Ending Market Value Portfolio Weight Last Qtr 1 Year 3 Year 5 Year 10 You	1.9% 11/2020 2.0 11/2020 -0.1 1.9 11/2020 2.0 11/2020 11/2020
Managers Neuberger Berman Ladder Bond \$1,016,979,108 23.7% 1.4% 5.2% 2.0% ICE BofA US 3-Month Treasury Bill 0.0 0.2 -0.2 Goldman Sachs Ladder Bond 1,018,166,263 23.7 1.4 5.2 2.0 ICE BofA US 3-Month Treasury Bill 1.4 5.0 2.2 Excess 0.0 0.2 -0.1	2.0 11/2020 -0.1 11/2020
1.4 5.0 2.2	2.0 11/2020 -0.1 11/2020
Excess 0.0 0.2 -0.2	-0.1 1.9 11/2020
Goldman Sachs Ladder Bond 1,018,166,263 23.7 1.4 5.2 2.0 ICE BofA US 3-Month Treasury Bill 1.4 5.0 2.2 Excess 0.0 0.2 -0.1	1.9 11/2020
ICE BofA US 3-Month Treasury Bill 1.4 5.0 2.2 Excess 0.0 0.2 -0.1	
Bill Excess 0.0 0.2 -0.1	2.0 11/2020
Toursey Lodden Assessment	-0.1
Treasury Ladder Aggregate 2,035,145,371 47.4 1.4 5.2 2.0	1.9 11/2020
ICE BofA US 3-Month Treasury 1.4 5.0 2.2 Bill	2.0 11/2020
Excess 0.0 0.2 -0.1	-0.1
Combined Funds STIF 2,187,391,700 50.9 1.4 5.3 2.4 2.0% 1.3*	3% 1.6 01/2004
iMoneyNet Money Fund Average- 1.3 4.8 2.0 1.7 1.0 All Taxable	0 1.3 01/2004
Excess 0.1 0.5 0.3 0.3 0.3	3 0.4
TEACHERS RETIREMENT CD 74,286,623 1.7 1.4 5.2 2.2 2.0 1.4 REPO	4 1.3 02/2012
ICE BofA US 3-Month Treasury 1.4 5.0 2.2 1.9 1.3 Bill	3 1.1 02/2012
Excess 0.1 0.2 0.1 0.2 0.2	2 0.2
Laddered Bond + Cash 4,297,180,710 100.0 1.4 5.2 2.1 1.8 1.3	3 4.2 12/1977
ICE BofA US 3-Month Treasury 1.4 5.0 2.2 1.9 1.3 Bill	
Excess 0.0 0.2 -0.1 -0.0 0.1	1 -0.2





	2023 Calendar Return	2022 Calendar Return	2021 Calendar Return	2020 Calendar Return	2019 Calendar Return
Laddered Bond and Cash Managers					
Neuberger Berman Ladder Bond	5.2%	0.8%	0.0%		
ICE BofA US 3-Month Treasury Bill	5.0	1.5	0.0		
Excess	0.2	-0.6	-0.0		
Goldman Sachs Ladder Bond	5.2	0.9	0.1		
ICE BofA US 3-Month Treasury Bill	5.0	1.5	0.0		
Excess	0.2	-0.5	0.0		
Treasury Ladder Aggregate	5.2	0.9	0.0		
ICE BofA US 3-Month Treasury Bill	5.0	1.5	0.0		
Excess	0.2	-0.6	-0.0		
Combined Funds STIF	5.3	1.7	0.1	0.5%	2.3%
iMoneyNet Money Fund Average- All Taxable	4.8	1.4	0.0	0.3	1.9
Excess	0.5	0.4	0.1	0.2	0.5
TEACHERS RETIREMENT CD	5.2	1.5	0.1	1.0	2.5
REPO ICE BofA US 3-Month Treasury Bill	5.0	1.5	0.0	0.7	2.3
Bill Excess	0.2	0.1	0.0	0.4	0.2
Laddered Bond + Cash	5.2	1.1	0.0	0.6	2.3
ICE BofA US 3-Month Treasury Bill	5.0	1.5	0.0	0.7	2.3
Excess	0.2	-0.4	-0.0	-0.1	0.1







Private Markets December 31, 2023





Combined Funds Asset Class Performance Summary

Private Markets									
	Last Qtr	FYTD	1 Year	3 Year	5 Year	10 Year	20 Year	25 Year	30 Year
Private Markets - Invested	1.6%	3.8%	8.0%	16.4%	12.6%	12.3%	14.0%	13.0%	13.4%
Private Markets -Uninvested(1)	1.3%	2.9%	5.9%	3.9%					
Private Equity	1.7%	4.8%	10.8%	17.1%	16.1%	15.9%	16.2%	14.6%	15.5%
Private Credit	2.1%	4.9%	8.5%	15.8%	11.3%	12.8%	12.9%	12.5%	
Resources	4.6%	3.1%	2.4%	16.8%	3.0%	2.0%	13.0%	12.7%	12.9%
Real Estate	-2.2%	-3.5%	-7.2%	12.9%	10.5%	11.3%	9.3%	9.3%	9.5%

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 Private Markets is currently cash. Prior to 11/02/2022. The Uninvested portion of the Private Markets allocation was invested in a combination of a passively managed S&P 500 Index strategy and a cash overlay strategy invested in equity derivatives and cash. Source: State Street Bank





Investments	Commitments	Contributions	Distributions	Remaining Commitment	Market Value	Investment Multiple	IRR	Vintage Year
Private Equity	25,876,542,848	19,997,728,995	15,449,055,540	7,990,314,831	16,403,809,246	1.59	13.7	
Adams Street Partners, LLC	465,355,000	257,832,184	126,363,040	208,332,175	234,397,742	1.40	11.9	
Adams Street Global Secondary Fund 5 LP	100,000,000	77,114,692	80,333,805	22,885,308	23,950,648	1.35	6.2	2012
Adams Street Global Secondary Fund 6	100,000,000	80,400,008	46,029,235	19,599,992	80,590,980	1.57	20.1	2017
Adams Street Global Secondary Fund 7	265,355,000	100,317,484	0	165,846,875	129,856,114	1.29	46.1	2021
Advent International Group	505,000,000	401,034,845	358,976,635	107,049,109	311,988,395	1.67	15.3	
Advent International GPE VI-A, L.P.	50,000,000	52,993,313	103,400,194	0	3,887,369	2.02	16.4	2008
Advent International GPE VII, L.P.	90,000,000	86,490,641	143,472,935	3,600,000	12,681,091	1.81	13.3	2012
Advent International GPE VIII-B	100,000,000	100,000,000	100,608,098	0	107,241,987	2.08	17.6	2016
Advent International GPE IX	115,000,000	107,532,348	11,495,408	7,467,652	137,381,503	1.38	14.4	2019
Advent International GPE X	150,000,000	54,018,543	0	95,981,457	50,796,445	0.94	-10.6	2022
Affinity Ventures	9,000,000	9,000,000	3,590,011	0	788,645	0.49	-11.2	
Affinity Ventures IV, L.P.	4,000,000	4,000,000	1,541,970	0	3,279	0.39	-34.5	2004
Affinity Ventures V, L.P.	5,000,000	5,000,000	2,048,042	0	785,366	0.57	-8.1	2008
Apax Partners	600,000,000	544,244,758	571,473,413	147,250,312	309,839,307	1.62	15.4	
APAX VIII - USD	200,000,000	240,451,261	364,650,169	7,966,190	31,007,221	1.65	13.6	2013
Apax IX USD L.P.	150,000,000	162,660,807	190,842,594	14,436,164	123,311,203	1.93	20.2	2016
Apax X USD L.P.	150,000,000	141,132,691	15,980,649	24,847,958	155,520,883	1.22	12.7	2019
Apax XI	100,000,000	0	0	100,000,000	0			2022
Arsenal Capital Partners	175,000,000	102,510,142	13,903,312	81,210,301	95,913,332	1.07	2.8	
Arsenal Capital Partners V, L.P.	75,000,000	72,853,782	13,616,281	10,598,693	74,085,067	1.20	6.2	2019
Arsenal Capital Partners VI LP	100,000,000	29,656,360	287,031	70,611,608	21,828,265	0.75	-21.2	2021
Asia Alternatives	649,000,000	211,231,211	20,599,678	453,194,230	208,138,763	1.08	4.3	
Asia Alternatives Capital Partners V	99,000,000	104,637,948	19,441,511	9,787,493	112,942,232	1.27	8.6	2017
MN Asia Investors	550,000,000	106,593,263	1,158,167	443,406,737	95,196,532	0.90	-10.1	2020
Banc Fund	178,551,387	187,460,477	57,328,319	0	167,128,140	1.20	3.5	
Banc Fund IX, L.P.	107,205,932	107,205,932	50,002,922	0	90,549,413	1.31	4.3	2014
Banc Fund X, L.P.	71,345,455	80,254,545	7,325,397	0	76,578,727	1.05	1.2	2018
BlackRock	951,774,870	956,392,392	4,593,050	0	1,931,629,300	2.02	33.2	
BlackRock Long Term Capital, SCSP	950,000,000	954,617,522	2,660,745	0	1,931,629,300	2.03	33.4	2019
BlackRock Tempus Fund	1,774,870	1,774,870	1,932,305	0	0	1.09	4.5	2015



Investments	Commitments	Contributions	Distributions	Remaining Commitment	Market Value	Investment Multiple	IRR	Vintage Year
Blackstone Group L.P.	1,535,000,000	926,122,448	737,420,275	717,938,462	568,521,972	1.41	14.1	
Blackstone Capital Partners Asia II	270,000,000	67,509,678	997	202,490,322	68,468,585	1.01	2.0	2021
Blackstone Capital Partners IV, L.P.	70,000,000	84,459,887	201,361,236	1,765,384	183,227	2.39	37.0	2002
Blackstone Capital Partners V L.P.	140,000,000	152,408,625	245,685,920	7,027,560	612,129	1.62	8.0	2006
Blackstone Capital Partners VI, L.P.	100,000,000	106,861,279	164,328,632	10,975,597	29,578,996	1.81	12.4	2008
Blackstone Capital Partners VII	130,000,000	139,943,971	93,973,762	9,306,402	119,732,158	1.53	11.9	2015
Blackstone Capital Partners VIII LP	150,000,000	100,313,209	6,249,186	62,176,802	110,947,651	1.17	9.4	2019
Blackstone Capital Partners IX	150,000,000	0	0	150,000,000	0			2022
Blackstone Growth	250,000,000	209,072,886	24,986,270	63,673,295	175,654,694	0.96	-2.1	2020
Blackstone Growth Equity II	150,000,000	0	0	150,000,000	0			2022
Blackstone Supplemental Account - M	125,000,000	65,552,913	834,272	60,523,099	63,344,533	0.98	-1.1	2021
Blackstone Strategic Partners	915,500,000	709,416,762	871,883,038	270,209,907	235,708,759	1.56	11.4	
Strategic Partners III VC, L.P.	25,000,000	25,088,565	34,142,783	86,254	6,429	1.36	6.0	2004
Strategic Partners III-B, L.P.	100,000,000	79,714,850	118,768,862	12,219,010	34,841	1.49	6.3	2004
Strategic Partners IV VC, L.P.	40,500,000	42,325,414	63,954,747	2,097,328	883,792	1.53	9.1	2008
Strategic Partners IV-B	100,000,000	99,541,961	155,239,588	6,656,298	1,104,451	1.57	12.2	2008
Strategic Partners V, LP	100,000,000	87,497,031	141,091,599	11,706,005	2,539,625	1.64	18.4	2011
Strategic Partners VI, L.P.	150,000,000	104,513,129	134,999,409	31,158,892	23,331,990	1.51	13.9	2014
Strategic Partners VII, L.P.	150,000,000	124,802,104	132,392,004	43,109,636	75,503,024	1.67	17.5	2016
Strategic Partners VIII	150,000,000	119,736,626	87,651,365	85,796,490	104,797,517	1.61	29.2	2018
Strategic Partners IX	100,000,000	26,197,082	3,642,681	77,379,994	27,507,091	1.19	15.8	2022
Bridgepoint	273,670,986	159,330,724	14,957,084	117,239,845	238,953,434	1.59	19.8	
Bridgepoint Europe VI L.P.	165,697,520	159,330,724	14,957,084	9,266,379	238,953,434	1.59	19.8	2018
Bridgepoint Europe VII	107,973,466	0	0	107,973,466	0			2022
Brookfield Asset Management Inc.	500,000,000	405,100,856	256,619,686	151,591,189	438,499,686	1.72	30.1	
Brookfield Capital Partners Fund IV	100,000,000	115,002,304	216,029,739	6,604,408	61,018,172	2.41	42.8	2015
Brookfield Capital Partners V L.P.	250,000,000	261,031,272	40,495,014	24,054,060	339,260,367	1.45	16.6	2018
Brookfield Capital Partners Fund VI	150,000,000	29,067,280	94,933	120,932,720	38,221,148	1.32	26.3	2022
Canyon Partners	125,000,000	146,475,843	21,475,843	0	157,464,814	1.22	11.0	
Canyon Distressed Opportunity Fund III	125,000,000	146,475,843	21,475,843	0	157,464,814	1.22	11.0	2020
Cardinal Partners	10,000,000	10,000,000	39,196,082	0	30,099	3.92	10.6	
DSV Partners IV	10,000,000	10,000,000	39,196,082	0	30,099	3.92	10.6	1985
Carlyle Group	400,000,000	354,729,419	77,853,313	117,800,401	328,293,578	1.14	6.3	
Carlyle Strategic Partners IV, L.P.	100,000,000	119,848,374	53,429,269	32,306,465	80,963,737	1.12	5.4	2016
Carlyle Partners VII, L.P.	150,000,000	154,897,553	17,422,357	8,564,696	174,450,634	1.24	7.4	2017
Carlyle Partners VIII	150,000,000	79,983,492	7,001,687	76,929,240	72,879,207	1.00	-0.2	2021
CarVal Investors	600,000,000	503,380,828	422,247,389	96,479,827	253,972,502	1.34	7.9	
CVI Credit Value Fund A II	150,000,000	142,500,000	199,735,718	7,500,000	3,518,938	1.43	8.3	2012
CVI Credit Value Fund A III	150,000,000	142,500,000	168,545,561	7,500,000	25,740,177	1.36	8.3	2015
CVI Credit Value Fund IV	150,000,000	113,380,828	53,811,544	36,479,827	109,539,517	1.44	7.6	2017
CVI Credit Value Fund V	150,000,000	105,000,000	154,566	45,000,000	115,173,870	1.10	5.2	2020



Investments	Commitments	Contributions	Distributions	Remaining Commitment	Market Value	Investment Multiple	IRR	Vintage Year
Chicago Growth Partners	60,000,000	58,347,626	123,940,459	1,652,374	532	2.12	19.5	
Chicago Growth Partners II, L.P.	60,000,000	58,347,626	123,940,459	1,652,374	532	2.12	19.5	2008
Clearlake Capital	100,000,000	57,849,852	268,947	42,308,461	60,303,697	1.05	3.7	
Clearlake Capital Partners VII	100,000,000	57,849,852	268,947	42,308,461	60,303,697	1.05	3.7	2022
Court Square	489,419,132	498,674,744	629,312,317	48,980,142	289,924,804	1.84	14.8	
Court Square Capital Partners II, L.P.	164,419,132	170,245,229	295,744,454	5,681,078	3,130,843	1.76	12.3	2006
Court Square Capital Partners III, L.P.	175,000,000	190,097,845	289,828,116	6,147,077	145,088,509	2.29	20.4	2012
Court Square Capital Partners IV, L.P.	150,000,000	138,331,670	43,739,747	37,151,987	141,705,451	1.34	15.8	2018
CVC Capital Partners	469,476,307	441,472,337	664,283,461	130,561,068	215,191,485	1.99	16.6	
CVC Capital Partners VI	248,546,280	287,588,239	368,725,234	18,518,350	212,272,844	2.02	16.4	2013
CVC Capital Partners IX	110,465,014	0	0	110,465,014	0			2023
CVC European Equity Partners V, L.P.	110,465,014	153,884,098	295,558,227	1,577,704	2,918,640	1.94	16.7	2008
Goldman, Sachs & Co.	449,800,000	384,104,821	351,170,668	162,759,590	233,558,111	1.52	11.3	
GS Capital Partners VI, L.P.	100,000,000	110,285,035	143,299,966	2,551,356	1,627,138	1.31	7.1	2007
GS China-US Cooperation Fund	99,800,000	40,727,812	523,330	59,480,800	51,317,650	1.27	8.9	2018
GS Vintage VII	100,000,000	88,944,389	78,908,776	60,834,712	65,594,178	1.62	14.9	2016
West Street Capital Partners VII, L.P.	150,000,000	144,147,585	128,438,596	39,892,722	115,019,146	1.69	18.3	2016
Goldner Hawn Johnson & Morrison	150,510,266	66,974,255	73,796,563	83,247,978	68,341,547	2.12	21.7	
GHJM TrailHead Fund	20,000,000	17,112,130	52,080,283	2,434,486	4,948,539	3.33	19.8	2012
Goldner Hawn Fund VII, L.P.	57,755,138	43,455,692	21,716,280	14,464,797	56,873,322	1.81	29.8	2018
Goldner Hawn VIII	72,755,128	6,406,433	0	66,348,695	6,519,686	1.02	1.8	2023
Green Equity Investors	325,000,000	347,017,276	251,752,082	18,949,050	332,050,514	1.68	12.6	
Green Equity Investors VI, L.P.	200,000,000	235,160,724	250,071,828	4,125,348	200,297,655	1.92	13.0	2012
Green Equity Investors VIII	125,000,000	111,856,552	1,680,254	14,823,702	131,752,859	1.19	8.0	2020
GTCR	110,000,000	108,261,050	239,444,420	10,416,556	111,291,322	3.24	32.4	
GTCR XI	110,000,000	108,261,050	239,444,420	10,416,556	111,291,322	3.24	32.4	2013
HarbourVest	21,466,356	20,945,021	27,523,580	798,474	3,842,241	1.50	11.5	
Dover Street VII Cayman Fund L.P.	2,198,112	2,074,270	1,856,658	132,416	3,796	0.90	-4.5	2014
HarbourVest Intl PE Partners V-Cayman US	3,429,131	3,346,199	4,530,727	176,744	6,271	1.36	13.5	2014
Harbourvest Intl PE Partners VI-Cayman	4,141,503	4,039,473	5,861,536	193,314	2,028,557	1.95	14.8	2014
HarbourVest Partners VIII Cayman Buyout	4,506,711	4,393,997	6,084,996	156,000	101,073	1.41	12.9	2014
HarbourVest Partners VIII-Cayman Venture	7,190,898	7,091,082	9,189,664	140,000	1,702,544	1.54	10.6	2014
Hellman & Friedman	575,000,000	412,376,471	172,692,267	182,403,351	446,036,069	1.50	18.6	
Hellman & Friedman Capital Partners VII, L.P.	50,000,000	49,914,704	154,063,260	2,183,886	11,732,317	3.32	24.9	2009
Hellman & Friedman Investors IX, L.P.	175,000,000	175,174,084	10,750,120	9,628,261	236,086,455	1.41	12.5	2018
Hellman & Friedman Capital Partners X	250,000,000	187,287,683	7,878,887	70,591,204	198,217,297	1.10	6.0	2021
Hellman & Friedman Capital Partners XI	100,000,000	0	0	100,000,000	0			2023



Investments	Commitments	Contributions	Distributions	Remaining Commitment	Market Value	Investment Multiple	IRR	Vintage Year
IK Limited	588,496,275	505,149,589	560,239,017	130,955,437	259,856,501	1.62	14.6	
IK Fund VII	165,697,520	179,393,652	322,286,061	8,377,967	13,768,950	1.87	14.2	2013
IK Fund VIII	165,697,520	179,209,717	237,952,956	8,480,375	90,466,013	1.83	18.0	2016
IK Fund IX	149,127,768	146,546,221	0	6,123,628	155,621,538	1.06	3.6	2019
IK Fund X	107,973,466	0	0	107,973,466	0			2022
Kohlberg, Kravis, Roberts & Co.	1,797,000,000	1,189,093,379	991,778,615	691,798,633	849,902,817	1.55	13.0	
KKR 2006 Fund L.P.	200,000,000	218,137,965	392,503,725	3,300,979	64,550	1.80	9.1	2006
KKR Americas Fund XII L.P.	150,000,000	147,420,509	87,038,632	17,874,818	180,775,398	1.82	18.9	2016
KKR Ascendant Strategy	150,000,000	0	0	150,000,000	0			2023
KKR Asian Fund III	100,000,000	97,000,499	60,735,918	14,730,983	114,772,392	1.81	21.1	2017
KKR Asian Fund IV	150,000,000	73,139,660	3,535,969	84,375,855	78,789,149	1.13	7.8	2020
KKR Core Investments Partnership	97,000,000	102,078,443	5,416,200	1,522,803	119,477,694	1.22	10.9	2021
KKR Core Investments Fund II	100,000,000	0	0	100,000,000	754,709			2022
KKR Europe V	100,000,000	93,373,427	16,882,045	11,934,883	98,226,925	1.23	9.2	2018
KKR European Fund VI (USD) SCSp	100,000,000	23,428,692	0	78,501,649	17,262,251	0.74	-34.1	2022
KKR Millennium Fund	200,000,000	205,167,570	424,946,028	0	162,941	2.07	16.4	2002
KKR MN Partnership L.P.	150,000,000	93,838,019	720,098	57,573,936	99,827,451	1.07	4.8	2021
KKR North America Fund XIII	300,000,000	135,508,595	0	171,982,727	139,789,357	1.03	2.8	2021
Lexington Partners	1,645,000,000	1,164,323,588	799,217,840	556,623,837	942,976,098	1.50	13.1	
Lexington Capital Partners VI-B, L.P.	100,000,000	98,374,022	145,958,371	1,634,703	516,502	1.49	7.9	2005
Lexington Capital Partners VII, L.P.	200,000,000	173,297,773	269,316,010	30,670,593	20,551,457	1.67	14.4	2009
Lexington Capital Partners VIII, L.P.	150,000,000	138,682,457	142,559,675	30,367,767	87,858,249	1.66	15.7	2014
Lexington Capital Partners IX, L.P.	150,000,000	129,405,518	37,902,022	33,829,311	152,712,247	1.47	22.6	2018
Lexington Capital Partners X	100,000,000	30,000,000	0	70,000,000	37,166,220	1.24	59.5	2021
Lexington Co-Investment Partners IV	200,000,000	219,011,365	148,641,504	3,469,473	222,930,180	1.70	15.7	2017
Lexington Co-Investment Partners V	300,000,000	256,598,658	15,991,030	59,392,372	290,752,070	1.20	13.5	2020
Lexington Co-Investment Partners V Overage	45,000,000	35,055,900	1,265,648	11,157,513	39,189,098	1.15	9.5	2021
Lexington Co-Investment Partners VI	300,000,000	0	0	300,000,000	0			2023
Lexington Middle Market Investors IV	100,000,000	83,897,895	37,583,580	16,102,105	91,300,075	1.54	20.2	2016
Madison Dearborn Capital Partners LLC	200,000,000	179,821,723	77,240,155	52,094,159	160,760,720	1.32	9.3	
Madison Dearborn Capital Partners VII, L.P.	100,000,000	100,303,020	60,172,303	16,735,885	89,917,647	1.50	9.9	2015
Madison Dearborn Capital Partners VIII-A, L.P	100,000,000	79,518,703	17,067,852	35,358,274	70,843,073	1.11	6.6	2019
Marathon	400,000,000	161,906,171	14,240,074	244,000,000	179,459,361	1.20	8.8	
Marathon Distressed Credit Fund	200,000,000	161,906,171	14,240,074	44,000,000	179,459,361	1.20	8.8	2020
Marathon Distressed Credit Fund II	200,000,000	0	0	200,000,000	0			2023
Merced Capital	178,737,500	184,266,287	157,295,389	0	62,985,977	1.20	3.5	
Merced Partners IV	125,000,000	124,968,390	123,722,539	0	15,545,717	1.11	2.2	2013
Merced Partners V	53,737,500	59,297,897	33,572,850	0	47,440,260	1.37	6.1	2017
MHR Institutional Partners	75,000,000	83,022,509	26,033,416	11,735,519	95,932,097	1.47	9.8	
MHR Institutional Partners IV LP	75,000,000	83,022,509	26,033,416	11,735,519	95,932,097	1.47	9.8	2014



Investments	Commitments	Contributions	Distributions	Remaining Commitment	Market Value	Investment Multiple	IRR	Vintage Year
Neuberger Berman LLC	625,000,000	491,468,073	397,547,193	439,718,161	448,922,436	1.72	29.1	
Dyal Capital Partners III	175,000,000	215,743,153	219,434,359	108,261,804	168,447,093	1.80	25.4	2015
Dyal Capital Partners IV	250,000,000	202,631,390	143,712,786	171,627,902	227,200,189	1.83	41.5	2018
Dyal Capital Partners V	200,000,000	73,093,530	34,400,049	159,828,456	53,275,155	1.20	14.7	2020
Nordic Capital	588,496,275	535,548,589	357,819,253	171,536,097	456,551,097	1.52	14.4	
Nordic Capital Fund VIII	165,697,520	225,322,480	296,912,142	15,774,489	48,885,330	1.53	12.1	2013
Nordic Capital IX Beta, L.P.	165,697,520	180,204,637	60,907,110	31,264,800	240,368,402	1.67	18.7	2017
Nordic Capital Fund X	149,127,768	120,307,140	0	26,586,460	159,704,288	1.33	22.0	2020
Nordic Capital Fund XI	107,973,466	9,714,332	0	97,910,347	7,593,076	0.78	-21.8	2022
Oak Hill Capital Management, Inc.	250,000,000	247,394,722	238,587,803	10,152,576	195,651,824	1.76	29.3	
Oak Hill Capital Partners IV Onshore LP	150,000,000	153,245,546	219,478,696	4,299,116	84,500,048	1.98	33.3	2016
Oak Hill Capital Partners V	100,000,000	94,149,176	19,109,107	5,853,461	111,151,776	1.38	16.0	2018
Oaktree Capital Management, LLC	400,000,000	253,154,864	68,970,664	200,320,535	232,131,583	1.19	6.8	
Oaktree Special Situations Fund, L.P.	100,000,000	103,751,429	22,391,423	7,741,294	69,137,329	0.88	-2.7	2014
Oaktree Special Situations Fund II, L.P.	100,000,000	99,403,435	46,579,241	42,579,241	112,994,254	1.61	37.7	2018
Oaktree Special Situations Fund III	200,000,000	50,000,000	0	150,000,000	50,000,000	1.00		2022
Paine & Partners, LLC	325,000,000	226,811,571	88,839,960	121,808,407	218,889,704	1.36	11.4	
Paine Schwartz Food Chain Fund IV	75,000,000	70,121,139	35,397,971	13,737,482	61,432,504	1.38	7.2	2014
Paine Schwartz Food Chain Fund V, L.P.	150,000,000	129,291,820	53,257,921	35,135,077	131,695,531	1.43	19.4	2018
Paine Schwartz Food Chain VI	100,000,000	27,398,612	184,068	72,935,848	25,761,668	0.95	-6.3	2023
Permal PE	5,337,098	4,406,696	4,794,251	1,090,000	258,246	1.15	4.5	
Glouston Private Equity Opportunities IV	5,337,098	4,406,696	4,794,251	1,090,000	258,246	1.15	4.5	2014
Permira	613,080,825	505,055,428	483,467,012	170,269,177	486,090,802	1.92	18.7	
Permira V, L.P.	165,697,520	184,936,895	392,772,099	4,650,339	117,904,233	2.76	21.1	2013
Permira VI, L.P.	132,558,016	129,712,367	79,469,242	27,357,751	169,437,592	1.92	16.6	2016
Permira VII L.P.1	149,127,768	147,198,277	11,225,671	17,039,925	154,066,204	1.12	4.9	2019
Permira VIII	165,697,520	43,207,888	0	121,221,162	44,682,773	1.03	5.1	2022
Public Pension Capital Management	285,000,000	168,015,592	103,490,733	138,143,232	217,932,960	1.91	22.2	
Public Pension Capital, LLC	285,000,000	168,015,592	103,490,733	138,143,232	217,932,960	1.91	22.2	2014
Silver Lake Partners	335,000,000	347,209,500	441,557,220	30,056,156	289,264,309	2.10	18.6	
Silver Lake Partners III, L.P.	100,000,000	93,894,552	210,187,409	9,528,468	15,959,956	2.41	18.5	2007
Silver Lake Partners IV	100,000,000	116,267,955	158,959,886	2,881,307	138,506,320	2.56	21.5	2012
Silver Lake Partners V, L.P.	135,000,000	137,046,993	72,409,925	17,646,381	134,798,034	1.51	12.7	2017
Siris Capital Group	67,875,000	0	0	67,875,000	0			
Siris V	67,875,000	0	0	67,875,000	0			2022
Split Rock	110,000,000	107,055,906	125,392,564	2,944,094	27,788,345	1.43	4.9	
Split Rock Partners LP	50,000,000	47,890,906	58,794,192	2,109,094	2,484,055	1.28	3.0	2005
Split Rock Partners II, LP	60,000,000	59,165,000	66,598,372	835,000	25,304,290	1.55	7.2	2008



Investments	Commitments	Contributions	Distributions	Remaining Commitment	Market Value	Investment Multiple	IRR	Vintage Year
Summit Partners	600,000,000	457,653,637	417,080,009	282,413,862	413,804,160	1.82	25.2	
Summit Partners Growth Equity Fund VIII	100,000,000	116,727,192	237,084,364	23,129,320	47,686,089	2.44	26.0	2011
Summit Partners Growth Equity Fund IX	100,000,000	134,554,799	146,949,457	32,610,000	134,734,550	2.09	28.1	2015
Summit Partners Growth Equity Fund X-A	150,000,000	142,186,520	33,046,188	40,859,668	162,090,220	1.37	16.0	2019
Summit Partners Growth Equity Fund XI	250,000,000	64,185,126	0	185,814,874	69,293,299	1.08	8.9	2021
TA Associates	80,000,000	0	0	80,000,000	0			
TA XV	80,000,000	0	0	80,000,000	0			2023
Thoma Bravo LLC	525,000,000	535,875,048	339,723,510	81,384,995	516,386,772	1.60	21.8	
Thoma Cressey Fund VII, L.P.	50,000,000	50,000,000	107,057,940	0	394,496	2.15	23.6	2000
Thoma Bravo Fund XII, L.P.	75,000,000	81,949,004	84,992,456	18,452,144	83,791,527	2.06	16.0	2016
Thoma Bravo Fund XIII, L.P.	150,000,000	184,783,234	128,118,668	12,475,387	212,430,168	1.84	26.8	2018
Thoma Bravo Fund XIV	150,000,000	147,759,334	19,534,890	21,775,519	144,989,037	1.11	4.8	2020
Thoma Bravo Fund XV LP	100,000,000	71,383,476	19,556	28,681,945	74,781,545	1.05	4.4	2021
Thomas H. Lee Partners	400,000,000	324,825,815	298,977,445	104,706,466	206,188,877	1.56	22.2	
Thomas H. Lee Equity Fund VII, LP.	100,000,000	99,643,507	137,891,993	10,518,650	44,789,269	1.83	20.5	2015
Thomas H. Lee Equity Fund VIII, L.P.	150,000,000	150,506,365	161,085,452	18,863,759	91,604,559	1.68	30.1	2018
Thomas H. Lee Equity Fund IX	150,000,000	74,675,943	0	75,324,057	69,795,049	0.93	-6.7	2021
TPG Capital	800,000,000	484,992,441	204,559,926	361,067,896	476,435,293	1.40	18.4	
TPG Growth V	150,000,000	139,185,010	11,838,826	20,620,018	159,924,168	1.23	15.3	2021
TPG Growth VI, L.P.	150,000,000	0	0	150,000,000	0			2023
TPG Partners VII, L.P.	100,000,000	101,140,861	157,120,286	16,747,992	40,490,571	1.95	19.3	2015
TPG Partners VIII	150,000,000	148,640,367	34,272,017	19,726,089	179,150,413	1.44	22.3	2018
TPG Partners IX, L.P.	100,000,000	25,115,367	7,014	74,884,633	25,298,558	1.01	1.2	2022
TPG Tech Adjacencies II, L.P.	150,000,000	70,910,836	1,321,783	79,089,164	71,571,583	1.03	2.5	2021
Varde Fund	631,286,710	620,124,403	732,954,090	11,162,307	210,573,663	1.52	9.5	
Varde Fund IX, L.P.	100,000,000	100,000,000	216,671,921	0	0	2.17	15.0	2008
Varde Fund X, LP	150,000,000	150,000,000	253,807,303	0	5,142,969	1.73	9.9	2010
Varde Fund XI, LP	200,000,000	200,000,000	229,469,710	0	31,067,511	1.30	4.3	2013
Varde Fund XIII, L.P.	150,000,000	144,000,000	33,005,156	6,000,000	146,503,231	1.25	8.3	2018
Varde Fund XIV	31,286,710	26,124,403	0	5,162,307	27,859,952	1.07	9.7	2022
Vestar Capital Partners	325,000,000	326,088,390	318,485,998	23,309,251	189,349,268	1.56	10.0	
Vestar Capital Partners V, L.P.	75,000,000	76,797,458	101,183,748	0	34,579	1.32	3.9	2005
Vestar Capital Partners VI, LP	100,000,000	109,624,110	184,058,508	0	51,625,475	2.15	24.1	2011
Vestar Capital Partners VII, L.P.	150,000,000	139,666,823	33,243,742	23,309,251	137,689,214	1.22	9.1	2017



Investments	Commitments	Contributions	Distributions	Remaining Commitment	Market Value	Investment Multiple	IRR	Vintage Year
Vista Equity Partners	200,000,000	160,275,547	77,223	40,937,356	195,620,807	1.22	7.3	
Vista Equity Partners Perennial	200,000,000	160,275,547	77,223	40,937,356	195,620,807	1.22	7.3	2020
Warburg Pincus	1,316,000,000	1,066,415,082	974,762,679	255,055,000	761,761,731	1.63	11.2	
Warburg Pincus China, L.P.	45,000,000	46,935,000	19,177,200	0	43,929,238	1.34	7.1	2016
Warburg Pincus China-Southeast Asia II	50,000,000	26,000,000	4,097,500	24,000,000	24,643,579	1.11	5.1	2019
Warburg Pincus Financial Sector	90,000,000	90,529,341	42,534,900	3,555,000	124,663,639	1.85	18.7	2017
Warburg Pincus Global Growth, L.P.	250,000,000	235,180,860	32,152,289	14,500,000	302,702,376	1.42	13.1	2018
Warburg Pincus Global Growth 14, L.P.	300,000,000	86,427,428	2,313,000	213,000,000	87,535,584	1.04	3.8	2022
Warburg Pincus Private Equity IX, L.P.	100,000,000	100,000,000	172,072,950	0	113,667	1.72	9.6	2005
Warburg Pincus Private Equity X, LP	150,000,000	150,000,000	266,806,541	0	2,749,907	1.80	9.5	2007
Warburg Pincus Private Equity XI, LP	200,000,000	200,342,452	283,315,821	0	67,058,925	1.75	11.9	2012
Warburg Pincus Private Equity XII, LP	131,000,000	131,000,000	152,292,478	0	108,364,815	1.99	16.5	2015
Wayzata Investment Partners	150,000,000	68,415,000	54,124,640	15,000,000	15,011,062	1.01	0.2	
Wayzata Opportunities Fund III	150,000,000	68,415,000	54,124,640	15,000,000	15,011,062	1.01	0.2	2012
Wellspring Capital Partners	125,000,000	153,950,798	57,804,878	11,130,966	169,288,316	1.48	16.5	
Wellspring Capital Partners VI, L.P.	125,000,000	153,950,798	57,804,878	11,130,966	169,288,316	1.48	16.5	2016
Welsh, Carson, Anderson & Stowe	650,000,000	518,456,145	489,825,785	131,543,855	409,058,550	1.73	17.4	
Welsh, Carson, Anderson & Stowe XI, L.P.	100,000,000	100,000,000	161,464,441	0	6,992,252	1.68	11.7	2008
Welsh, Carson, Anderson & Stowe XII, L.P.	150,000,000	150,000,000	238,572,640	0	124,016,130	2.42	25.2	2014
Welsh, Carson, Anderson & Stowe XIII, L.P.	250,000,000	229,328,036	89,788,704	20,671,964	245,865,303	1.46	22.3	2018
Welsh, Carson, Anderson & Stowe XIV	150,000,000	39,128,109	0	110,871,891	32,184,865	0.82	-32.5	2022
Whitehorse Capital	300,000,000	267,619,683	174,339,293	97,329,501	151,519,835	1.22	14.6	
Whitehorse Liquidity Partners III	100,000,000	104,878,566	89,975,165	13,066,122	46,922,221	1.31	15.1	2019
Whitehorse Liquidity Partners IV	100,000,000	99,941,149	58,407,586	24,505,281	61,618,395	1.20	14.3	2020
Whitehorse Liquidity Partners V	100,000,000	62,799,969	25,956,541	59,758,098	42,979,219	1.10	12.5	2021
Wind Point Partners	200,000,000	144,995,646	25,350,842	80,359,799	173,027,899	1.37	19.1	
Wind Point Partners IX	100,000,000	96,618,258	25,350,842	28,737,187	121,315,326	1.52	20.4	2019
Wind Point Partners X	100,000,000	48,377,388	0	51,622,612	51,712,574	1.07	8.9	2022
Windjammer Capital Investors	441,708,861	234,050,830	291,813,128	223,419,756	148,619,346	1.88	12.3	
Windjammer Capital Fund VI	175,000,000	0	0	175,000,000	0			2023
Windjammer Senior Equity Fund V, L.P.	100,000,000	84,094,418	39,718,838	17,112,479	78,522,563	1.41	15.9	2017
Windjammer Mezzanine & Equity Fund II	66,708,861	55,215,684	85,678,634	10,139,363	297,022	1.56	9.0	2000
Windjammer Senior Equity Fund IV, L.P.	100,000,000	94,740,728	166,415,656	21,167,914	69,799,761	2.49	17.3	2012



Investments	Commitments	Contributions	Distributions	Remaining Commitment	Market Value	Investment Multiple	IRR	Vintage Year
Private Credit	4,330,010,084	3,380,222,525	2,546,488,294	1,462,899,465	1,992,625,531	1.34	10.5	
Audax Group	350,000,000	234,623,228	219,279,727	138,529,551	78,271,899	1.27	10.4	
Audax Mezzanine Fund III, L.P.	100,000,000	105,207,316	133,977,984	0	5,209,754	1.32	9.7	2010
Audax Mezzanine Fund IV-A, L.P.	100,000,000	89,886,994	79,726,522	26,590,800	32,815,723	1.25	11.2	2015
Audax Mezzanine Fund V	150,000,000	39,528,917	5,575,221	111,938,751	40,246,423	1.16	18.0	2020
Avenue Capital Partners	200,000,000	200,977,328	185,986,243	0	163,131,378	1.74	10.1	
Avenue Energy Opportunities Fund, L.P.	100,000,000	100,977,328	82,538,314	0	73,327,159	1.54	6.8	2014
Avenue Energy Opportunities Fund II	100,000,000	100,000,000	103,447,929	0	89,804,219	1.93	14.9	2017
BlackRock	97,500,000	93,899,899	32,420,560	3,600,101	92,283,319	1.33	8.6	
BlackRock Middle Market Senior Fund	97,500,000	93,899,899	32,420,560	3,600,101	92,283,319	1.33	8.6	2018
Brookfield Asset Management Inc.	200,000,000	89,956,644	30,598,088	135,223,783	69,624,857	1.11	13.2	
Brookfield Real Estate Finance Fund VI	200,000,000	89,956,644	30,598,088	135,223,783	69,624,857	1.11	13.2	2021
Castlelake L.P.	100,000,000	0	0	100,000,000	0			
Castlelake Aviation V Stable Yield	100,000,000	0	0	100,000,000	0			2023
Energy Capital Partners	28,087,500	38,526,304	18,996,994	8,558,190	23,088,920	1.09	6.2	
Energy Capital Credit Solutions II-A	28,087,500	38,526,304	18,996,994	8,558,190	23,088,920	1.09	6.2	2018
Gold Hill	65,852,584	65,852,584	113,842,999	0	2,750,182	1.77	11.8	
Gold Hill Venture Lending	40,000,000	40,000,000	65,449,702	0	203,165	1.64	10.7	2004
Gold Hill 2008	25,852,584	25,852,584	48,393,297	0	2,547,016	1.97	14.4	2008
HPS Investment Partners	200,000,000	132,895,892	36,561,599	93,344,502	126,928,399	1.23	10.9	
HPS Mezzanine Partners 2019, L.P.	100,000,000	96,080,275	32,170,470	25,768,991	90,251,471	1.27	10.5	2019
HPS Strategic Investment Partners V	100,000,000	36,815,617	4,391,128	67,575,511	36,676,928	1.12	14.2	2022
Kohlberg, Kravis, Roberts & Co.	274,000,000	381,810,465	348,273,550	80,601,499	105,571,633	1.19	9.8	
KKR Lending Partner II L.P.	75,000,000	87,059,946	85,209,374	8,802,924	4,984,672	1.04	1.7	2015
KKR Lending Partners III L.P.	199,000,000	294,750,519	263,064,176	71,798,575	100,586,961	1.23	13.7	2017
LBC Credit Partners	200,000,000	209,010,637	172,441,498	61,614,942	82,550,406	1.22	10.8	
LBC Credit Partners IV, L.P.	100,000,000	120,057,350	123,958,474	27,043,046	19,744,726	1.20	8.8	2016
LBC Credit Partners V, L.P.	100,000,000	88,953,287	48,483,024	34,571,896	62,805,680	1.25	15.6	2019
Marathon	200,000,000	133,522,008	17,053,544	72,500,000	162,218,708	1.34	12.4	
Marathon Secured Private Strategies Fund II	100,000,000	96,022,008	16,870,847	10,000,000	123,739,920	1.46	12.9	2019
Marathon Secured Private Strategies Fund III	100,000,000	37,500,000	182,698	62,500,000	38,478,788	1.03	4.8	2022
Merit Capital Partners	350,000,000	280,145,608	351,159,793	69,787,592	109,491,555	1.64	11.7	
Merit Mezzanine Fund IV, L.P.	75,000,000	70,178,571	139,120,463	4,821,429	1,112,861	2.00	11.6	2004
Merit Mezzanine Fund V, LP	75,000,000	72,306,122	108,565,889	2,693,878	11,921,965	1.67	10.0	2009
Merit Mezzanine Fund VI	100,000,000	92,629,096	103,473,441	7,304,104	52,482,979	1.68	16.8	2016
Merit Mezzanine Fund VII	100,000,000	45,031,818	0	54,968,182	43,973,751	0.98	-3.9	2020
Oaktree Capital Management, LLC	650,000,000	507,440,920	76,672,311	156,100,000	550,557,588	1.24	10.2	
Oaktree Opportunities Fund X, L.P.	50,000,000	46,500,021	44,294,660	8,500,000	24,800,034	1.49	9.0	2015
Oaktree Opportunities Fund Xb, L.P.	100,000,000	75,000,000	0	25,000,000	113,642,175	1.52	12.6	2015
Oaktree Real Estate Debt III	200,000,000	130,940,899	29,603,810	77,600,000	116,060,638	1.11	8.3	2020
Oaktree Opportunities Fund XI	300,000,000	255,000,000	2,773,841	45,000,000	296,054,742	1.17	10.2	2020



Investments	Commitments	Contributions	Distributions	Remaining Commitment	Market Value	Investment Multiple	IRR	Vintage Year
PIMCO BRAVO	5,000,000	4,501,479	5,714,432	0	255,530	1.33	5.9	
PIMCO Bravo Fund OnShore Feeder II	5,000,000	4,501,479	5,714,432	0	255,530	1.33	5.9	2014
Prudential Global Investment Mgmt	600,000,000	541,345,253	580,989,028	117,205,089	177,074,157	1.40	10.3	
Prudential Capital Partners II, L.P.	100,000,000	97,930,132	145,671,152	11,049,052	488,725	1.49	9.0	2005
Prudential Capital Partners III, L.P.	100,000,000	102,884,014	174,852,395	13,573,997	2,382,207	1.72	14.1	2009
Prudential Capital Partners IV	100,000,000	113,143,330	133,421,700	1,948,707	22,003,691	1.37	8.8	2012
Prudential Capital Partners V, L.P.	150,000,000	158,311,274	116,127,983	7,244,881	79,654,059	1.24	7.2	2016
PGIM Capital Partners VI, L.P.	150,000,000	69,076,504	10,915,798	83,388,453	72,545,475	1.21	18.8	2020
Summit Partners	95,000,000	100,002,497	137,062,090	22,177,023	2,166,831	1.39	9.1	
Summit Subordinated Debt Fund III, L.P.	45,000,000	44,088,494	62,804,226	2,250,000	543,916	1.44	8.6	2004
Summit Subordinated Debt Fund IV, L.P.	50,000,000	55,914,003	74,257,864	19,927,023	1,622,915	1.36	9.8	2008
TCW	189,570,000	174,519,135	162,648,948	62,018,565	62,058,608	1.29	8.8	
TCW Direct Lending LLC	89,570,000	83,599,652	90,598,283	14,899,409	19,819,049	1.32	8.6	2014
TCW Direct Lending VII	100,000,000	90,919,484	72,050,665	47,119,156	42,239,559	1.26	9.0	2018
Torchlight Investors	150,000,000	0	0	150,000,000	0			
Torchlight Debt Fund VIII	150,000,000	0	0	150,000,000	0			2023
TSSP	375,000,000	191,192,643	56,786,890	191,638,626	184,601,561	1.26	10.7	
Sixth Street Opportunities Partners V	75,000,000	38,550,071	712,372	37,153,102	37,689,051	1.00	-0.4	2021
Sixth Street TAO Partners (B) Vintage 2023	100,000,000	37,808	0	99,962,192	0	0.00		2023
Sixth Street TAO Partners (B), L.P.	50,000,000	51,145,304	21,811,423	20,681,930	46,576,713	1.34	10.5	2018
Sixth Street TAO Partners (D), L.P.	100,000,000	61,073,149	17,435,636	25,970,452	62,814,392	1.31	13.1	2018
TSSP Opportunities Partners IV (A), L.P.	50,000,000	40,386,311	16,827,459	7,870,950	37,521,405	1.35	10.9	2018



Investments	Commitments	Contributions	Distributions	Remaining Commitment	Market Value	Investment Multiple	IRR	Vintage Year
Real Assets	4,197,571,518	4,027,160,089	2,981,142,865	500,427,429	2,075,244,472	1.26	5.1	
BlackRock	198,500,000	179,390,563	81,887,133	31,385,542	132,118,772	1.19	6.9	
BlackRock Global Renewable Power Fund II	98,500,000	108,982,081	79,021,873	0	53,815,608	1.22	6.0	2017
BlackRock Global Renewable Power Infrastructure III	100,000,000	70,408,481	2,865,259	31,385,542	78,303,164	1.15	10.8	2019
EIG Global Energy Partners	450,000,000	473,254,572	396,022,932	75,356,663	129,094,323	1.11	2.4	
EIG Energy Fund XIV	100,000,000	113,459,470	95,309,310	2,761,129	3,513,933	0.87	-5.0	2007
EIG Energy Fund XV	150,000,000	161,570,371	159,449,534	22,871,323	14,916,067	1.08	1.8	2010
EIG Energy Fund XVI	200,000,000	198,224,731	141,264,088	49,724,211	110,664,324	1.27	5.4	2013
Encap Energy	300,000,000	322,809,150	348,920,598	7,836,632	134,656,015	1.50	8.6	
EnCap Energy Capital Fund VIII, L.P.	100,000,000	103,367,281	68,667,631	0	39,358,230	1.05	8.0	2010
Encap Energy Fund IX	100,000,000	113,725,245	137,819,497	3,890,055	35,156,084	1.52	11.0	2012
EnCap Energy Capital Fund X, L.P.	100,000,000	105,716,624	142,433,470	3,946,576	60,141,701	1.92	15.7	2015
Energy & Minerals Group	680,000,000	695,713,079	428,515,213	43,953,880	534,473,059	1.38	6.6	
NGP Midstream & Resources, L.P.	100,000,000	103,565,615	179,560,149	17,857	4,535,966	1.78	13.2	2007
The Energy & Minerals Group Fund II, L.P.	100,000,000	109,697,789	110,462,562	170,365	107,089,865	1.98	11.8	2011
The Energy & Minerals Group Fund III, L.P.	200,000,000	208,719,926	39,535,987	952,518	107,781,410	0.71	-4.7	2014
The Energy & Minerals Group Fund IV, LP	150,000,000	164,163,548	93,746,740	14,023,899	147,504,748	1.47	8.3	2015
The Energy & Minerals Group Fund V	112,500,000	92,332,817	3,658,916	23,199,538	141,617,669	1.57	12.6	2019
The Energy & Minerals Group Fund V Accordion, LP	17,500,000	17,233,384	1,550,859	5,589,703	25,943,401	1.60	13.3	2019
Energy Capital Partners	500,000,000	437,008,066	363,815,620	155,978,594	271,357,407	1.45	12.5	
Energy Capital Partners III, L.P.	200,000,000	237,909,919	310,409,050	30,959,867	58,398,210	1.55	11.7	2013
Energy Capital Partners IV-A, LP	150,000,000	144,066,071	53,107,452	29,138,587	153,462,908	1.43	15.2	2017
Energy Capital Partners V	150,000,000	55,032,076	299,118	95,880,140	59,496,289	1.09	8.4	2023
Enervest Management Partners	100,000,000	99,686,719	101,510,847	8,406,979	56,399,284	1.58	9.9	
EnerVest Energy Institutional Fund XIV-A, L.P.	100,000,000	99,686,719	101,510,847	8,406,979	56,399,284	1.58	9.9	2015
First Reserve	500,000,000	554,490,997	311,903,432	11,058,656	87,775,709	0.72	-7.2	
First Reserve Fund XI, L.P.	150,000,000	150,292,121	100,059,903	0	45,042	0.67	-8.8	2006
First Reserve Fund XII, L.P.	150,000,000	165,617,044	85,669,271	0	144,665	0.52	-17.9	2008
First Reserve Fund XIII, L.P.	200,000,000	238,581,832	126,174,258	11,058,656	87,586,001	0.90	-3.2	2013
Kohlberg, Kravis, Roberts & Co.	249,850,000	199,563,149	42,869,867	66,679,415	198,603,097	1.21	9.1	
KKR Global Infrastructure Investors III	149,850,000	138,289,492	40,922,272	23,442,771	137,037,972	1.29	10.0	2018
KKR Global Infrastructure Investors IV	100,000,000	61,273,657	1,947,595	43,236,644	61,565,125	1.04	3.3	2021
Merit Energy Partners	519,721,518	431,244,496	212,266,510	47,999,883	314,164,620	1.22	3.4	
Merit Energy Partners F-II, L.P.	100,000,000	59,522,861	34,597,707	0	3,204,515	0.64	-6.6	2006
Merit Energy Partners H	100,000,000	100,000,000	29,668,582	0	44,578,552	0.74	-4.0	2011
Merit Energy Partners I, L.P.	169,721,518	169,721,518	116,039,060	0	154,912,995	1.60	8.6	2014
Merit Energy Partners K, L.P.	150,000,000	102,000,117	31,961,161	47,999,883	111,468,558	1.41	19.3	2019
NGP	599,500,000	599,646,294	658,880,714	38,251,185	192,089,185	1.42	9.4	
Natural Gas Partners IX, LP	150,000,000	174,005,353	249,411,654	605,481	235,370	1.43	12.0	2007
NGP Natural Resources X, L.P.	150,000,000	149,697,949	135,379,508	302,051	13,012,218	0.99	-0.2	2011
NGP Natural Resources XI, L.P.	150,000,000	156,714,100	162,634,950	4,736,941	93,641,136	1.64	11.0	2014
NGP Natural Resources XII, L.P.	149,500,000	119,228,892	111,454,602	32,606,712	85,200,461	1.65	15.4	2017
Sheridan	100,000,000	34,353,005	34,550,000	13,520,000	24,513,000	1.72	12.2	
Sheridan Production Partners III-B, L.P.	100,000,000	34,353,005	34,550,000	13,520,000	24,513,000	1.72	12.2	2014



Investments	Commitments	Contributions	Distributions	Remaining Commitment	Market Value	Investment Multiple	IRR	Vintage Year
Real Estate	4,523,147,868	3,114,963,185	2,010,805,358	1,745,805,336	2,058,672,907	1.31	8.4	
Angelo, Gordon & Co.	650,000,000	479,651,682	287,532,407	223,155,000	345,992,737	1.32	9.5	
AG Asia Realty Fund III, L.P.	50,000,000	47,587,261	47,125,000	6,196,250	14,236,356	1.29	8.9	2016
AG Asia Realty Fund IV, L.P.	100,000,000	81,350,334	36,750,000	34,797,500	74,958,847	1.37	13.5	2018
AG Asia Realty Fund V	100,000,000	9,000,000	0	91,000,000	9,000,000	1.00	0.0	2023
AG Europe Realty Fund II, L.P.	75,000,000	68,635,121	33,769,976	12,768,750	63,696,831	1.42	9.0	2018
AG Europe Realty Fund III	75,000,000	45,713,586	3,000,000	29,437,500	52,200,091	1.21	9.0	2020
AG Realty Fund IX	100,000,000	92,141,126	89,250,000	11,650,000	28,799,448	1.28	5.8	2014
AG Realty Fund X, L.P.	150,000,000	135,224,254	77,637,431	37,305,000	103,101,165	1.34	14.1	2018
Blackstone	1,224,500,000	927,430,511	914,558,369	474,629,042	568,670,548	1.60	12.8	
Blackstone Real Estate Partners Asia II	74,500,000	72,124,702	16,187,862	12,679,199	67,611,042	1.16	5.3	2017
Blackstone Real Estate Partners Asia III	100,000,000	17,276,242	2,368	84,670,648	13,076,029	0.76	-22.3	2021
Blackstone Real Estate Partners Europe Fund VII	100,000,000	0	0	100,000,000	0			2023
Blackstone Real Estate Partners V	100,000,000	104,217,981	209,143,624	4,174,052	123,090	2.01	10.8	2006
Blackstone Real Estate Partners VI, L.P.	100,000,000	109,529,000	219,180,462	4,907,906	869,173	2.01	13.1	2007
Blackstone Real Estate Partners VII, LP	100,000,000	113,719,433	182,119,958	9,529,411	16,901,507	1.75	14.6	2011
Blackstone Real Estate VIII.TE.1 L.P.	150,000,000	175,911,544	179,135,559	20,084,336	111,352,503	1.65	14.7	2015
Blackstone Real Estate Partners IX, L.P.	300,000,000	323,714,309	108,788,537	46,870,545	350,501,943	1.42	18.8	2018
Blackstone Real Estate Partners X	200,000,000	10,937,299	0	191,712,945	8,235,261	0.75	-34.3	2022
Blackstone Strategic Partners	75,000,000	77,489,832	66,308,764	916,710	355,309	0.86	-2.2	
Strategic Partners III RE, L.P.	25,000,000	25,981,841	15,327,012	9,006	9,924	0.59	-6.5	2005
Strategic Partners IV RE, L.P.	50,000,000	51,507,991	50,981,752	907,704	345,386	1.00	-0.1	2008
Brookfield Asset Management Inc.	400,000,000	190,043,233	11,337,228	221,227,189	194,198,979	1.08	10.0	
Brookfield Strategic Real Estate Partners IV	300,000,000	190,043,233	11,337,228	121,227,189	194,198,979	1.08	10.0	2021
Brookfield Strategic Real Estate Partners V	100,000,000	0	0	100,000,000	0			2023
Carlyle Group	450,000,000	184,717,563	115,558,418	338,623,353	128,419,835	1.32	21.3	
Carlyle Realty Partners VIII, L.P.	150,000,000	127,140,980	115,558,418	96,199,936	75,017,612	1.50	24.6	2017
Carlyle Realty Partners IX	300,000,000	57,576,583	0	242,423,417	53,402,223	0.93	-11.1	2021
Kohlberg, Kravis, Roberts & Co.	125,000,000	85,874,703	6,701,036	46,779,146	76,519,003	0.97	-2.1	
KKR Real Estate Partners Americas III	125,000,000	85,874,703	6,701,036	46,779,146	76,519,003	0.97	-2.1	2021
Landmark Partners	249,500,000	112,738,434	69,314,246	159,474,965	79,653,570	1.32	13.8	
Landmark Real Estate Partners VIII, L.P.	149,500,000	112,738,434	69,314,246	59,474,965	79,653,570	1.32	13.8	2016
Landmark Real Estate Partners IX	100,000,000	0	0	100,000,000	0			2021
Lubert Adler	174,147,868	155,045,244	89,073,212	21,986,552	108,359,655	1.27	13.1	
Lubert-Adler Real Estate Fund VII-B, L.P.	74,147,868	67,585,213	82,515,205	7,414,787	20,773,051	1.53	15.1	2017
Lubert-Adler Recovery and Enhancement Capital Fund	100,000,000	87,460,030	6,558,008	14,571,765	87,586,604	1.08	6.6	2021
Oaktree Capital Management, LLC	200,000,000	150,475,519	37,225,052	84,000,000	123,721,901	1.07	7.7	
Oaktree Real Estate Opportunities Fund VIII	200,000,000	150,475,519	37,225,052	84,000,000	123,721,901	1.07	7.7	2020



Investments	Commitments	Contributions	Distributions	Remaining Commitment	Market Value	Investment Multiple	IRR	Vintage Year
Rockpoint	200,000,000	191,518,253	69,882,159	29,305,455	134,301,955	1.07	2.2	
Rockpoint Real Estate Fund V, L.P.	100,000,000	103,423,281	58,755,434	14,217,829	42,404,752	0.98	-0.6	2014
Rockpoint Real Estate Fund VI, L.P.	100,000,000	88,094,972	11,126,725	15,087,626	91,897,203	1.17	8.2	2019
Rockwood	200,000,000	178,468,837	61,784,022	25,711,866	126,730,783	1.06	1.9	
Rockwood Capital RE Partners X, L.P.	100,000,000	99,209,229	57,507,174	2,475,300	49,755,058	1.08	2.2	2015
Rockwood Capital RE Partners XI	100,000,000	79,259,607	4,276,848	23,236,567	76,975,725	1.03	1.2	2019
Silverpeak Real Estate Partners	225,000,000	144,009,375	109,295,624	7,496,058	3,389,232	0.78	-3.9	
Silverpeak Legacy Pension Partners III, L.P.	150,000,000	70,940,363	17,261,685	0	2,977,599	0.29	-12.0	2008
Silverpeak Legacy Pension Partners II, L.P.	75,000,000	73,069,012	92,033,940	7,496,058	411,633	1.27	4.2	2005
TA Associates Realty	350,000,000	237,500,000	172,234,819	112,500,000	168,359,400	1.43	11.7	
Realty Associates Fund XI	100,000,000	100,000,000	153,238,637	0	6,779,070	1.60	10.8	2015
Realty Associates Fund XII	100,000,000	100,000,000	18,996,182	0	127,518,029	1.47	15.1	2018
Realty Associates Fund XIII	150,000,000	37,500,000	0	112,500,000	34,062,300	0.91	-9.2	2023
Total	38,927,272,318	30,520,074,794	22,987,492,057	11,699,447,061	22,530,352,155	1.49	11.6	
Differ	rence**				13,372,984			
Private Markets Total with Difference					22,543,725,140			

Private Markets Portfolio Status	Managers	Funds
Private Equity	59	194
Private Credit	19	43
Real Assets	11	32
Real Estate	13	37
Total	102	306

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 and may slightly differ from final fiscal year-end report. 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.

Arsenal Capital Partners V, L.Pp erformance and valuation data may differ from final year-end reporting.

^{*}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, 2023



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 Funds 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. Equity Actively Managed Fund an actively managed, U.S. common stock portfolio.
- U.S. Equity Index Fund a passively managed, common stock portfolio designed to broadly track the performance of the U.S. stock market.
- Broad International Equity 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.

	Ending Market Value	Last Qtr	1 Year	3 Year	5 Year	10 Year	Option Since
BALANCED FUND	\$115,785,128	9.9%	18.1%	4.3%	10.2%	8.0%	01/1980
U.S. EQUITY ACTIVELY MANAGED FUND	89,767,566	12.6	26.8	7.5	15.8	11.7	07/1986
U.S. EQUITY INDEX FUND	421,284,700	12.1	26.0	8.7	15.4	11.6	07/1986
BROAD INTERNATIONAL EQUITY FUND	142,179,980	8.6	15.6	2.8	8.2	4.5	09/1994
BOND FUND	105,530,588	7.4	7.0	-3.1	1.8	2.4	07/1986
MONEY MARKET FUND	770,256,101	1.4	5.4	2.5	2.1	1.4	07/1986
STABLE VALUE FUND	1,607,461,214	0.8	2.9	2.3	2.4	2.2	11/1994
VOLUNTEER FIREFIGHTER ACCOUNT	177,538,490	8.9	14.7	2.2	7.7	6.0	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.





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.

	Ending Market Value	Last Qtr	1 Year	3 Year	5 Year	10 Year
BALANCED FUND	\$115,785,128	9.9%	18.1%	4.3%	10.2%	8.0%
SIF BALANCED FUND BENCHMARK		9.7%	17.5%	4.2%	9.8%	7.8%
Excess		0.2%	0.6%	0.2%	0.4%	0.2%

U.S. Equity Actively Managed Fund

The U.S. Equity 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.

	Ending Market Value	Last Qtr	1 Year	3 Year	<u>5 Year</u>	10 Year
U.S. EQUITY ACTIVELY MANAGED FUND	89,767,566	12.6	26.8	7.5	15.8	11.7
Russell 3000		12.1	26.0	8.5	15.2	11.5
Excess		0.6	0.9	-1.1	0.6	0.2





U.S. Equity Index Fund

The investment objective of the U.S. Equity 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.

	Ending Market Value	Last Qtr	1 Year	3 Year	5 Year	10 Year
U.S. EQUITY INDEX FUND	\$421,284,700	12.1%	26.0%	8.7%	15.4%	11.6%
Russell 3000		12.1%	26.0%	8.5%	15.2%	11.5%
Excess		0.1%	0.1%	0.2%	0.2%	0.1%

Broad International Equity Fund

The investment objective of the Broad International Equity 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).

	Ending Market Value	Last Qtr	1 Year	3 Year	5 Year	10 Year
BROAD INTERNATIONAL EQUITY FUND	142,179,980	8.6	15.6	2.8	8.2	4.5
International Equity Benchmark		9.8	15.6	1.5	7.1	3.8
Excess		-1.1	-0.1	1.3	1.1	0.6





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.

	Ending Market Value	Last Qtr	1 Year	3 Year	5 Year	10 Year
BOND FUND	\$105,530,588	7.4%	7.0%	-3.1%	1.8%	2.4%
Bloomberg U.S. Aggregate		6.8%	5.5%	-3.3%	1.1%	1.8%
Excess		0.6%	1.5%	0.2%	0.7%	0.5%

Money Market Fund

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

	Ending Market Value	Last Qtr	1 Year	3 Year	5 Year	10 Year
MONEY MARKET FUND	770,256,101	1.4	5.4	2.5	2.1	1.4
ICE BofA US 3-Month Treasury Bill		1.4	5.0	2.2	1.9	1.3
Excess		0.1	0.4	0.3	0.2	0.2





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.

	Ending Market Value	Last Qtr	1 Year	3 Year	5 Year	10 Year
STABLE VALUE FUND	\$1,607,461,214	0.8%	2.9%	2.3%	2.4%	2.2%
Fixed Interest Blended Benchmark		1.2%	4.8%	3.0%	2.5%	2.2%
Excess		-0.5%	-1.9%	-0.8%	-0.1%	0.1%

Volunteer Firefighter Account

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

Ending Market Value	Last Qtr	1 Year	3 Year	5 Year	10 Year
VOLUNTEER FIREFIGHTER ACCOUNT 177,538,490	8.9	14.7	2.2	7.7	6.0
SIF Volunteer Firefighter Account BM	8.8	14.0	2.0	7.2	5.7
Excess	0.1	0.7	0.2	0.5	0.3





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.

	Ending Market Value	Last Qtr	1 Year	3 Year	5 Year	10 Year	Option Since
VANGUARD TOTAL STOCK MARKET INSTITUTIONAL INDEX PLUS	\$833,118,978	12.2%	26.0%	8.5%			07/2019
VANGUARD INSTITUTIONAL INDEX PLUS	1,916,139,064	11.7	26.3	10.0	15.7%	12.0%	07/1999
VANGUARD DIVIDEND GROWTH	988,155,929	10.4	8.1	8.7	13.5		10/2016
VANGUARD MID CAP INDEX	761,445,320	12.3	16.0	5.5	12.7	9.4	01/2004
T. ROWE PRICE SMALL-CAP STOCK	897,030,129	14.6	17.6	1.7	12.0	9.4	04/2000
FIDELITY DIVERSIFIED INTERNATIONAL	345,145,350	10.2	17.7	0.7	9.7	5.1	07/1999
VANGUARD TOTAL INTERNATIONAL STOCK INDEX	377,438,715	10.0	15.5	1.8	7.4	4.1	07/2011
VANGUARD BALANCED INDEX	1,409,870,209	10.0	17.6	3.7	9.6	7.7	12/2003
DODGE & COX INCOME	303,607,707	7.3	7.7	-1.7	2.7	2.8	07/1999
VANGUARD TOTAL BOND MARKET INDEX	328,651,632	6.7	5.7	-3.3	1.1	1.8	12/2003
2025 FUND	213,755,675	7.0	10.4	2.1	6.7	5.2	07/2011
2030 FUND	235,337,238	8.2	12.9	2.2	8.0	6.1	07/2011
2035 FUND	194,431,387	9.8	15.8	2.3	8.9	6.7	07/2011
2040 FUND	161,202,183	10.6	16.9	2.6	9.4	7.0	07/2011
2045 FUND	155,728,176	10.9	17.8	2.9	9.9	7.3	07/2011
2050 FUND	140,248,899	11.2	18.6	3.2	10.4	7.5	07/2011
2055 FUND	94,318,277	11.5	19.4	3.4	10.6	7.6	07/2011
2060 FUND	71,556,519	11.5	19.5	3.5	10.6	7.6	07/2011
2065 FUND	14,627,666	11.5	19.5	3.5			04/2020
INCOME FUND	208,927,497	6.7	9.7	1.8	5.5	4.1	07/2011
Charles Schwab SDB	86,021,769						
Charles Schwab SDB Roth	3,553,763						



Mutual Funds

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

LARGE CAP EQUITY

Vanguard Mid Cap Index (passive) (2)

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

SMALL CAP EQUITY

T Rowe Price Small Cap (active)

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

INTERNATIONAL EQUITY

Fidelity Diversified International (active)

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

Vanguard Total International Stock Index (passive) (3)

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

	Ending Market Value	Last Qtr	1 Year	3 Year	5 Year	Option Since
Large Cap US Equity						
VANGUARD TOTAL STOCK MARKET INSTITUTIONAL INDEX PLUS	\$833,118,978	12.2%	26.0%	8.5%		07/2019
CRSP US Total Market Index		12.1	26.0	8.4		07/2019
Excess		0.0	0.1	0.0		
VANGUARD INSTITUTIONAL INDEX PLUS	1,916,139,064	11.7	26.3	10.0	15.7%	07/1999
S&P 500		11.7	26.3	10.0	15.7	07/1999
Excess		-0.0	-0.0	-0.0	-0.0	
VANGUARD DIVIDEND GROWTH	988,155,929	10.4	8.1	8.7	13.5	10/2016
VANGUARD DIVIDEND GROWTH INDEX		10.3	14.5	8.6	13.9	10/2016
Excess		0.1	-6.4	0.1	-0.4	
Mid Cap US Equity						
VANGUARD MID CAP INDEX	761,445,320	12.3	16.0	5.5	12.7	01/2004
CRSP US Mid Cap Index		12.3	16.0	5.5	12.7	01/2004
Excess		0.0	0.0	0.0	0.0	
Small Cap US Equity						
T. ROWE PRICE SMALL-CAP STOCK	897,030,129	14.6	17.6	1.7	12.0	04/2000
Russell 2000		14.0	16.9	2.2	10.0	04/2000
Excess		0.6	0.6	-0.5	2.0	
International Equity						
FIDELITY DIVERSIFIED INTERNATIONAL	345,145,350	10.2	17.7	0.7	9.7	07/1999
MSCI EAFE FREE (NET)		10.4	18.2	4.0	8.2	07/1999
Excess		-0.2	-0.5	-3.4	1.5	
VANGUARD TOTAL INTERNATIONAL STOCK INDEX	377,438,715	10.0	15.5	1.8	7.4	07/2011
FTSE Global All Cap ex US Index Net		9.7	15.6	1.7	7.3	07/2011
Excess		0.2	-0.0	0.1	0.1	





Mutual Funds

BALANCED		Ending Market Value	Last Qtr	1 Year	3 Year	5 Year	Option Since
Vanguard Balanced Index (passive) (4)	Balanced Funds						
A fund that passively invests in a mix of domestic stocks and bonds. The fund is	VANGUARD BALANCED INDEX	\$1,409,870,209	10.0%	17.6%	3.7%	9.6%	12/2003
expected to track a weighted benchmark of 60% CRSP US Total Market Index/40% Bloomberg U.S. Aggregate.	Vanguard Balanced Fund Benchmark		10.0	17.5	3.8	9.7	12/2003
	Excess		0.0	0.0	-0.1	-0.1	
FIXED INCOME							
Dodge & Cox Income Fund (active)	Fixed Income						
A fund that invests primarily in investment grade securities in the U.S. bond	DODGE & COX INCOME	303,607,707	7.3	7.7	-1.7	2.7	07/1999
market which is expected to outperform the Bloomberg U.S. Aggregate, over	Bloomberg U.S. Aggregate		6.8	5.5	-3.3	1.1	07/1999
time.	Excess		0.5	2.2	1.7	1.6	
Vanguard Total Bond Market Index (passive) A fund that passively invests in a broad, market weighted bond index that is	VANGUARD TOTAL BOND MARKET INDEX	328,651,632	6.7	5.7	-3.3	1.1	12/2003
expected to track the Bloomberg U.S. Aggregate.	Bloomberg U.S. Aggregate		6.8	5.5	-3.3	1.1	12/2003
	Excess		-0.1	0.2	-0.0	0.0	
Money Market Fund (5)							
A fund that invests in short-term debt instruments which is expected to	MONEY MARKET FUND	770,256,101	1.4	5.4	2.5	2.1	07/1986
outperform the return on 3 Month T-Bills.	ICE BofA US 3-Month Treasury Bill		1.4	5.0	2.2	1.9	07/1986
STABLE VALUE	Excess		0.1	0.4	0.3	0.2	
Stable Value Fund (5)	Otable Value						
A portfolio composed of stable value instruments which are primarily	Stable Value						
investment contracts and security backed contracts. The fund is expected to	STABLE VALUE FUND	1,607,461,214	0.8	2.9	2.3	2.4	11/1994
outperform the return of the 3 year Constant Maturity Treasury $+45$ basis points,	Fixed Interest Blended Benchmark		1.2	4.8	3.0	2.5	11/1994

Excess



-0.5

-1.9

-0.8

-0.1

over time.

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

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

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

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

SBI MINNESOTA STATE BOARD OF INVESTMENT

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 decison by investing their assets in the fund that is closest to their anticipated retirement date.

	_		
Tarnot	Data	Retirement Funds	

raiget Date Netherik	Ending Market Value	Last Qtr	1 Year	3 Year	5 Year	Option Since		Ending Market Value	Last Qtr	1 Year	3 Year	5 Year	Option Since
SSgA													
2025 FUND	\$213,755,675	7.0%	10.4%	2.1%	6.7%	07/2011	2050 FUND	\$140,248,899	11.2%	18.6%	3.2%	10.4%	07/2011
2025 FUND BENCHMARK		7.0%	10.4%	2.1%	6.7%	07/2011	2050 FUND BENCHMARK		11.2%	18.6%	3.2%	10.4%	07/2011
Excess		-0.0%	0.0%	-0.0%	-0.0%		Excess		-0.0%	0.1%	0.0%	0.0%	
2030 FUND	\$235,337,238	8.2%	12.9%	2.2%	8.0%	07/2011	2055 FUND	\$94,318,277	11.5%	19.4%	3.4%	10.6%	07/2011
2030 FUND BENCHMARK		8.3%	12.9%	2.2%	8.0%	07/2011	2055 FUND BENCHMARK		11.5%	19.4%	3.4%	10.6%	07/2011
Excess		-0.0%	0.0%	-0.0%	0.0%		Excess		-0.0%	0.1%	0.0%	-0.0%	
2035 FUND	\$194,431,387	9.8%	15.8%	2.3%	8.9%	07/2011	2060 FUND	\$71,556,519	11.5%	19.5%	3.5%	10.6%	07/2011
2035 FUND BENCHMARK		9.9%	15.7%	2.3%	8.9%	07/2011	2060 FUND BENCHMARK		11.5%	19.4%	3.4%	10.7%	07/2011
Excess		-0.0%	0.0%	-0.0%	0.0%		Excess		-0.0%	0.1%	0.0%	-0.0%	
2040 FUND	\$161,202,183	10.6%	16.9%	2.6%	9.4%	07/2011	2065 FUND	\$14,627,666	11.5%	19.5%	3.5%		04/2020
2040 FUND BENCHMARK		10.6%	16.9%	2.6%	9.4%	07/2011	2065 FUND BENCHMARK		11.5%	19.4%	3.4%		04/2020
Excess		-0.0%	0.1%	-0.0%	0.0%		Excess		-0.0%	0.1%	0.0%		
2045 FUND	\$155,728,176	10.9%	17.8%	2.9%	9.9%	07/2011	INCOME FUND	\$208,927,497	6.7%	9.7%	1.8%	5.5%	07/2011
2045 FUND BENCHMARK		10.9%	17.8%	2.9%	9.9%	07/2011	INCOME FUND BENCHMARK		6.7%	9.7%	1.8%	5.5%	07/2011
Excess		-0.0%	0.1%	-0.0%	-0.0%		Excess		-0.0%	0.0%	-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.

<u>RISK BASED ALLOCATIONS</u> - 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, 2023

Total = \$1,890 Million

Fund Name	Ending Market	3 Months	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
2040/2041 Enrollment Option	\$7,014,979	10.76%					11.20%	5/12/2023
2040-2041 Custom Benchmark		10.62%					11.87%	
2038/2039 Enrollment Option	\$35,272,505	10.64%	18.05%				1.55%	6/11/2021
2038-2039 Custom Benchmark		10.48%	18.37%				1.64%	
2036/2037 Enrollment Option	\$86,736,590	10.40%	17.41%	4.64%			7.80%	10/28/2019
2036-2037 Custom Benchmark		10.25%	17.75%	4.83%			7.74%	
2034/2035 Enrollment Option	\$69,634,914	10.12%	16.80%	4.36%			7.42%	10/28/2019
2034-2035 Custom Benchmark		10.00%	17.09%	4.51%			7.36%	
2032/2033 Enrollment Option	\$75,037,348	9.59%	15.61%	3.85%			6.98%	10/28/2019
2032-2033 Custom Benchmark		9.53%	15.95%	4.05%			6.93%	
2030/2031 Enrollment Option	\$84,981,233	8.69%	13.78%	3.17%			6.24%	10/28/2019
2030-2031 Custom Benchmark		8.67%	14.23%	3.41%			6.22%	
2028/2029 Enrollment Option	\$103,901,644	7.71%	11.88%	2.48%			5.34%	10/28/2019
2028-2029 Custom Benchmark		7.83%	12.59%	2.76%			5.34%	
2026/2027 Enrollment Option	\$135,432,531	6.55%	9.96%	1.81%			4.52%	10/28/2019
2026-2027 Custom Benchmark		6.69%	10.88%	2.16%			4.58%	
2024/2025 Enrollment Option	\$174,993,111	4.57%	7.25%	1.32%			3.78%	10/28/2019
2024-2025 Custom Benchmark		4.99%	8.98%	1.88%			3.96%	
In School Option	\$312,002,866	3.88%	6.04%	1.37%			2.83%	10/28/2019
In School Custom Benchmark		4.35%	7.89%	1.72%			2.72%	





MINNESOTA COLLEGE SAVINGS PLAN Performance Statistics for the Period Ending: December 31, 2023

Fund Name	Ending Market	3 Months	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
U.S. and International Equity Option	\$291,573,430	12.00%	21.52%	6.50%	12.12%	8.87%	7.56%	10/1/2001
BB: U.S. and International Equity Option		11.78%	21.90%	6.75%	12.08%	8.93%	8.22%	
Moderate Allocation Option	\$101,769,522	9.53%	15.17%	3.28%	8.30%	6.33%	5.64%	8/2/2007
BB: Moderate Allocation Option		9.46%	15.52%	3.50%	8.31%	6.46%	6.12%	
100% Fixed-Income Option	\$17,890,112	5.87%	6.02%	-1.80%	1.92%	2.02%	2.86%	8/16/2007
BB: 100% Fixed-Income Option		5.95%	6.19%	-1.66%	2.14%	2.31%	3.38%	
International Equity Index Option	\$10,761,266	9.95%	16.24%	2.60%	7.44%	3.99%	4.84%	6/18/2013
BB: International Equity Index Option		9.91%	16.56%	2.22%	7.35%	4.04%	4.92%	
Money Market Option	\$23,355,952	1.33%	4.95%	2.10%	1.73%	1.09%	0.84%	11/1/2007
BB: Money Market Option		1.27%	4.76%	2.02%	1.62%	1.01%	0.77%	
Principal Plus Interest Option	\$101,404,548	0.72%	2.08%	1.58%	1.73%	1.58%	2.33%	10/10/2001
Citigroup 3-Month U.S. Treasury Bill		1.41%	5.26%	2.25%	1.91%	1.26%	1.43%	
Aggressive Allocation Option	\$97,961,999	10.75%	18.33%	4.92%	10.19%		7.60%	8/12/2014
BB: Aggressive Allocation Option		10.62%	18.70%	5.15%	10.23%		7.59%	
Conservative Allocation Option	\$16,847,638	6.39%	9.49%	1.66%	5.10%		3.90%	8/18/2014
BB: Conservative Allocation Option		6.58%	10.65%	2.02%	5.29%		4.04%	
Equity and Interest Accumulation Option	\$9,544,631	6.29%	13.56%	5.22%	8.41%		6.53%	8/18/2014
BB: Equity and Interest Accumulation Option		6.74%	15.49%	5.75%	8.84%		6.69%	
U.S. Large Cap Equity Option	\$130,769,027	11.66%	26.12%	9.85%	15.52%		11.98%	8/12/2014
BB: U.S. Large Cap Equity Option		11.69%	26.29%	10.00%	15.69%		12.10%	
Social Choice Equity Option	\$2,228,875	12.70%	22.41%				4.14%	6/11/2021
BB: Social Choice Equity Option		12.07%	25.96%				4.66%	
Matching Grant	\$1,131,978	0.72%	2.08%	1.58%	1.73%	1.58%	2.33%	3/22/2002
Citigroup 3-Month U.S. Treasury Bill		1.41%	5.26%	2.25%	1.91%	1.26%	1.43%	

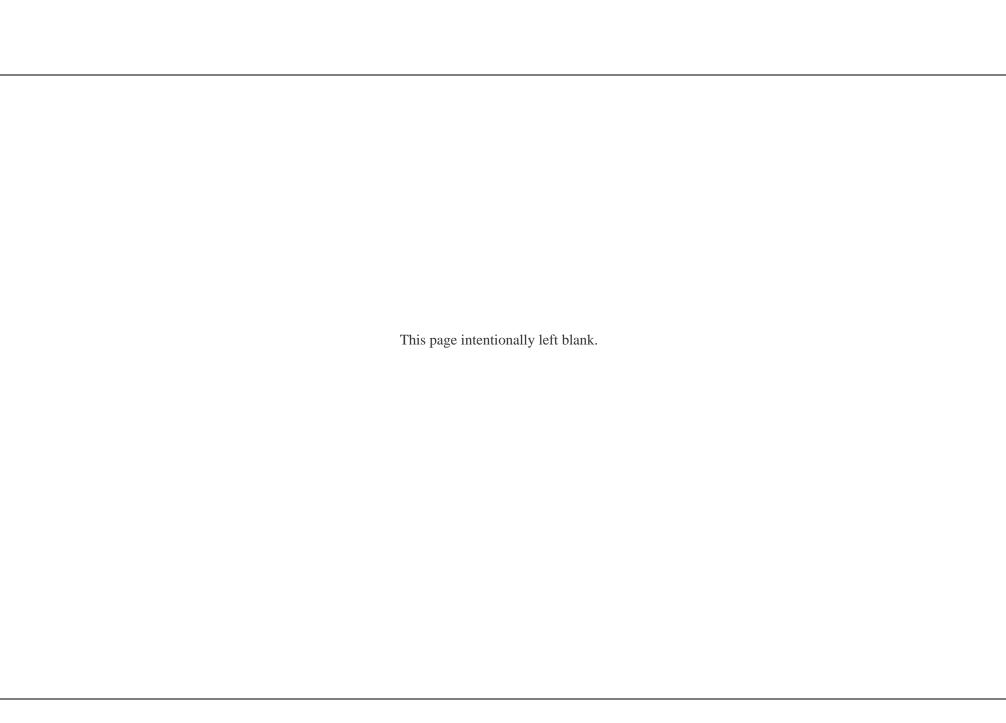


Performance as of 12/31/23

Total Market Value: \$41,754,202

Fund Name Aggressive Option ABLE Aggressive Custom Benchmark Variance	<u>Market Value</u> \$3,211,052	<u>% of Plan</u> 7.69%	1 Month 6.27 6.27 (0.00)	3 Months 11.72 11.75 (0.03)	YTD 19.12 19.45 (0.33)	1 Year 19.12 19.45 (0.33)	3 Year 4.03 4.25 (0.22)	<u>5 Year</u> 10.13 10.46 (0.33)	<u>10 Year</u>	Inception 8.38 8.78 (0.40)	<u>Date</u> 12/15/16
Moderately Aggressive Option ABLE Moderately Aggressive Custom Benchmark Variance	\$3,614,603	8.66%	5.69 5.72 (0.03)	10.57 10.66 (0.09)	16.74 17.15 (0.41)	16.74 17.15 (0.41)	3.31 3.55 (0.24)	8.91 9.21 (0.30)		7.40 7.78 (0.38)	12/15/16
Growth Option ABLE Growth Custom Benchmark Variance	\$5,196,677	12.45%	4.90 4.89 0.01	9.14 9.21 (0.07)	14.32 14.67 (0.35)	14.32 14.67 (0.35)	2.55 2.77 (0.22)	7.59 7.87 (0.28)		6.33 6.69 (0.36)	12/15/16
Moderate Option ABLE Moderate Custom Benchmark Variance	\$4,908,069	11.75%	4.22 4.23 (0.01)	7.90 8.00 (0.10)	11.94 12.32 (0.38)	11.94 12.32 (0.38)	1.76 1.97 (0.21)	6.21 6.50 (0.29)		5.25 5.58 (0.33)	12/15/16
Moderately Conservative Option ABLE Moderately Conservative Custom Benchmark Variance	\$4,551,399	10.90%	3.11 3.13 (0.02)	6.00 6.09 (0.09)	9.50 10.04 (0.54)	9.50 10.04 (0.54)	1.69 1.92 (0.23)	4.80 5.07 (0.27)		4.09 4.39 (0.30)	12/15/16
Conservative Option ABLE Conservative Custom Benchmark Variance	\$7,580,951	18.16%	1.55 1.63 (0.08)	3.23 3.41 (0.18)	6.10 6.89 (0.79)	6.10 6.89 (0.79)	1.42 1.75 (0.33)	2.75 3.03 (0.28)		2.41 2.68 (0.27)	12/15/16
Checking Account Option	\$12,691,450	30.40%									03/30/17







Non-Retirement

December 31, 2023



Quarterly Report



Non-Retirement Funds

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

- The Minnesota Workers Compensation Assigned Risk Plan provides worker compensation insurance for companies unable to obtain coverage through private carriers.
- 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 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 trusteed 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.





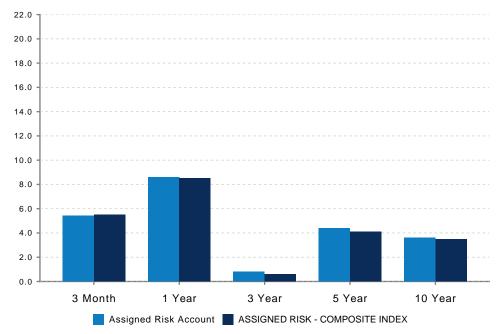
Non-Retirement

Assigned Risk Plan

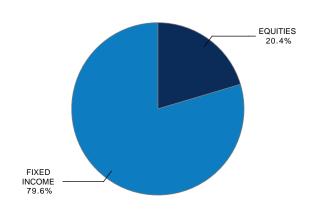
The Assigned Risk plan has two investment objectives: to minimize the mismatch between assets and liabilities and to provide sufficient liquidity for the payment of ongoing claims and operating expenses.

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.



.6%
.6%
.3%
.5%
.1%
.0%
.2%



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





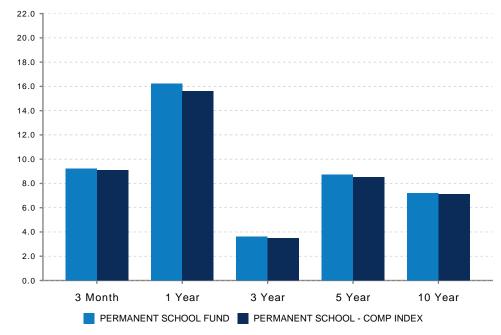
Non-Retirement

Permanent School Fund

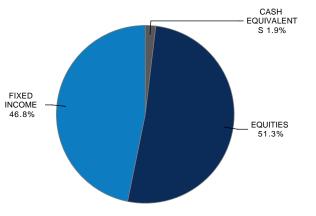
The investment objective of the Permanent School Fund is to produce a growing level of spendable income, within the constraints of maintaining adequate portfolio quality and liquidity. The income from the portfolio is transferred to the school endowment fund and distributed to Minnesota's public schools.

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

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



	Ending Market Value	Last Qtr	1 Year	3 Year	5 Year	10 Year
PERMANENT SCHOOL FUND	\$1,995,210,457	9.2%	16.2%	3.6%	8.7%	7.2%
CASH EQUIVALENTS	38,157,162	1.4	5.3	2.3	2.0	1.3
EQUITIES	1,022,645,150	11.6	26.2	10.0	15.7	12.0
FIXED INCOME	934,408,145	7.0	6.3	-3.3	1.4	2.1
PERMANENT SCHOOL - COMP INDEX		9.1	15.6	3.5	8.5	7.1
Excess		0.1	0.6	0.1	0.1	0.1
S&P 500		11.7	26.3	10.0	15.7	12.0
Bloomberg U.S. Aggregate		6.8	5.5	-3.3	1.1	1.8



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



SBI MINNESOTA STATE BOARD OF INVESTMENT

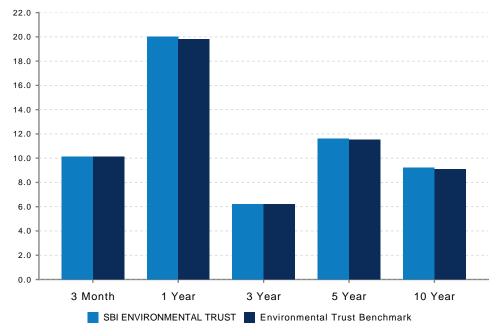
Non-Retirement

Environmental Trust Fund

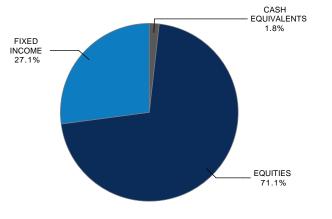
The objective of the Environmental Trust Fund is to increase the market value of the Fund over time in order to increase the annual amount made available for spending within the constraints of maintaining adequate portfolio quality and liquidity.

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	\$1,714,230,977	10.1%	20.0%	6.2%	11.6%	9.2%
CASH EQUIVALENTS	31,507,498	1.4	5.3	2.3	2.0	1.3
EQUITIES	1,218,771,198	11.6	26.2	10.0	15.7	12.0
FIXED INCOME	463,952,280	7.0	6.3	-3.3	1.4	2.1
Environmental Trust Benchmark		10.1	19.8	6.2	11.5	9.1
Excess		0.0	0.2	0.0	0.2	0.1
S&P 500		11.7	26.3	10.0	15.7	12.0
Bloomberg U.S. Aggregate		6.8	5.5	-3.3	1.1	1.8



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



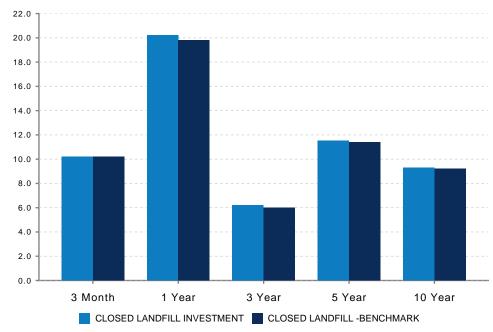


Non-Retirement

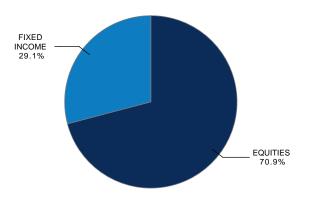
Closed Landfill Investment Fund

The investment objective of the Closed Landfill Investment Fund is to increase the market value of the Fund and to reduce volatility to meet future expenditures. By statute, the assets of the Fund were 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	\$136,357,799	10.2%	20.2%	6.2%	11.5%	9.3%
EQUITIES	96,662,769	11.6	26.2	10.0	15.7	12.0
FIXED INCOME	39,695,030	7.0	6.3	-3.3	1.4	
CLOSED LANDFILL -BENCHMARK		10.2	19.8	6.0	11.4	9.2
Excess		0.0	0.4	0.2	0.1	0.1
S&P 500		11.7	26.3	10.0	15.7	12.0
Bloomberg U.S. Aggregate		6.8	5.5	-3.3	1.1	1.8



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





	Ending Market Value	Last Qtr	Fiscal YTD	1 Year	3 Year	5 Year	10 Year	Since Inception	Inception Date
NON RETIREMENT EQUITY INDEX - MELLON	3,294,929,831	11.7	8.0	26.3	10.0	15.7	12.0	10.2	07/1993
S&P 500 INDEX (DAILY)		11.7	8.0	26.3	10.0	15.7	12.0	10.1	07/1993
Excess		-0.0	0.0	-0.0	-0.0	-0.0	0.0	0.1	
NON RETIREMENT FIXED INCOME - PRUDENTIAL	1,627,972,799	7.0	3.8	6.3	-3.3	1.4	2.1	5.1	07/1994
Bloomberg U.S. Aggregate		6.8	3.4	5.5	-3.3	1.1	1.8	4.6	07/1994
Excess		0.2	0.5	0.8	0.0	0.3	0.3	0.5	
RBC	216,925,172	4.0	3.1	4.5	-1.7	1.1	1.3	4.3	07/1991
RBC Custom Benchmark		4.0	3.2	4.3	-1.8	1.0	1.2	4.3	07/1991
Excess		-0.0	-0.0	0.2	0.1	0.1	0.1	-0.1	
MET COUNCIL OPEB BOND POOL	119,628,938	3.2	3.0	4.1	-0.7	1.0			02/2009
NON RETIREMENT CASH ACCOUNT	729,764,009	1.4	2.8	5.3	2.3	2.0		2.0	12/2017
ICE BofA US 3-Month Treasury Bill		1.4	2.7	5.0	2.2	1.9		1.9	12/2017
Excess		0.0	0.1	0.3	0.2	0.1		0.1	

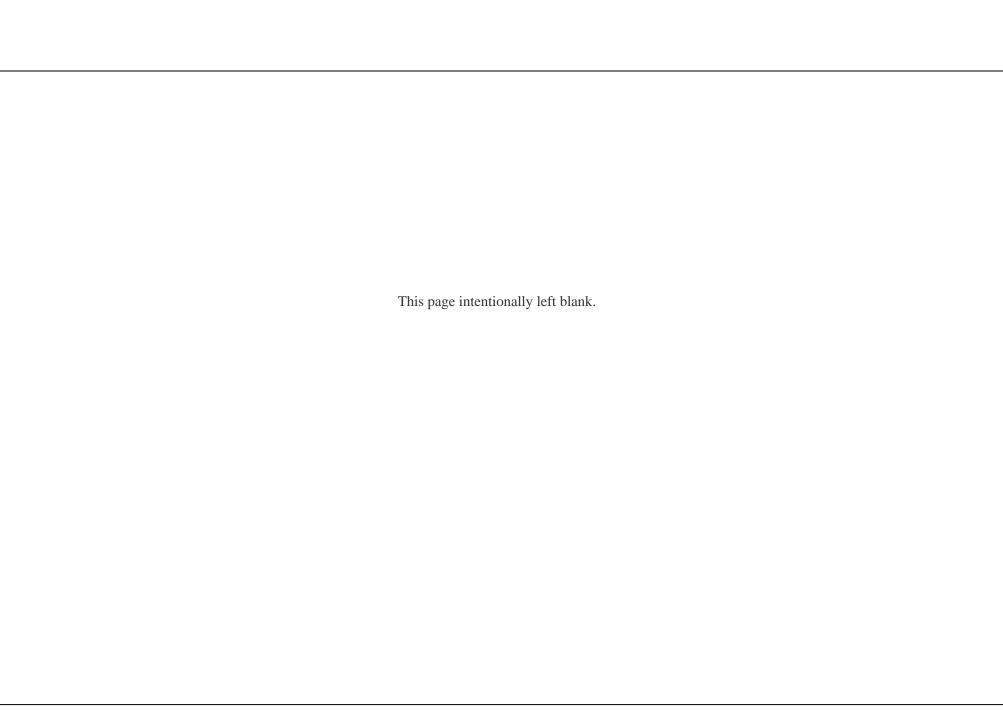
Note:

RBC is the manager for the fixed income portion of the Assigned Risk Account. RBC changed its name from Voyageur Asset Management on 1/1/2010. The current benchmark is the Bloomberg 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.







State Cash December 31, 2023





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.

	Ending Market Value	Last Qtr	1 Year	3 Year	5 Year	10 Year
Treasurer's Cash	26,851,099,428	1.6	5.4	1.8	1.8	1.2
iMoneyNet Money Fund Average-All Taxable		1.3	4.8	2.0	1.7	1.0

Other State Cash Accounts

Due to differing investment objectives, strategies, and time horizons, some State agencies' accounts are invested seperately. 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.

	Ending Market Value	Last Qtr	1 Year	3 Year	<u>5 Year</u>	10 Year
Debt Service	93,966,457	5.7	7.7	1.3	2.8	1.7
Housing Finance (1)	820,696,226	1.8	9.7			

1. Housing Finance performance will be shown with first full quarter of performance.





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.



SBI MINNESOTA STATE BOARD OF INVESTMENT

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 (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

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.

