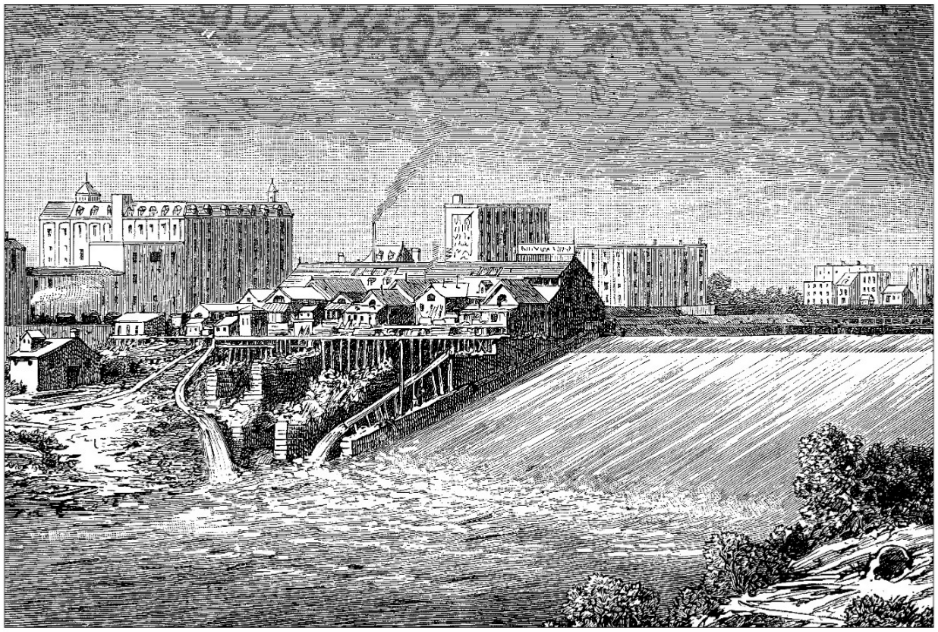
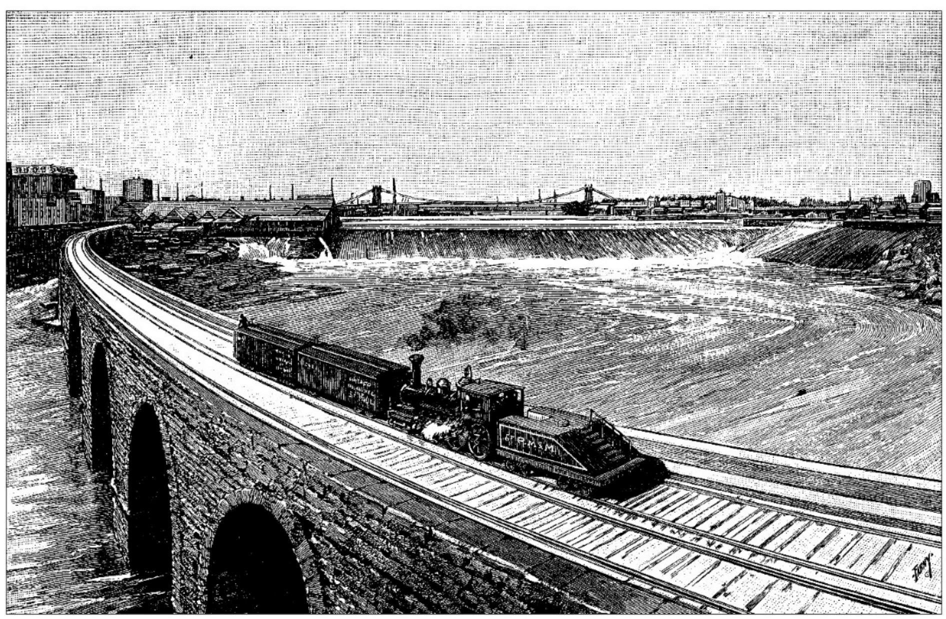


MINNESOTA STATE BOARD OF INVESTMENT

2017 Annual Report



Minnesota State Board of Investment
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E-mail: minn.sbi@state.mn.us | Website: http://mn.gov/sbi

2017 Annual Report

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This annual report can be accessed on our website at http://mn.gov/sbi

MINNESOTA STATE BOARD OF INVESTMENT

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December 2017

The Minnesota State Board of Investment (SBI) is pleased to present its report for the fiscal year ending June 30, 2017.

SBI Results for Fiscal Year 2017
In a positive economic environment, the Combined Funds returned 15.1% during the fiscal year 2017. Over the recent ten and 20 fiscal year time periods, the Combined Funds generated annualized returns of 6.2% and 7.2%, respectively (see **page 8**).

- For the fiscal year ending June 30, 2017, U.S. equity markets were buoyed by strong corporate earnings and a positive economic environment resulting in eight years of U.S. economic expansion since the global financial crisis of 2009. The U.S. equity markets returned 18.5% over the fiscal year.
- Despite heightened geopolitical risks and uncertainty in Europe, international equity markets were resilient, fueled by solid economic data and corporate earnings. International equity returned 20.5% for the year.
- U.S. bonds returned a -0.3%, for the fiscal year ending June 30, 2017, as interest rates rose across the yield curve and bond prices fell.

On June 30, 2017, assets under management totaled $89.5 billion. This total is the aggregate of pension funds, trust funds, and cash accounts, each with different investment objectives. In establishing a comprehensive management program, the Board has developed an investment strategy for each fund which reflects its unique requirements.

Investment Beliefs
In September 2017, the State Board of Investment formally adopted a set of Investment Beliefs that reflect SBI's investment values, acknowledge its role in supporting the State's broader pension systems, and guide the development of sound investing policies. While the Beliefs are directed to the Combined Funds, the SBI applies the same approach, as appropriate, to other funds under the SBI's responsibility. The Investment Beliefs appears after this letter.

The primary purpose of this annual report is to communicate the investment goals, policies and performance of each fund managed by the Board. Through the investment programs presented in this report, the Minnesota State Board of Investment seeks to enhance the management and performance of the assets under its control.

Sincerely,

Mansco Perry III

Mansco Perry III
Executive Director and Chief Investment Officer

In September 2017, the State Board of Investment adopted a set of Investment Beliefs for managing the assets of the Combined Funds (those funds utilized to support the defined benefit plans of the State's employees). The primary purpose of these Beliefs is to guide the SBI toward sound investing principles related to investing on behalf of the Combined Funds. In this respect, the Beliefs help provide context for SBI's actions, reflect SBI's investment values, and acknowledge SBI's role in supporting the State's broader retirement systems.

The SBI is a long-term investor whose primary mission is to maintain the viability of the retirement systems it supports.

When determining an appropriate level of risk that the systems' assets should bear the SBI must reflect the nature of those systems' liabilities and funding policy.

The SBI's strategic allocation policy is the primary determinant of (i) the asset portfolio's long-term investment return and (ii) asset portfolio's risk.

While the SBI can sacrifice some short-term liquidity to pursue a greater long-term return, the investment portfolio's net cash flows and ability to pay benefits on a year-by-year basis are key risk considerations.

Diversification improves the risk-adjusted return profile of the SBI investment portfolio.

Diversification of the SBI investment portfolio takes place across several critical dimensions, such as allocation across global regions and country markets (e.g., U.S. versus Europe, Asia, emerging markets, etc.), allocation among different types of assets (equities, bonds, real estate, etc.), spreading assets across various sectors and industries (e.g., technology, financials, consumer-oriented, etc.), and weighting of different risk factor premiums (e.g., value vs. growth, small companies vs. big companies, carry, illiquidity, etc.). If the correlation (i.e., relationship) among the returns generated by these factors is less than perfect (i.e., less than 1.0), then diversification is beneficial.

There are long-term benefits to SBI managing investment costs.

The equity risk premium is significantly positive over a long-term investment horizon although it can vary over time.

The equity risk premium is also pervasive across several asset classes and its overall exposure should be managed accordingly.

Private market investments have an illiquidity premium that the SBI can capture.

This risk premium can increase the portfolio's long-term compound return and help diversify the portfolio's risk.

It is extremely challenging for a large institutional investor to add significant value over market-representative benchmarks, particularly in the highly-competitive public global equity markets.

Passive management should be utilized when there is low confidence that active management can add value. Active management can have potential to add value where information processing is difficult and challenging, allowing for market inefficiencies that are potentially exploitable.

The SBI benefits significantly when roles and levels of authority are clearly defined and followed.

The role of the members of the State Board of Investment (Board) is to establish investment policies that are in compliance with state statute and guide the ongoing management of the funds. The Board delegates implementation of that policy to the Executive Director/CIO, and exercises oversight with respect to the Executive Director/CIO's implementation activities and the portfolio's active risk level in the context of the portfolio's strategic allocation policy. The Board also ensures adequate resources are available to the SBI staff to perform their work;

The Investment Advisory Council (IAC) key role is advising the Board and Executive Director/CIO on general policy matters and methods to enhance the management of the investment portfolio;

The Executive Director's/CIO's key role is implementing SBI investment policies and setting the portfolio's active risk level in a prudent manner to achieve value-added over policy benchmarks.

Utilizing engagement initiatives to address economic, social, and governance-related (ESG) issues can lead to positive portfolio and governance outcomes.

In addition to specific engagement strategies the SBI might apply, proxy rights attached to shareholder interests in public companies are also "plan assets" of the SBI and represent a key mechanism for expressing SBI's positions relating to specific ESG issues. By taking a leadership role in promoting responsible corporate governance through the proxy voting process, SBI can contribute significantly to implementing ESG best practices which should, in turn, add long-term value to SBI's investments.

Approved by State Board of Investment

Date: September 12, 2017

Governor Mark Dayton, Chair
State Auditor Rebecca Otto
Secretary of State Steve Simon
State Attorney General Lori Swanson

Investment Advisory Council

The Legislature has established a seventeen member Investment Advisory Council (IAC) to advise the Board and its staff on investment-related matters.

The IAC fulfills its statutory duty to the State Board of Investment (SBI) by providing advice and independent due diligence review of the investment policy and implementation recommendations that guide the SBI's investment of assets.

The Board appoints ten members from the public experienced in finance and investment. These members traditionally have come from the Minneapolis and St. Paul investment community.

The Commissioner of Minnesota Management & Budget and the Executive Directors of the three statewide retirement systems are permanent members of the Council.

Two active employee representatives and one retiree representative are appointed to the Council by the Governor.

All proposed investment policies are reviewed by the IAC before they are presented to the Board for action.

Public Members

Gary Martin, Chair
Chief Investment Officer
Macalester College

Kim Faust, Vice Chair
Vice President and Treasurer
Fairview Health Services

Kerry Brick
Manager, Pension Investments
Cargill, Inc.

Dennis Duerst
Director, Benefit Funds Investment
3M Company

Wei Huang
Chief Investment Officer
The Saint Paul & Minnesota
Community Foundations

Susanna Gibbons
Program Director, Carlson
Fixed Income Fund
Carlson School of Management

Morris Goodwin, Jr.
Sr. Vice President and CFO
American Public Media Group

Malcolm W. McDonald
Director & Corporate Secretary
(Retired)
Space Center, Inc.

Carol Peterfeso
Chief Treasury and Investment
Officer
University of St. Thomas

Shawn Wischmeier
Chief Investment Officer
Margaret A. Cargill Philanthropies

Permanent Members

Doug Anderson
Executive Director
Public Employees Retirement
Association

Erin Leonard
Executive Director
MN State Retirement System

Myron Frans
Commissioner
MN Management and Budget

Jay Stoffel
Executive Director
Teachers Retirement Association

Employee and Retirement Representative

Denise Anderson
Governor's Appointee
Active Employee Representative

Peggy Ingison
Governor's Appointee
Active Employee Representative

As of December 2017

Staff, Consultants & Custodians

Mansco Perry III Executive Director and Chief Investment Officer
Charlene Olson Executive Assistant

Senior Leadership Team

LeaAnn M. Stagg
Assistant Executive Director and Chief Operating Officer

Paul T. Anderson
Director, Investment Administration

Andrew Krech
Director, Private Markets

Michael J. Menssen
Director, Debt Management

John Mulé
Manager, Legal & Legislative Policy

Investment Staff

Patricia Ammann
Investment Officer

Nathan Blumenshine
Investment Officer

Cassandra Boll
Investment Officer

Tammy Brusehaver
Investment Officer

Stephanie Gleeson
Investment Officer

Aaron D. Griga
Investment Officer

Steven P. Kuettel
Investment Officer

Ryan O. Hill
Investment Officer

Jonathan Stacy
Investment Officer

Administrative Staff

Kailee Anderson
Accounting Officer

Shirley Baribeau
Controller

Julie Grill
Accounting Officer, Intermediate

Kathy Leisz
Information Technology Specialist 3

Melissa Mader
Office Administrative Specialist, Intermediate

William J. Nicol
Investment Accounting Specialist

Kelly Nordstrom
Office Administrative Specialist

Iryna Shafir
Compliance Analyst

Consultants

General Consultant
Aon Hewitt Investment Consulting, Inc.
Chicago, Illinois

Special Projects Consultant
Pension Consulting Alliance
Portland, Oregon

Custodian Banks

Retirement and Trust Funds
State Street Corporation
Boston, Massachusetts

State Cash Accounts
Wells Fargo Bank, National Association
St. Paul, Minnesota

As of December 2017

Introduction

The Minnesota State Board of Investment is responsible for the investment management of various retirement funds, trust funds and cash accounts. On June 30, 2017, the market value of all assets was $89.5 billion.

Constitutional and Statutory Authority

The Minnesota State Board of Investment (SBI) is established by Article XI of the Minnesota Constitution to invest all state funds. Its membership as specified in the Constitution is comprised of the Governor (who is designated as chair of the Board), State Auditor, Secretary of State and State Attorney General.

All investments undertaken by the SBI are governed by the prudent person rule and other standards codified in *Minnesota Statutes*, Chapter 11A and Chapter 356A.

Prudent Person Rule

The prudent person rule, as codified in *Minnesota Statutes,* Section 11A.09, requires all members of the Board, Investment Advisory Council, and SBI staff to *"...act in good faith and ...exercise that degree of judgment and care, under circumstances then prevailing, which persons of prudence, discretion, and intelligence exercise in the management of their own affairs, not for speculation, but for investment, considering the probable safety of their capital as well as the probable income to be derived therefrom." Minnesota Statutes,* Section 356A.04 contains similar codification of the prudent person rule applicable to the investment of pension fund assets.

Authorized Investments

In addition to the prudent person rule, *Minnesota Statutes,* Section 11A.24 contains a specific list of asset classes available for investment including common stocks, bonds, short term securities, real estate, private equity, and resource funds. The section prescribes the maximum percentage of fund assets that may be invested in various asset classes and contains specific restrictions to ensure the quality of the investments.

Investment Policies

Within the requirements defined by state law, the State Board of Investment, in conjunction with SBI staff and the Investment Advisory Council, establishes investment policies for all funds under its control. These investment policies are tailored to the particular needs of each fund and specify investment objectives, risk tolerance, asset allocation, investment management structure and specific performance standards.

The Board, its staff, and the Investment Advisory Council have conducted detailed analyses that address investment objectives, asset allocation policy and management structure of each of the funds under the SBI's control. The studies guide the on-going management of these funds and are updated periodically.

Important Notes

Readers should note that the SBI's returns in this report are shown ***after*** transaction costs and fees are deducted. Performance is computed and reported after all applicable charges to assure that the Board's focus is on true net returns.

Due to the large number of individual securities owned by the funds managed by the SBI, this report does not include asset listings. **A complete list of securities is available on the SBI's website at http://mn.gov/sbi**. Asset listings are updated semi-annually as the new data becomes available.

			Market Value June 30, 2017*
Retirement Funds			*$72.7 billion*

Combined Funds — *$64.1 billion*

The Combined Funds represent the assets for both the active and retired public employees in eight statewide retirement plans:

Teachers Retirement Fund (TRA)	$21.2 billion
Public Employees Retirement Association (PERA)	
General Employees Retirement Fund	20.1 billion
Police and Fire Fund	7.9 billion
Correctional Fund	602 million
Minnesota State Retirement System (MSRS)**	
State Employees Retirement Fund	12.4 billion
Correctional Employees Fund	1.0 billion
Highway Patrol Retirement Fund	689 million
Judges Retirement Fund	184 million

Supplemental Investment Fund (SIF) — *$2.1 billion*

The Supplemental Investment Fund includes assets of the unclassified state employees retirement plan, a defined benefit plan, other defined contribution retirement plans, a healthcare savings plan, and various retirement programs for local firefighters. Participating plans use one or more of the eight accounts which have a different investment objectives designed to meet a wide range of needs and objectives.

Note: There are two investment options from the Supplemental Investment Fund (SIF) program that are also offered in the $6.4 billion State Deferred Compensation Plan. To avoid double counting these assets, the $1.4 billion of State Deferred Compensation dollars invested in these SIF portfolios are not included in the amounts below.

Balanced Fund	stocks and bonds	$403 million
U.S. Stock Index Fund	passively managed stocks	559 million
U.S. Stock Actively Managed Fund	actively managed stocks	229 million
Bond Fund	actively managed bonds	155 million
Broad International Stock Fund	non-U.S. stocks	179 million
Stable Value Fund	stable value investments	214 million
Money Market Fund	short-term debt securities	314 million
Volunteer Firefighter Account	stocks and bonds	75 million

State Deferred Compensation Plan — *$6.4 billion*

The State Deferred Compensation Plan provides public employees with a tax sheltered retirement savings program that is a supplemental plan to their primary retirement plan.

Vanguard Institutional Index Plus	$1,146 million
Vanguard Dividend Growth	568 million
Vanguard Mid Cap Index	502 million
T. Rowe Price Small-Cap Stock	658 million
Fidelity Diversified International	284 million
Vanguard Total International Stock Index	180 million
Vanguard Balanced Index	748 million
Dodge & Cox	227 million
Vanguard Total Bond Market Index	205 million
SIF Money Market	70 million
SIF Fixed Interest	1,351 million
Target Date Retirement Funds	488 million

		Market Value June 30, 2017*
Non-Retirement Funds (including College Savings Plan and State Cash Accounts)		*$16.8 billion*
Assigned Risk Plan The Minnesota Workers Compensation Assigned Risk Plan provides worker compensation insurance for companies unable to obtain coverage through private carriers.	$323 million	
Closed Landfill Investment Fund 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.	$81 million	
Environmental Trust Fund 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.	$1.0 billion	
Other Postemployment Benefits Accounts (OPEBs) These accounts are the assets set aside by local units of government for the payment of retiree benefits trusteed by the Public Employees Retirement Association.	$575 million	
Permanent School Fund The Permanent School Fund is a trust established for the benefit of Minnesota public schools.	$1.3 billion	
Miscellaneous Trust Accounts	$206 million	
Minnesota College Savings Plan The Minnesota College Savings Plan is an education savings plan designed to help families set aside funds for future college costs. It is established under the provisions of the Internal Revenue Code Section 529, which authorized these types of savings plans to help families meet the costs of qualified colleges nationwide.	$1.3 billion	
State Cash Accounts These accounts are the cash balances of state government funds including the General Fund, transportation funds, and miscellaneous cash accounts. Assets are invested through the Invested Treasurers Cash Pool in high quality, liquid, debt securities.	$11.8 billion	
Miscellaneous State Accounts	$145 million	
Total Assets Invested by SBI		*$89.5 billion*

* Totals may not add due to rounding.

** The MSRS Legislative Plan is a closed plan that is funded by the General Fund on a "pay-as-you-go" basis.

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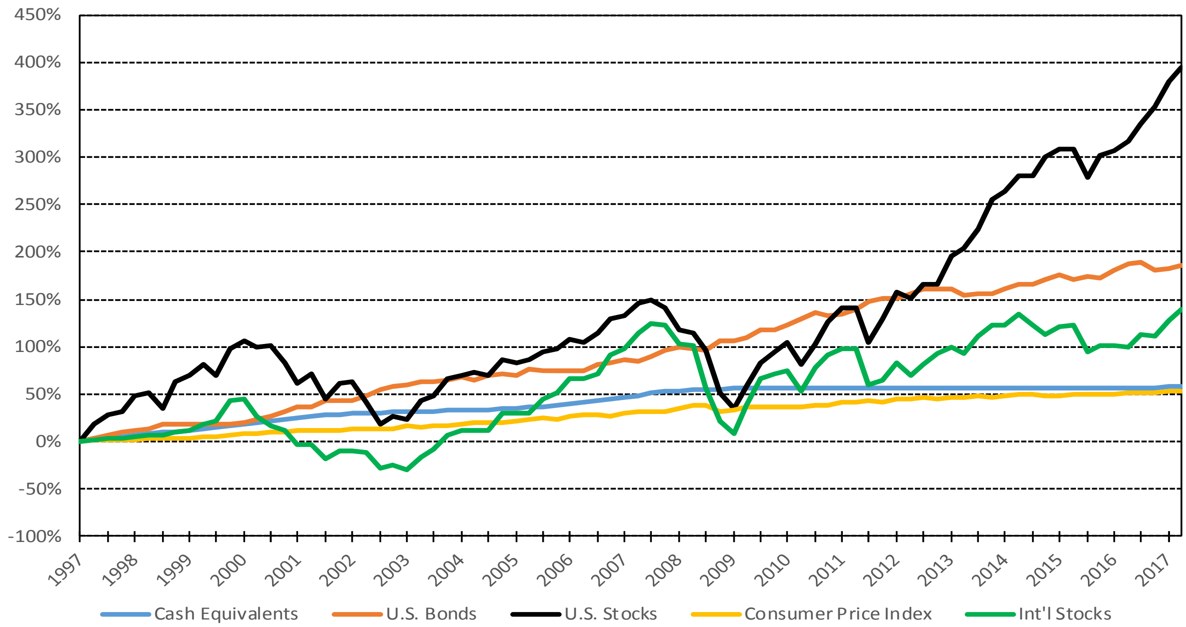
RETIREMENT PROGRAM

Figure 1.

PERFORMANCE OF CAPITAL MARKETS
Cumulative Returns



Periods Ending June 30, 2017

	1 Yr.	3 Yr.	5 Yr.	10 Yr.	20 Yr.	30 Yr.
Domestic Equity						
Russell 3000	18.5%	9.1%	14.6%	7.3%	7.4%	9.7%
Domestic Fixed Income						
Bloomberg Barclays U.S. Aggregate(1)	-0.3	2.5	2.2	4.5	5.2	6.4
3 month U.S. Treasury Bills	0.5	0.2	0.2	0.6	2.2	3.4
International Equity						
MSCI ACWI ex USA (net)	20.5	0.8	7.2	1.1	N/A	N/A
MSCI EAFE	20.3	1.1	8.7	1.0	4.3	5.9
MSCI Emerging Market Index	23.7	1.1	4.0	2.0	5.5	N/A
Inflation Measure						
Consumer Price Index CPI-U(2)	1.6	0.9	1.3	1.6	2.1	2.6

(1) Bloomberg Barclays U.S. Aggregate Bond Index. Includes governments, corporates and mortgages.

(2) Consumer Price Index (CPI) for all urban consumers, also known as CPI-U.

The Combined Funds represent the assets of both active and retired public employees who participate in the defined benefit plans of three statewide retirement systems: Teachers Retirement Association (TRA), Public Employees Retirement Association (PERA) and the Minnesota State Retirement System (MSRS). On June 30, 2017, the Combined Funds had a market value of $64.1 billion.

Background

The Combined Funds consist of the assets of active employees and retired members of the three statewide retirement systems that sponsor eight different funds. The SBI commingles the assets of these plans into the Combined Funds to capture investment efficiencies.

Figure 2 identifies the eight different retirement funds which comprise the Combined Funds.

Investment Objectives

One overriding responsibility of the State Board of Investment (SBI) with respect to the management of the Combined Funds is to ensure that sufficient funds are available to finance promised benefits.

Actuarial Assumed Return

Employee and employer contribution rates are specified in state law as a percentage of an employee's salary. The rates are set so that contributions plus expected investment earnings will cover the projected cost of promised pension benefits. The investment returns needed to meet these projected pension costs are set by statute. After a five year period where the 2012 Legislature lowered the TRA actuarial return assumption from 8.5% to 8%, its assumption returned to 8.5% as of July 1, 2017. MSRS and PERA have an actuarial assumed return of 8.0% on an annualized basis.

Time Horizon

In general, pension assets will accumulate in the Combined Funds for 30 to 40 years during an employee's years of active service. A typical retiree can be expected to draw benefits for an additional 15 to 20 years. This provides the Combined Funds with a long investment time horizon and permits the Board to take advantage of the long run return opportunities offered by common stocks and other equity investments in order to meet the actuarial return target.

Asset Allocation

The allocation of assets among stocks, bonds, alternative investments (private market investments include private equity, real estate, real assets and distressed/opportunistic) and cash has a dramatic impact on investment results. In fact, asset allocation decisions overwhelm the impact of individual security selection within a total portfolio.

As illustrated in Figure 1, historical evidence indicates that U.S. Stocks have provided the greatest opportunity to maximize investment returns

Figure 2. Composition of Combined Funds as of June 30, 2017

Teachers Retirement Association (TRA)		**33.1%**
Public Employees Retirement Association (PERA)		
General Employees Retirement Fund	31.29%	
Police and Fire Fund	12.33	
Correctional Fund	0.94	
Total PERA		**44.6**
Minnesota State Retirement System (MSRS)**		
State Employees Retirement Fund	19.40	
Correctional Employees Fund	1.59	
Highway Patrol Retirement Fund	1.08	
Judges Retirement Fund	0.29	
Total MSRS		**22.4**
Funds Total*		**100.0%**

* Total may not add due to rounding.
** The MSRS Legislative Plan is a closed plan that is funded by the General Fund on a "pay-as-you-go" basis.

over the long-term. As a result, the Board has chosen to incorporate a large commitment to Public Equity (common stocks) in the asset allocation policy for the retirement funds. In order to limit the short run volatility of returns exhibited by common stocks, the Board includes other asset classes such as fixed income (bonds), real estate, real assets, distressed/ opportunistic and private credit investments in the total portfolio. 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.

Long-Term Allocation Policy

The Combined Funds have a policy asset allocation that is based on the investment objectives of the Combined Funds and the expected long run performance of the capital markets. The SBI periodically reviews this policy allocation. The policy asset allocation of the Combined Funds as approved by the Board in June 2016 for Fiscal Year 2017 is as follows:

Public Equity	58%
Fixed Income	20
Private Markets	20
Unallocated Cash	2
Total	100%

The unfunded allocation to private markets investments is held in stocks until it is needed for investment. As a result, the actual amount invested in stocks at any time can be above the target allocation.

Figure 3 presents the actual asset mix of the Combined Funds at the end of fiscal year 2017. Historical asset mix data are displayed in Figure 4.

Asset Mix Compared to Other Pension Funds

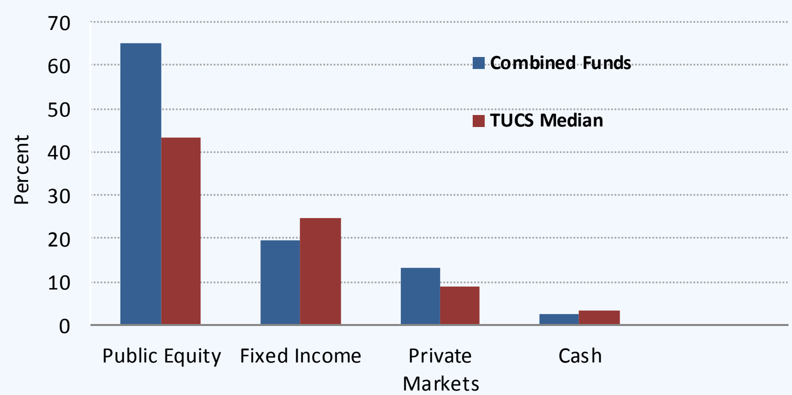
The Board finds it instructive to review asset mix and performance of the Combined Funds relative to other pension fund investors. The comparison universe used by the SBI is the Master Trust portion of the Trust Universe Comparison Service (TUCS). This universe contains information on public and corporate pension and trust funds with diversified asset mixes and more than $1 billion in assets.

Comparisons of the Combined Funds' actual asset mix to the median allocation to stocks, bonds and other assets of the funds in TUCS on June 30, 2017 are also displayed in Figure 3. The Combined Funds were overweighted in public equities, and private markets but underweighted in fixed income and cash relative to the median allocation in TUCS.

Total Return Vehicles

The SBI invests the majority of the Combined Funds' assets in ***common stocks*** (both domestic and international). A large allocation is consistent with the investment time horizon of the Combined Funds and the advantageous long-term risk-return characteristics of common stocks. Including international stocks in the asset mix allows the SBI to diversify holdings across world markets and offers the opportunity to enhance

Figure 3. Combined Funds Asset Mix Comparison as of June 30, 2017



	Combined Funds[1]	Median Allocation in TUCS[2]
Public Equity	64.9%	43.4%
Fixed Income	19.4	24.6
Private Markets[3]	13.1	8.7
Cash	2.6	3.5

(1) May not add to 100% due to rounding.
(2) Represents the median allocation by asset class, and does not add to 100%.
(3) TUCS may include assets other than Private Markets Investments.

returns and reduce the volatility of the total portfolio. The rationale underlying the inclusion of ***private markets*** is similar.

The Board recognizes that this sizable policy allocation to common stock and private markets likely will produce more volatile portfolio returns than a more conservative policy focused on fixed income securities. It is understood that this policy may result in quarters or even years of relative underperformance. Nevertheless, the long run return benefits of this policy are expected to compensate for the additional volatility.

Diversification Vehicles
The Board includes other asset classes in the Combined Funds to provide some protection against highly inflationary or deflationary environments and to diversify the portfolio sufficiently to avoid excessive return volatility.

Real Estate and ***Real Assets*** (oil and gas) investments provide an inflation hedge that other financial assets cannot offer. Under normal financial conditions, such as low to moderate inflation, the returns on these assets are not highly correlated with common stocks. As a result, inclusion of these assets in the Combined Funds serves to dampen return volatility.

The allocation to ***bonds*** acts as a hedge against a deflationary economic environment. In the event of substantial deflation, high quality fixed income assets are expected to protect principal and generate significant capital gains. Bonds, like real estate and real assets, under normal financial conditions, help to diversify the Combined Funds, thereby controlling return volatility.

Private Credit investments provide the opportunity for higher long-term returns than those typically available from bonds, yet still generate sufficient current income. Typically, these investments (e.g., subordinated debt, mezzanine debt, or resource income investments such as producing properties) are structured more like fixed income securities with the opportunity to participate in the appreciation of the underlying assets. While these investments may have an equity component, they display a return pattern more like a bond. Therefore, they will help reduce the volatility of the total portfolio, but should also generate higher returns relative to more traditional bond investments.

Investment Management

All assets in the Combined Funds are managed externally by investment management firms retained by contract. More information on the structure, management and performance of the various investment managers is included in the **Investment Program** sections of this report.

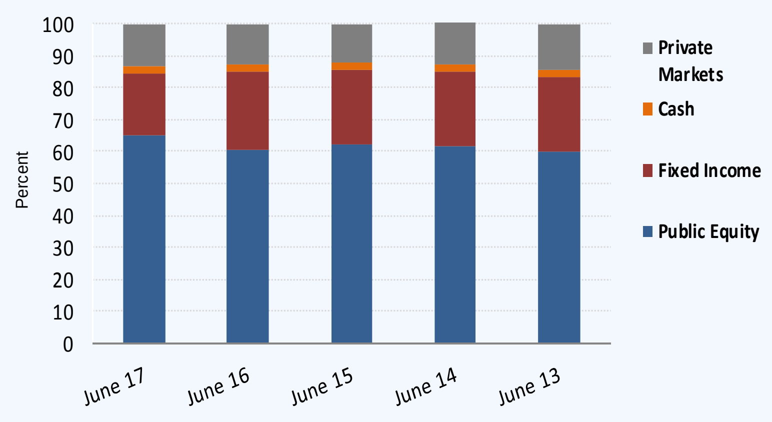
Return Objectives

The Board measures the performance of the Combined Funds relative to the following total rate of return objectives:

— ***Provide Real Returns.*** Over a twenty year period, the Combined Funds are expected to produce returns that exceed inflation by 3 to 5 percentage points on an annualized basis.

— ***Match or Exceed Market Returns.*** Over a ten year period, the Combined Funds are expected to match or exceed a composite of market indices weighted using the asset allocation of the Combined Funds.

Figure 4. Combined Funds Historical Asset Mix Fiscal Year 2013-2017



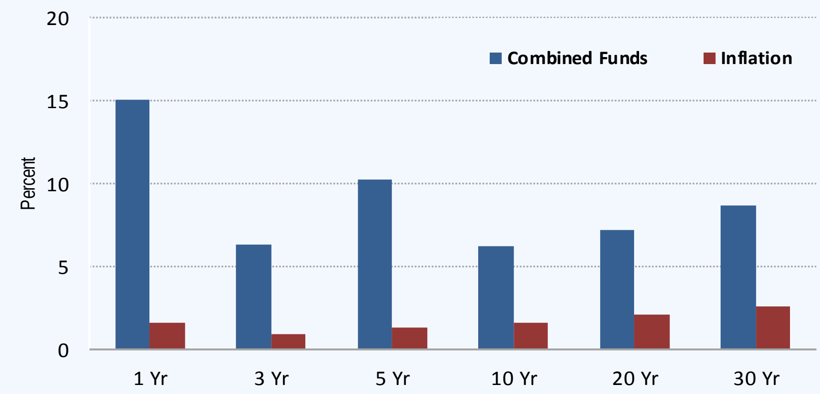
Performance is reported net of all fees and costs to assure that the Board's focus is on true net return.

Investment Results

Comparison to Inflation

Over the last twenty years, the Combined Funds exceeded inflation by 5.1 percentage points. Historical results compared to inflation are shown in Figure 5.

Figure 5. Combined Funds Performance vs. Inflation For Periods Ending June 30, 2017



	Annualized					
	1 Yr.	**3 Yr.**	**5 Yr.**	**10 Yr.**	**20 Yr.**	**30 Yr.**
Combined Funds	**15.1%**	**6.3%**	**10.2%**	**6.2%**	**7.2%**	**8.7%**
Inflation	1.6	0.9	1.3	1.6	2.1	2.6

Comparison to Market Returns

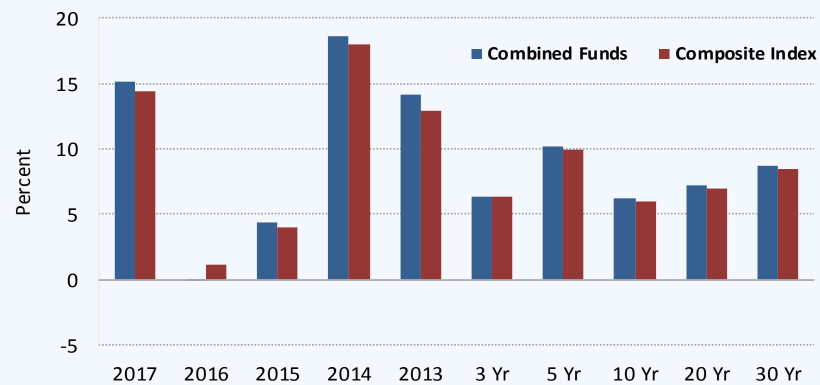
The Combined Funds' performance is also evaluated relative to a composite of market indices which is weighted in a manner that reflects the asset allocation of the Combined Funds. Performance relative to this standard will measure two effects:

— The ability of the managers selected by the SBI, in aggregate, to add value to the returns available from the broad capital markets.

— The impact of the SBI's rebalancing activity. The SBI rebalances the total Fund when market movements take the stock (domestic and international), bond, or cash segments above or below long term asset allocation targets. This policy imposes a low risk discipline of "buy low-sell high" among asset classes on a total fund basis.

Performance results and a breakdown of the composite index are shown in Figures 6 and 7. The Combined Funds exceeded the composite index over the last ten years by 0.2 percentage point and, therefore, met the stated performance goal.

Figure 6. Combined Funds Performance For Periods Ending June 30, 2017



	2017	**2016**	**2015**	**2014**	**2013**
Combined Funds	**15.1%**	**-0.1%**	**4.4%**	**18.6%**	**14.2%**
Composite Index	14.4	1.1	4.0	18.0	12.9

	Annualized				
	3 Yr.	**5 Yr.**	**10 Yr.**	**20 Yr.**	**30 Yr.**
Combined Funds	**6.3%**	**10.2%**	**6.2%**	**7.2%**	**8.7%**
Composite Index	6.3	9.9	6.0	7.0	8.5

The Funds met or exceeded the composite index over all time periods shown excluding fiscal year 2016 when the Combined Funds underperformed the benchmark. These results are largely a measure of value added or lost from active management after all fees and expenses have been taken into consideration.

Comparison to Other Funds

While the SBI is concerned with how its returns compare to other pension investors, universe comparison data should be used with great care. There are two primary reasons why such comparisons will provide an "apples-to-oranges" look at performance:

— ***Differing Allocations.*** Asset allocation has a dominant effect on returns. The allocation to stocks among the funds in TUCS typically ranges from 20% to 90%, too wide a range for meaningful comparison. In addition, it appears that many funds do not include private market holdings in their reports to TUCS. This further distorts comparisons among funds.

— ***Differing Goals/Liabilities.*** Each pension fund structures its portfolio to meet its own liabilities and risk tolerance, leading to different choices on asset mix. Since asset mix will largely determine investment results, a universe ranking may not be relevant to a discussion of how well a plan sponsor is meeting its long-term liabilities.

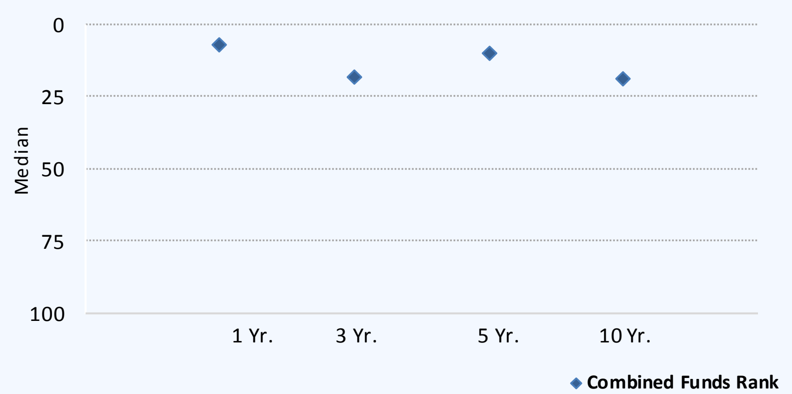
With these considerations in mind, the performance of the Combined Funds compared to other public and corporate pension funds with over $1 billion in assets in the Master Trust portion of TUCS is displayed in Figure 8. It shows that the Combined Funds have ranked in the first quartile over all time periods shown.

Figure 7. Composite Index For Period Ending June 30, 2017

Asset Class	Market Index	Composite Index Wts. *
Public Equity	69% Russell 3000/ 31% MSCI ACWI ex USA (net)	65.0%
Fixed Income	BB Barclays U.S. Aggregate	20.0
Private Markets	Private Markets	13.0
Cash	3 Month T-Bills	2.0
Total	**100.0%**	

* Weights are reset in the composite at the start of each month to reflect the combined allocation policies of the Combined Funds.

Figure 8. Combined Funds Performance Compared to Other Pension Funds For Periods Ending June 30, 2017



	Annualized			
	1 Yr.	3 Yr.	5 Yr.	10 Yr.
Combined Funds Percentile Rank in TUCS*	7th	18th	10th	19th

* Compared to public and corporate plans greater than $1 billion, gross of fees.

Supplemental Investment Fund (SIF)

The Supplemental Investment Fund program is an investment program that offers a range of investment options to state and local public employees. The program serves individuals who participate in defined contribution or supplemental retirement savings plans and many local volunteer fire relief associations. On June 30, 2017, the market value of the entire Fund was $2.1 billion.

The Supplemental Investment Fund (SIF) program provides investment vehicles for a variety of retirement plans. It provides some or all of the investment options for the Unclassified Employees Retirement Plan, Public Employees Defined Contribution Plan, Hennepin County Supplemental Retirement Plan, Health Care Savings Plan and the St. Paul Teachers Retirement Fund Association. The State Deferred Compensation Plan uses two of the SIF investment options, the Stable Value Fund and the Money Market Fund, for its participants. (Please note that in this report the value of the State Deferred Compensation Plan's SIF investments are included only in the Deferred Compensation Plan market values.) All Funds in the SIF program, except the Stable Value Fund, are available to local volunteer fire relief associations who invest their assets with the SBI.

The Volunteer Firefighter Account is available only for those local firefighter entities that participate in the Statewide Volunteer Firefighter Retirement Plan administered by PERA. Local entities that participate in this Plan must have all their assets invested in the Volunteer Firefighter Account.

Fund Structure

Investment goals among the SIF's many participants are varied. In order to meet the variety of goals, the Supplemental Investment Fund is structured much like a family of mutual funds. Participants may allocate their investments among one or more accounts that are appropriate for their needs within statutory requirements and rules established by the participating organizations. Participation in the SIF is accomplished through the purchase or sale of shares in each Fund.

Fund Management

The Supplemental Investment Fund program offers eight investment options which are shown in Figure 9. The objectives, asset allocation, management and performance of each Fund in the SIF program are explained in the following sections.

Share Values

A share value is established daily for each account in the SIF program, and participants buy or sell shares based on the most recent share value.

Figure 9. Accounts in the Supplemental Investment Fund

Balanced Fund	a balanced portfolio of U.S. common stocks, fixed income and cash.
U.S. Stock Actively Managed Fund	an actively and semi-passively managed portfolio of U.S. common stocks.
U.S. Stock Index Fund	a passively managed portfolio of U.S. common stocks.
Broad International Stock Fund	a portfolio of actively, semi-passively, and passively managed non-U.S. stocks.
Bond Fund	a portfolio of both actively and semi-passively managed fixed income securities.
Money Market Fund	a portfolio of short-term, liquid debt securities.
Stable Value Fund	a high quality fixed income portfolio and includes a portfolio of stable value instruments, security backed contracts, insurance company investment contracts and bank investment contracts.
Volunteer Firefighter Account	a balanced portfolio of U.S. and international common stocks, fixed income and cash.

Shares in the Balanced Fund, U.S. Stock Actively Managed Fund, U.S Stock Index Fund, Broad International Stock Fund, Bond Fund, and the Volunteer Firefighter Account are priced based on the market value of each Fund. Performance of these Funds is a function of the income and capital appreciation (or depreciation) generated by the securities in the Funds.

In the Stable Value Fund, shares are priced based on the blended crediting rates of the contracts and yields from any liquidity investments. Performance is calculated based on changes in these share values.

In the Money Market Fund, share values remain constant and the accrued interest income is credited to the Fund through the purchase of additional shares.

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 to defray administrative costs.

The distribution of assets by market value in the Supplemental Investment Fund as of June 30, 2017 is shown by Fund in Figure 10 and by Plan in Figure 11.

Figure 10. Composition by Fund as of June 30, 2017

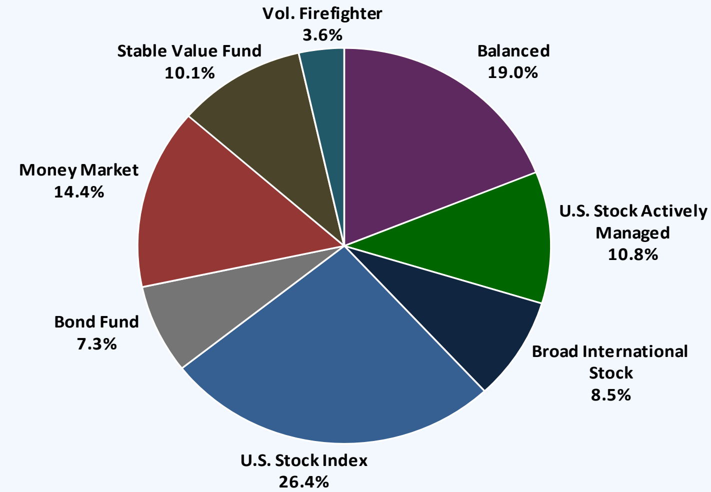
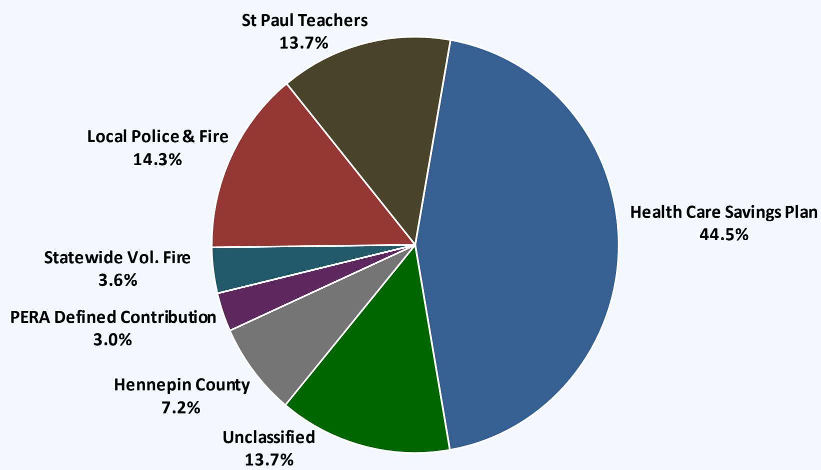


Figure 11. Participation by Plan as of June 30, 2017



Note: Does not include Deferred Compensation Plan assets in the SIF Stable Value Fund and Money Market Funds which are reported elsewhere in the Annual Report.

Balanced Fund

Objective
The investment objectives of the Balanced Fund are to earn a return both from capital appreciation (increases in market value) and current yield (dividends from stock and interest on bonds). The Balanced Fund pursues these objectives within the constraints of protecting against adverse financial environments and limiting short-run portfolio return volatility.

The SBI invests the Balanced Fund in a balanced portfolio of common stocks and fixed income securities with the following long-term asset mix: 60% domestic common stocks, 35% bonds, 5% cash equivalents.

Domestic common stocks provide the potential for significant long-term capital appreciation, while bonds provide both a hedge against deflation and the diversification needed to limit excessive portfolio return volatility.

At the close of fiscal year 2017, the value of the Balanced Fund was $403 million.

Management
All the assets of the Balanced Fund are invested by external managers. The fixed income assets are invested in the Bond Fund, which includes active and semi-passive external investment managers retained by the SBI. The common stock segment is managed externally in the Domestic Stock Program and is designed to track the returns of the Russell 3000 Index. The passive manager for this portion of the Fund is BlackRock Institutional Trust Company. The cash portion of the Fund is actively managed by State Street Global Advisors.

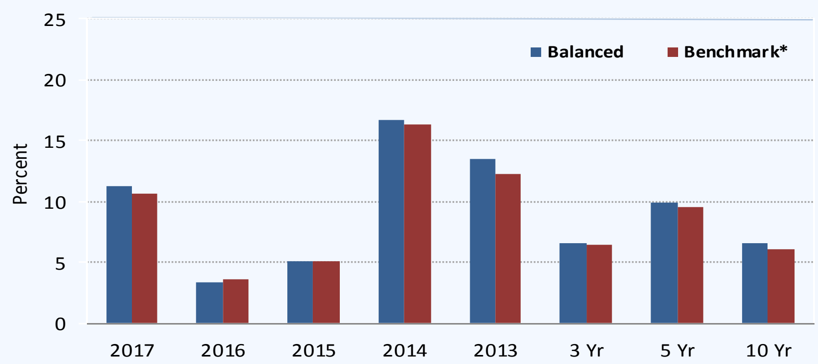
Performance
As with the other SBI funds which use a multi-manager investment structure, the Board evaluates the performance of the Balanced Fund on two levels:

— ***Total Fund.*** The Balanced Fund is expected to exceed the returns of a composite of market indices weighted in the same proportion as its long-term asset allocation.

— ***Individual Manager.*** The passive stock manager is expected to closely track the performance of the Russell 3000. The group of external bond managers for the Fund are expected to exceed the performance of the Bloomberg Barclays U.S. Aggregate Bond Index. The cash manager for the Fund is expected to exceed the performance of 3 month U.S. Treasury bills.

The Balanced Fund provided a return of 11.3% for fiscal year 2017, slightly outperforming its benchmark. Over the most recent ten years, the Balanced Fund exceeded its benchmark by 0.5 percentage point. Figure 12 shows a history of performance results.

Figure 12. Balance Fund Performance For Periods Ending June 30, 2017



	2017	2016	2015	2014	2013	Annualized 3 Yr.	5 Yr.	10 Yr.
Balanced	**11.3%**	**3.4%**	**5.1%**	**16.7%**	**13.5%**	**6.6%**	**9.9%**	**6.6%**
Benchmark*	10.7	3.6	5.1	16.3	12.2	6.4	9.5	6.1

* 60% Russell 3000/35% Bloomberg Barclays U.S. Aggregate Bond Index/5% T-Bills Composite since 10/1/03.

U.S. Stock Actively Managed Fund

Objective
The investment objective of the U.S. Stock Actively Managed Fund is to generate high returns from capital appreciation. To achieve this objective, the Fund is invested primarily in U.S common stock.

At the close of fiscal year 2017, the value of the Fund was $229 million.

Management
The assets of the U.S. Stock Actively Managed Fund are actively managed within the Domestic Stock Program. This allocation reflects a more aggressive investment than is available through passive management. The Fund may hold a small amount of cash that represents new contributions received prior to investment in the market and cash that may be held by the individual managers in the Fund.

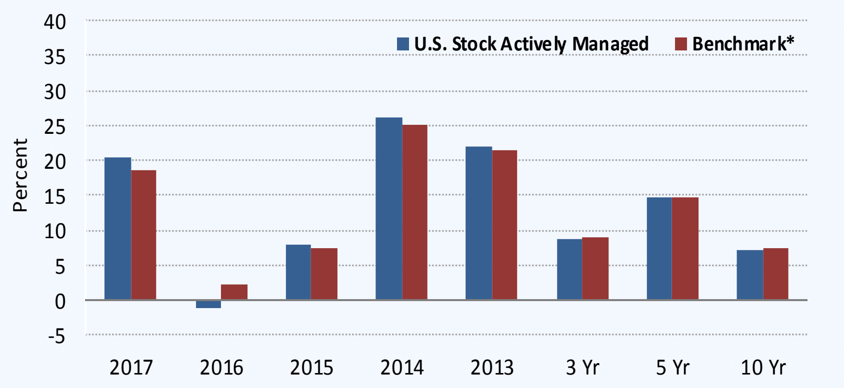
Performance
The Board evaluates the performance of the U.S. Stock Actively Managed Fund on two levels:

— ***Total Fund.*** The U.S. Stock Actively Managed Fund is expected to exceed the returns of the Russell 3000 Index.

— ***Individual Manager.*** Performance objectives for the individual managers are described in the **Retirement Program** section beginning on page 28 of this report.

The U.S. Stock Actively Managed Fund provided a return of 20.5% for the fiscal year, outperforming its benchmark. Over the last ten year period, the Fund trailed its benchmark by 0.2 percentage point. See the investment discussion beginning on page 28 concerning the actively and semi-passively managed Domestic Stock Program for performance information on the managers used by this Fund. A history of performance results is shown in Figure 13.

Figure 13. U.S. Stock Actively Managed Fund Performance For Periods Ending June 30, 2017



	2017	2016	2015	2014	2013	Annualized 3 Yr.	5 Yr.	10 Yr.
U.S. Stock	**20.5%**	**-1.1%**	**7.9%**	**26.1%**	**22.1%**	**8.7%**	**14.6%**	**7.1%**
Benchmark*	18.5	2.1	7.3	25.2	21.5	9.1	14.6	7.3

* Russell 3000 since 10/1/03.

U.S. Stock Index Fund

Objective
The investment objective of the U.S. Stock Index Fund is to generate returns that track the performance of the broad U.S. common stock market as represented by the Russell 3000 Index. To accomplish this objective, the SBI allocates all of the assets of the Fund to passively managed domestic stocks.

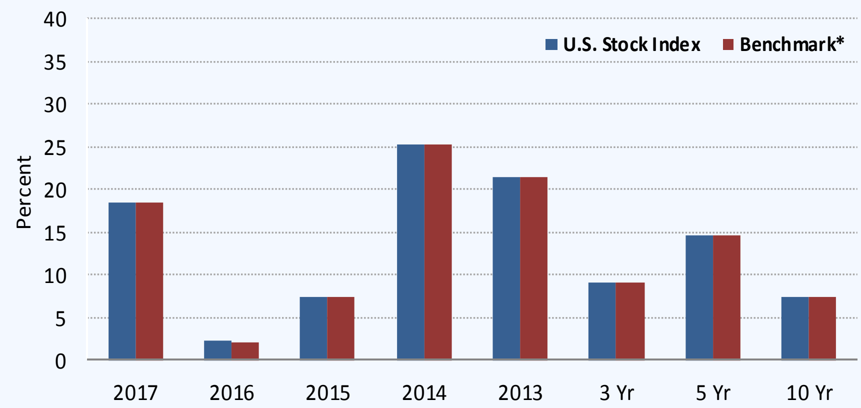
At the end of fiscal year 2017, the Fund had a market value of $559 million.

Management
The Fund participates in the passive managed segment of the Domestic Stock Program which is managed by BlackRock Institutional Trust Company.

Performance
The performance objective of the U.S. Stock Index Fund is to track the performance of the Russell 3000. The SBI recognizes that the Fund's returns may deviate slightly from those of the Russell 3000 due to the effects of management fees, trading costs and cash flows.

As expected, the U.S. Stock Index Fund tracked the Russell 3000 Index for the fiscal year and closely tracked over longer periods as shown in Figure 14.

Figure 14. U.S. Stock Index Fund Performance For Periods Ending June 30, 2017



	2017	2016	2015	2014	2013	Annualized 3 Yr.	5 Yr.	10 Yr.
U.S. Stock Index	**18.5%**	**2.2%**	**7.3%**	**25.2%**	**21.5%**	**9.1%**	**14.6%**	**7.3%**
Benchmark*	18.5	2.1	7.3	25.2	21.5	9.1	14.6	7.3

* Russell 3000 since 10/1/03.

Broad International Stock Fund

Objective
The investment objective of the Broad International Stock Fund is to earn a high rate of return by investing in the stock of companies outside the U.S.

Typically, a majority of the Fund is invested in the largest international stock markets (United Kingdom, Japan, Canada, France, Germany, and Switzerland) and is invested in other well established markets in Europe and the Pacific region. In addition, at the end of fiscal year 2017, the allocation to developing countries and emerging markets around the world, including those in Latin America, Asia, Eastern Europe, the Middle East and Africa was increased.

At the end of fiscal year 2017, the Fund had a market value of $179 million.

Management
The structure of the Broad International Stock Fund combines active, semi-passive, and passive management. The Fund has several actively managed portfolios that invest portfolios in both developed and emerging markets. These managers use a variety of investment styles and approaches to buy and sell stocks in an attempt to maximize market value. The passively managed portfolio's objective is to approximate the returns of the international markets in both the developed and emerging markets. The semi-passive mandates add incremental value over the index return by investing in broadly diversified portfolios of stocks in the developed and emerging markets. Overall, the Fund is designed to consistently track the return of the MSCI ACWI ex USA Index (net), a developed and emerging markets index. The Fund uses the same managers used by the Combined Funds in the International Stock Program.

Performance
The Board evaluates the performance of the Broad International Stock Fund on two levels:

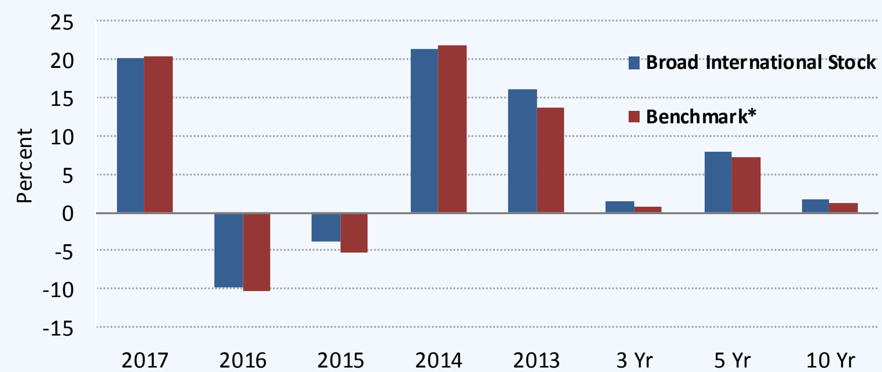
— ***Total Fund.*** The Broad International Stock Fund is expected to exceed the returns of the MSCI ACWI ex USA Index (net).

— ***Individual Manager.*** Performance objectives for the individual managers are described in the **Retirement Program** section beginning on page 28 of this report.

During fiscal year 2017, the Broad International Stock Fund, with a return of 20.2%, underperformed the MSCI ACWI ex USA Index (net) by 0.3 percentage point. Over the most recent ten year period, the Broad International Stock Fund exceeded its benchmark by 0.4 percentage point.

See the discussion on performance of the international managers beginning on page 36 of this report. A history of performance results is shown in Figure 15.

Figure 15. Broad International Stock Fund Performance For Periods Ending June 30, 2017



	2017	2016	2015	2014	2013	Annualized 3 Yr.	5 Yr.	10 Yr.
Broad International	**20.2%**	**-9.7%**	**-3.8%**	**21.4%**	**16.1%**	**1.5%**	**8.0%**	**1.6%**
Benchmark*	20.5	-10.2	-5.3	21.8	13.6	0.8	7.2	1.2

* The International Equity Asset Class Target is MSCI ACWI ex USA Index (net) since 10/1/03.

Bond Fund

Objective
The objective of the Bond Fund is to earn returns from fixed income securities. The Fund is invested primarily in investment-grade government bonds, corporate bonds and mortgage securities with intermediate to long maturities. A small portion of the Fund, not to exceed ten percent, is invested in below investment grade and non-U.S. securities.

At the end of fiscal year 2017, the market value of the Fund was $155 million.

The Fund earns investment returns through interest income and capital appreciation. Because bond prices move inversely with interest rates, the Fund entails some risk for investors. Historically, however, it represents a lower risk alternative than the investment options that include common stocks.

Management
The Bond Fund invests in the Fixed Income Program used by the Combined Funds. The Fixed Income Program retains both active and semi-passive managers.

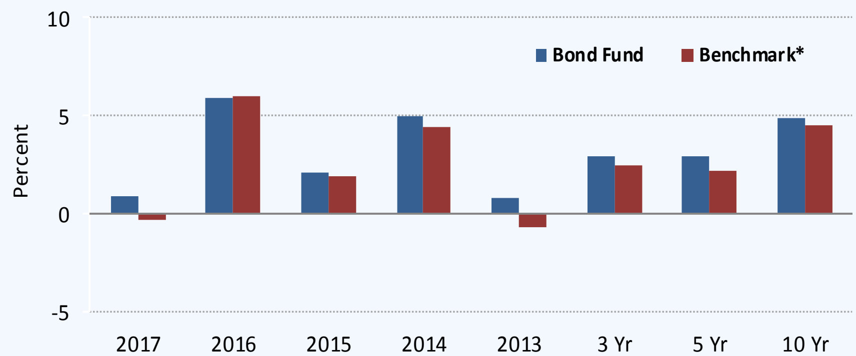
Performance
The Board evaluates the performance of the Bond Fund on two levels:

— ***Total Fund.*** The Fund is expected to exceed the returns of the Bloomberg Barclays U.S. Aggregate Bond Index.

— ***Individual Manager.*** Performance objectives for the individual managers are described in the **Retirement Program** section beginning on page 41 of this report.

For fiscal year 2017, the Bond Fund produced a return of 0.9%, which was 1.2 percentage points above the Bloomberg Barclays U.S. Aggregate benchmark. For the most recent ten year period, the Fund exceeded its benchmark by 0.4 percentage point. See the discussion regarding bond manager performance beginning on page 41 of this report. A history of performance results is shown in Figure 16.

Figure 16. Bond Fund Performance For Periods Ending June 30, 2017



	2017	2016	2015	2014	2013	Annualized 3 Yr.	5 Yr.	10 Yr.
Bond Fund	**0.9%**	**5.9%**	**2.1%**	**5.0%**	**0.8%**	**2.9%**	**2.9%**	**4.9%**
Benchmark*	-0.3	6.0	1.9	4.4	-0.7	2.5	2.2	4.5

* Bloomberg Barclays U.S. Aggregate Bond Index.

Money Market Fund

Objective

The Money Market Fund invests in high-quality, short-term debt instruments. The Fund's investment objectives are to preserve capital and offer competitive money market returns.

At the end of fiscal year 2017, the Fund had a market value of $384 million.

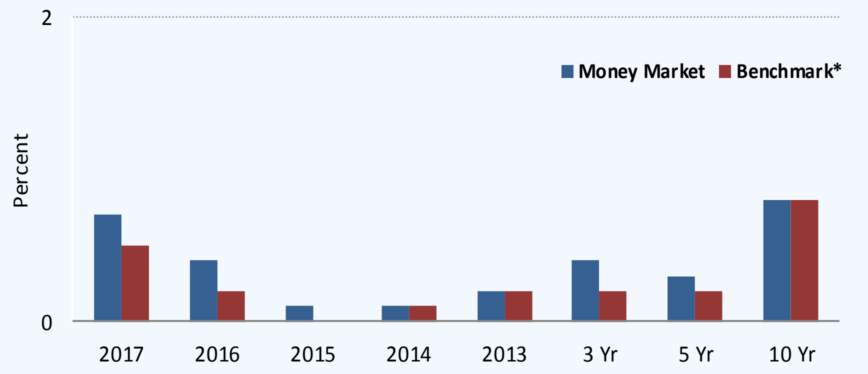
Management

The Fund uses the same cash manager as the Combined Funds, which is State Street Global Advisors.

Performance

The Fund is expected to produce returns competitive with those available from short-term debt securities. For fiscal year 2017, the Money Market Fund generated a return of 0.7%, which was 0.2 percentage point above the 3 month U.S. Treasury Bills. Over the most recent ten year period, the Fund matched its target. A history of performance results is shown in Figure 17.

Figure 17. Money Market Fund Performance For Periods Ending June 30, 2017



						Annualized		
	2017	**2016**	**2015**	**2014**	**2013**	**3 Yr.**	**5 Yr.**	**10 Yr.**
Money Market	**0.7%**	**0.4%**	**0.1%**	**0.1%**	**0.2%**	**0.4%**	**0.3%**	**0.8%**
3 Month T-Bills*	0.5	0.2	0.0	0.1	0.2	0.2	0.2	0.8

* 90 Day T-Bill.

Stable Value Fund

Objective

The investment objectives of the Stable Value Fund are to seek to provide preservation of principal, maintain adequate liquidity to meet potential withdrawals, and produce a level of income consistent with an underlying portfolio of short to intermediate duration, high quality fixed income securities.

At the end of fiscal year 2017, the Fund totaled $214 million, excluding Deferred Compensation Plan participation.

Management

The Fund is invested in a well-diversified portfolio of high quality fixed income securities. The Fund also holds insurance 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, and maintain a relatively stable return profile for the portfolio. The portfolio may also hold cash or cash equivalents for liquidity purposes. Performance reflects the blended crediting rates from all investments in the fund.

The manager for the Fund is Galliard Capital Management, a subsidiary of Wells Fargo Bank.

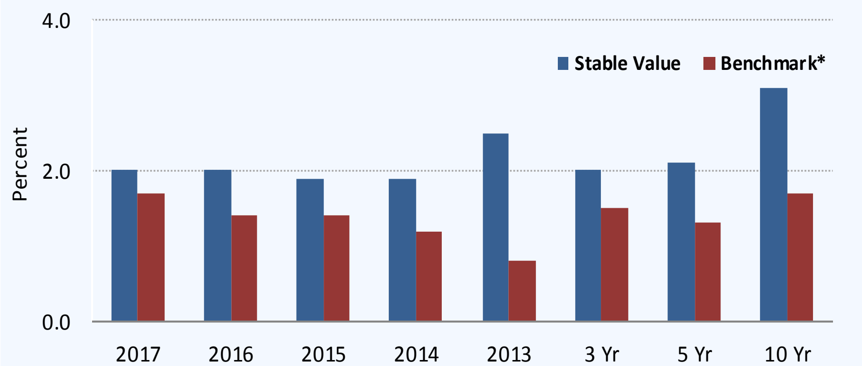
Figure 18 shows a history of the Fund's performance results.

Performance

The Stable Value Fund is expected to exceed the returns of its custom benchmark, the 3-year Constant Maturity Treasury plus 45 basis points (0.45%).

During fiscal year 2017, the Stable Value Fund provided a return of 2.0%, which was 0.3 percentage point above its benchmark. Over the most recent ten year period, the Stable Value Fund exceeded its benchmark by 1.4 percentage points.

Figure 18. Stable Value Fund Performance For Periods Ending June 30, 2017



						Annualized		
	2017	**2016**	**2015**	**2014**	**2013**	**3 Yr.**	**5 Yr.**	**10 Yr.**
Stable Value	**2.0%**	**2.0%**	**1.9%**	**1.9%**	**2.5%**	**2.0%**	**2.1%**	**3.1%**
Benchmark*	1.7	1.4	1.4	1.2	0.8	1.5	1.3	1.7

* 3-Year Constant Maturity Treasury plus 45 basis points.

Statewide Volunteer Firefighter Retirement Plan

Minnesota Statutes, Chapter 353G creates a statewide, voluntary plan for local relief associations. Local entities may choose to join the statewide plan which is trusted by PERA. Investments of the plan are invested in the Supplemental Investment Fund Statewide Volunteer Firefighter Retirement Plan (Volunteer Firefighter Plan). Participation in the plan is effective on December 31 of a given year. The SBI must evaluate the assets of each local entity that seeks to join the plan. In 2017, 30 local entities joined the plan, transferring over $15 million to the SBI for investment. At the close of fiscal year 2017, 141 local fire entities, representing over $75 million in assets, were in the Plan.

Objective

The investment objective of the Volunteer Firefighter Plan is to earn a high rate of return from both capital appreciation (increases in market value) and current yield (dividends from stocks and interest on bonds). The Plan pursues this objective within the constraints of protecting against adverse financial environments and limiting short-run portfolio return volatility.

The SBI invests the Plan in a balanced portfolio of domestic common stocks, international stocks and fixed income securities with the following long-term asset mix: 35% domestic stocks, 15% international stocks, 45% fixed income, 5% cash equivalents.

Domestic stocks provide the potential for significant long-term capital appreciation, international stocks provide similar potential along with a measure of diversification, and bonds provide both a hedge against deflation and the diversification needed to limit excessive portfolio return volatility.

Management

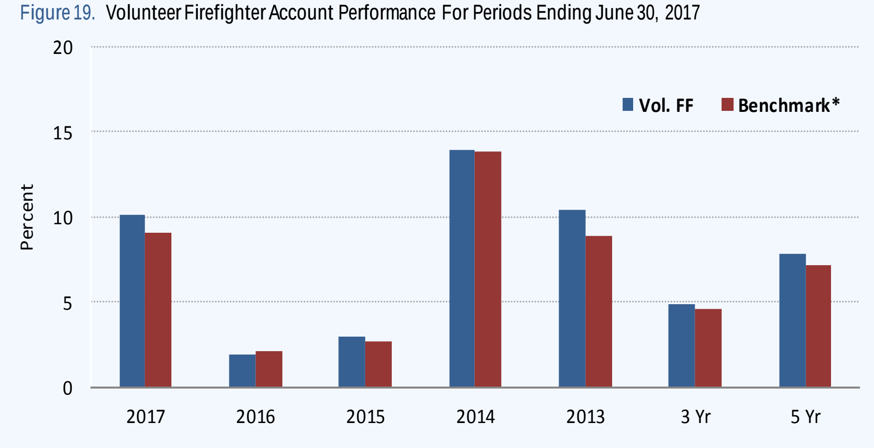
The Plan's investment management structure combines active and passive management used by the Combined Funds. The domestic stock segment is managed as part of the passively managed segment of the Domestic Stock Program designed to track the returns of the Russell 3000 Index. The international stock segment invests in the International Stock Program which uses a combination of active, semi-passive and passive management to invest across a broad range of developed and emerging markets. The bond segment invests in the Fixed Income Program used by the Combined Funds. The Fixed Income Program retains both active and semi-passive managers.

Performance

As with other SBI funds which utilize a multi-manager investment structure, the Board evaluates the performance of the Volunteer Firefighter Plan on two levels:

— ***Total Account.*** The Volunteer Firefighter Account is expected to exceed the returns of a composite of market indices weighted in the same proportion as its long-term asset allocation.

Figure 19. Volunteer Firefighter Account Performance For Periods Ending June 30, 2017



	2017	2016	2015	2014	2013	Annualized 3 Yr.	5 Yr.
Volunteer Firefighter (FF)	**10.1%**	**1.9%**	**3.0%**	**13.9%**	**10.4%**	**4.9%**	**7.8%**
Benchmark*	9.1	2.1	2.7	13.8	8.9	4.6	7.2

* 35% Russell 3000, 15% MSCI ACWI ex USA (net), 45% Bloomberg Barclays U.S. Aggregate Bond Index, 5% 3 month T-Bills.

— ***Individual Manager.*** The passive domestic stock and passive international stock managers are expected to closely track the performance of their respective benchmarks. The performance objectives of the individual international equity and bond managers are described in their respective sections of this report.

The Statewide Volunteer Firefighter Retirement Plan was established January 1, 2010. The Plan provided a return of 10.1% for the year ending June 30, 2017 and outperformed its composite benchmark by 1.0 percentage point. Over the most recent five year period, the Plan exceeded its benchmark by 0.6 percentage point.

Figure 19 on the previous page shows a history of the Account's performance results.

Local Fire Fund Activity

Volunteer Fire Plans Investment
Volunteer firefighter retirement plans that are not eligible to be consolidated with PERA may invest their assets with the SBI through the Supplemental Investment Fund (SIF). There are more than 630 local volunteer firefighter plans with investment authority that could participate in the SIF. As of the end of fiscal year 2017, there were 176 plans participating in the SIF with $303 million in assets.

Local Plan Performance Reports
The SBI provides participating local plans with reports showing annual returns and market value for all SIF Funds in compliance with *Minnesota Statutes*, Chapter 356. The local plans are responsible for providing their specific data to the Office of the State Auditor.

To gain greater operating efficiency, external managers are grouped into several "Investment Programs" which are segregated by asset class. The various retirement funds participate in one or more of the programs corresponding to their individual asset allocation strategies.

The Combined Funds and Supplemental Investment Fund (SIF) share many of the same stock and bond managers. This sharing is accomplished by grouping managers by asset class into several different investment pools, which are further aggregated into a select number of Investment Programs. The individual funds participate in the various Investment Programs by purchasing units in the related investment pools which function much like shares of a mutual fund.

This investment management structure allows the SBI to gain greater operating efficiency within asset classes and to keep management costs as low as possible for all participants.

Domestic Stock Program

The Domestic Stock Program is made up of active large-cap and small-cap managers, a passive U.S. all-cap manager, and a passive large-cap manager which is used by the Combined Funds. The active large-cap and small-cap managers and the passive all-cap managers are used by the Supplemental Investment Fund's U.S. Stock Actively Managed Fund, U.S. Stock Index Fund, and the stock portions of the Balanced Fund and Volunteer Firefighter Account.

The following are the dollar values as of June 30, 2017 of each fund's participation in the Domestic Stock Program:

Combined Funds (active, passive and semi-passive)	$27.7 billion
U.S. Stock Active (active and semi-passive)	$229.2 million
U.S. Stock Index (passive)	$559.3 million
Stock portion of the Balanced Fund (passive)	$243.1 million
Volunteer Firefighter Account (active and passive)	$26.6 million

Management Structure

The SBI uses three styles of management to invest the assets of the Domestic Stock Program:

— ***Active Management.*** The target is to have less than half the portfolio actively managed. At the end of fiscal year 2017, approximately 15% of the Domestic Stock Program was actively managed by a group of 15 external investment managers. The assets allocated to each of the managers ranged in size from approximately $185 million to $445 million.

— ***Semi-Passive Management.*** The target is to have less than half the portfolio semi-passively managed. At the end of fiscal year 2017, approximately 8% of the Domestic Stock Program was managed by two semi-passive external investment managers with portfolios ranging from $900 million to $1.4 billion.

— ***Passive Management.*** The target is to have at least a quarter of the portfolio passively managed. At the end of fiscal year 2017, approximately 77% of the Domestic Stock Program was managed with two external investment mandates with portfolio ranges from $10.7 billion to $11.5 billion.

The goal of the Domestic Stock Program is to outperform the asset class target, the Russell 3000 Index, over time. The Russell 3000 Index can be segmented into sub-indexes or Russell style indexes.

Assets of the Program are allocated based on the Russell style indexes in proportion to the style weighting within the Russell 3000. Assets within each style are then allocated to managers within the designated style. This allocation is done to minimize the style bias within the Program.

Each **active manager** is expected to add value over the long run relative to the Russell style index which reflects its investment approach or style.

The **semi-passive managers** are expected to add incremental value relative to the Russell 1000 Index. However, they employ a strategy that more closely tracks the benchmark than active management and are generally more consistent at generating modest excess returns.

The **passive managers** in the Domestic Stock Program manage their portfolios to consistently and inexpensively track their respective Russell index.

A description of each domestic stock manager's investment approach is included in the **Investment Manager Summaries** section beginning on page 28.

FY 2017 Changes

During fiscal year 2017, many changes were made to the manager structure.

In October 2016, BlackRock Institutional Trust Company, N.A. began managing a passive, Russell 1000 mandate. In November 2016, the following four small-cap growth managers were hired: ArrowMark Colorado Holdings, LLC; Hood River Capital Management, LLC; Rice Hall James & Associates, LLC and Wellington Management Company LLP.

In May 2017, the following five managers were terminated: INTECH Investment Management, LLC (Large-Cap Growth and Semi-Passive), Jacobs Levy Equity Management, Inc. (Large-Cap Growth), Mellon Capital Management Corporation (Large-Cap Semi-Passive) Next Century Growth Investors, LLC (Small-Cap Growth), and Systematic Financial Management, L.P. (Large-Cap Value).

Investment Performance

A comprehensive monitoring system has been established to ensure that the many elements of the Domestic Stock Program conform to the SBI's investment policies. Published performance benchmarks are used for each domestic stock manager. These benchmarks enable the SBI to evaluate the managers' results, both individually and in aggregate, with respect to risk incurred and returns achieved. Two primary long-term ***risk objectives*** have been established for the domestic stock managers:

— ***Investment Approach.*** Each manager (active, semi-passive, or passive) is expected to hold a portfolio that is consistent, in terms of risk characteristics, with the manager's stated investment approach. In the short run, market fluctuations may result in a departure from the active managers' risk targets as part of their specific investment strategies.

— ***Diversification.*** The passive and semi-passive managers are expected to hold highly diversified portfolios, while each active domestic stock manager may hold a more concentrated portfolio, appropriate for the particular investment strategy and style.

The domestic stock managers successfully fulfilled their long-term risk objectives during fiscal year 2017. In general, the managers constructed portfolios consistent with their stated investment approaches and maintained levels of diversification that were appropriate for their respective active, semi-passive and passive approaches.

The Board's ***return objectives*** for active and semi-passive stock managers are measured against the published Russell style indices that represent the managers' specific investment approaches. These indices take into account the equity market forces that affect certain investment styles. Thus, a Russell style index or benchmark is a more appropriate return target against which to judge these managers' returns than the Russell 3000 broad market index.

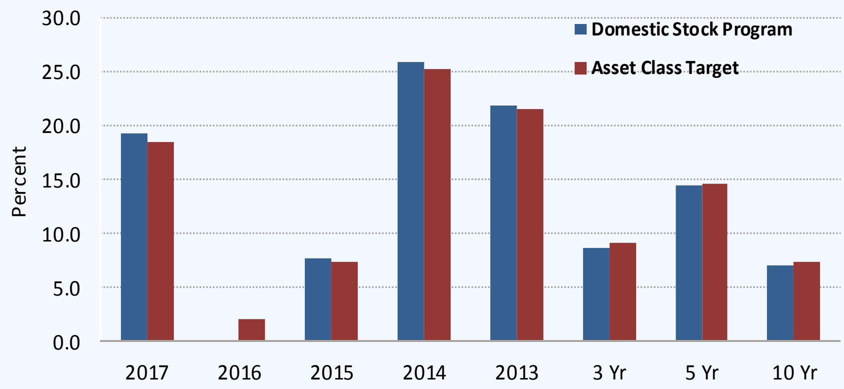
Active managers are expected to exceed their benchmark by an amount appropriate for their active risk level. This active risk level varies by manager and is influenced by the manager's stated strategy and style.

In aggregate, the Domestic Stock Program outperformed the Russell 3000 Index by 0.8 percentage point for the fiscal year. The active manager group outperformed and the semi-passive manager group (inclusive of terminated managers) underperformed their respective benchmarks.

Relative to the aggregate benchmark, the outperformance of the active manager group was due to sector allocation and overall stock selection, especially in the Financial Services and Health Care sectors. The semi-passive managers were impacted by overall stock selection, particularly in the Consumer Staples sector.

Figure 20 provides details of the historical performance of the entire Domestic Stock Program. Manager performance relative to the respective benchmarks for the fiscal year end was mixed. Eight of 11 active managers outperformed their assigned benchmarks, while three managers underperformed. Four were funded during the fiscal year. The two retained semi-passive managers outperformed the Russell 1000. The passive manager matched the Russell 3000 index. The Russell 1000 mandate was funded during the fiscal year. Individual manager performance for fiscal year 2017 is shown in Figure 21. Aggregate portfolio sector characteristics are shown in Figure 22.

Figure 20. Domestic Stock Program Performance For Periods Ending June 30, 2017



	2017	2016	2015	2014	2013	Annualized 3 Yr.	5 Yr.	10 Yr.
Domestic Stock Program	**19.3%**	**0.0%**	**7.7%**	**25.9%**	**21.9%**	**8.7%**	**14.5%**	**7.1%**
Asset Class Target*	18.5	2.1	7.3	25.2	21.5	9.1	14.6	7.3

* Reflects the Russell 3000 since 10/1/2003.

Figure 21. Domestic Stock Program Manager Performance for Periods Ending June 30, 2017

	1 Year Actual %	1 Year Bmk %	3 Years Actual %	3 Years Bmk %	5 Years Actual %	5 Years Bmk %	Market Value ($ in millions)
Active Managers							
Large Cap Growth (Russell 1000 Growth)							
Sands Capital Mgmt.	25.7	20.4	7.8	11.1	14.2	15.3	444.3
Winslow Capital Mgmt.	21.6	20.4	10.1	11.1	14.7	15.3	187.4
Zevenbergen Capital	36.7	20.4	8.3	11.1	17.3	15.3	422.6
Large Cap Value (Russell 1000 Value)							
Barrow, Hanley	15.8	15.5	7.2	7.4	13.9	13.9	353.0
Earnest Partners	21.2	15.5	8.8	7.4	13.1	13.9	241.8
LSV Asset Mgmt.	20.6	15.5	7.9	7.4	16.6	13.9	374.4
Small Cap Growth (Russell 2000 Growth)							
ArrowMark							185.3
Hood River							217.7
McKinley Capital	22.3	24.4	6.5	7.6	16.0	14.0	261.1
Rice Hall James							191.8
Wellington							217.0
Small Cap Value (Russell 2000 Value)							
Goldman Sachs	20.9	24.9	6.9	7.0	14.5	13.4	330.8
Hotchkis & Wiley	28.1	24.9	4.5	7.0	14.9	13.4	287.8
Martingale Asset Mgmt.	23.2	24.9	8.7	7.0	16.6	13.4	274.7
Peregrine Capital Mgmt.	26.1	24.9	6.4	7.0	13.4	13.4	339.7
Semi-Passive Managers (Russell 1000)							
BlackRock Institutional	20.0	18.0	9.9	9.3	15.2	14.7	904.2
J.P. Morgan Investment Mgmt.	18.9	18.0	9.7	9.3	15.2	14.7	1,347.5
Passive Manager (Russell 1000)							
BlackRock Institutional							10,743.1
Passive Manager (Russell 3000)							
BlackRock Institutional	18.5	18.5	9.1	9.1	14.6	14.6	11,446.7
Aggregate Domestic Stock Program(1)	**19.3**	**18.5**	**8.7**	**9.1**	**14.5**	**14.6**	**28,771.5**
Asset Class Target							
Russell 3000		18.5		9.1		14.6	

(1) Aggregate includes the performance of terminated managers.

Figure 22. Domestic Stock Program Allocations Russell Global (U.S.) Sector Weights for Period Ending June 30, 2017

Russell Sector	Active Managers %	Semi-Passive Managers %	Passive Manager %	Aggregate Domestic Stock Program %	Benchmarks Russell 1000 %	Benchmarks Russell 3000 %
Consumer Discretionary	15.8	14.5	13.8	14.3	14.0	14.0
Consumer Staples	2.4	7.7	7.6	6.3	8.0	7.6
Energy	4.5	6.2	6.3	5.8	6.7	6.4
Financial Services	21.6	19.4	20.1	20.4	20.0	20.6
Health Care	14.4	13.5	13.1	13.3	13.4	13.3
Materials and Processing	4.1	4.5	3.8	4.1	3.6	3.9
Producer Durables	11.3	10.2	10.8	10.6	10.9	11.1
Technology	16.6	17.6	17.4	17.0	17.8	17.6
Utilities	3.0	5.6	5.4	4.9	5.6	5.5
Cash	2.2	0.4	1.7	1.4	N/A	N/A
Unassigned*	4.1	0.4	0.0	1.9	N/A	N/A
Assigned Benchmark:	Russell 3000	Russell 1000	Russell 3000	Russell 3000		

* Holdings not included in benchmark.

Note: Totals may not add due to rounding.

Domestic Equity Program Managers

Active Managers

Large Cap Growth (Russell 1000 Growth)

Sands Capital Management, LLC
Sands invests in concentrated portfolios of high-quality, seasoned, growing businesses. Bottom-up, company-focused and long-term oriented research is the cornerstone of the investment process. To be considered as a potential holding, companies must demonstrate superior historical and projected sales and earnings growth; have the potential for wealth creation; and reside in growing sectors. The team then narrows the opportunity set by identifying potential leaders in attractive business spaces. The strategy focuses on six key investment criteria: 1) sustainable above average earnings growth; 2) leadership position in a promising business space; 3) significant competitive advantages or unique business franchise; 4) management with a clear mission and value added focus; 5) financial strength; and 6) rational valuation relative to the overall market and the company's business prospects. Sands was retained by the SBI in January 2005.

Winslow Capital Management, LLC
Winslow believes that investing in quality large cap companies with above-average growth provides the best opportunity for achieving superior portfolio returns over the long term. The investment philosophy is founded on bottom-up, fundamental research. The strategy identifies companies that can grow earnings above consensus expectations to build portfolios with forward weighted earnings growth in the range of 15-20% annually. A quantitative screen is employed for factors such as revenue, earnings and cash flow growth, return on invested capital, earnings consistency, earnings revisions, low financial leverage and high free cash flow rates relative to net income. Resulting companies are subjected to a qualitative assessment within the context of industry sectors. Detailed examination of income statements, cash flow and balance sheet projections is conducted, along with a judgment on the quality of management. Attractively valued stocks are chosen based on P/E relative to the benchmark, sector peers, the company's sustainable future growth rate and return on invested capital. Final portfolio construction includes diversification by economic sectors, earnings growth rates, price/earnings ratios and market capitalizations. Winslow was retained by the SBI in January 2005.

Zevenbergen Capital Investments LLC
Zevenbergen's investment philosophy is founded on the principles that superior fundamentals drive stock price appreciation and exceptional management combined with balance sheet strength provides capital protection. The firm employs a forward looking, bottom-up investment process designed for long-term results. Portfolios are constructed with companies presenting established and prospective revenue, cash flow and earnings growth, while diversification and risk control are accomplished through a blend of company size, expected growth rates, and appropriate portfolio weightings. The firm remains fully invested to ensure market participation. Zevenbergen was retained by the SBI in April 1994.

Large Cap Value (Russell 1000 Value)

Barrow, Hanley, Mewhinney & Strauss, LLC (BHMS)
BHMS believes that markets are inefficient and can best be exploited through adherence to a value-oriented investment process dedicated to the selection of securities on a bottom-up basis. The overall portfolio will always reflect all three value characteristics: price/earnings and price/book ratios below the market and dividend yields above the market. The stocks must also be attractive according to the firm's dividend discount and relative return models. Analysts provide fundamental analysis in the final step of their investment process. BHMS was retained by the SBI in April 2004.

Earnest Partners, LLC
Earnest Partners utilizes a proprietary valuation and performance model, and rigorous fundamental review to identify stocks with the most attractive risk adjusted returns. They have identified six performance drivers – valuation measures, operating trends, market trends, growth measures,

profitability measures and macroeconomic measures – and have done extensive research to determine which combination of performance drivers, or return patterns, precede outperformance for stocks in each sector. The firm's fundamental review generally includes conversations with the company's management team and industry specialists, a review of the company's financial reports, analysis of industry and company-specific studies, as well as independent field research. They control risk using a statistical approach designed to measure and control the prospects of substantially underperforming the benchmark. The portfolio is diversified across industry groups. Earnest Partners was retained by the SBI in July 2000.

LSV Asset Management
LSV's philosophy is that superior long-term results can be achieved by systematically exploiting the judgmental biases and behavioral weaknesses that influence the decisions of many investors. They use quantitative techniques to rank securities based on fundamental measures of value, past performance, and indicators of near-term appreciation potential. Their risk control discipline limits the portfolio's industry and sector concentrations. LSV was retained by the SBI in April 2004.

Small Cap Growth (Russell 2000 Growth)

ArrowMark Colorado Holdings, LLC
ArrowMark manages a fundamentally driven small cap growth portfolio and prioritizes downside risk while maintaining a long-term investment horizon. They believe companies with sustainable competitive advantages, growing from a low share of a large market at returns on capital that exceed cost of capital, can compound for longer and create more value than is often priced into small cap stocks. The team undertakes both quantitative analysis and qualitative assessments including detailed interviews with management. The core of the fundamental research process is extensive financial modeling to forecast cash flow generation and value creation potential. Scenario analysis is utilized to project a range of outcomes (best/base/stressed). ArrowMark was retained by the SBI in November 2016.

Hood River Capital Management, LLC
Hood River believes the small-cap market is inefficient, which is caused by many factors: a decline in the quantity and quality of sell-side coverage; higher probability of errors in analysts' models; accessible but under-followed management teams; and pure-play companies whose fundamentals are less certain than those of their larger-cap counterparts.

In-depth, original research can uncover companies whose future fundamentals, such as sales or earnings, are likely to exceed the market's expectations. They call this difference between reality and the market's perception the "information gap." Hood River is intently focused on identifying and monetizing the information gap. They aggressively pursue a research advantage by speaking to management teams, customers, competitors, suppliers and other primary sources. Hood River was retained by the SBI in November 2016.

McKinley Capital Management, LLC
McKinley uses a quantitatively driven investment process to systematically search for and identify signs of accelerating growth. The primary model includes a risk-adjusted relative return measurement designed to identify inefficiently priced common stocks relative to the market while adjusting for risk. The candidates are then filtered and scrutinized for liquidity factors and earnings acceleration. The earnings model identifies securities with strong earnings acceleration. The qualitative review begins after the quantitative process has identified candidates for possible inclusion in the portfolio. The purpose of the qualitative analysis is to confirm that the earnings picture revealed through the quantitative analysis is both reasonable and sustainable. New ideas are taken from the quantitative screening process and confirmed through the qualitative review. McKinley was retained by the SBI in January 2004.

Rice Hall James & Associates, LLC
Rice Hall James (RHJ) Small Cap Opportunities strategy employs a fundamental, bottom-up analytical process to identify companies that meet three primary criteria; high earnings growth, high or improving returns-on-invested capital (ROIC), and sustainable competitive advantages. The

team's investment philosophy is rooted in historical analysis indicating the high relative return potential of these factors in combination. The team believes that superior results can be achieved by owning companies that exhibit not only high earnings growth, but also the ability to sustainably generate high ROIC over long periods of time. RHJ was retained by the SBI in November 2016

Wellington Management Company LLP
Wellington Management Company's Disciplined US Small Cap Growth's investment philosophy is based on three core beliefs: 1) changes in the quality of a company's fundamentals are often not reflected in its stock price; 2) the persistence of a company's fundamentals is frequently underestimated by the market; and 3) active managers frequently underestimate the range of possible outcomes. Central to the investment process is intense, fundamental research focused on uncovering companies with improving quality metrics, business momentum and attractive relative valuations. This process is aided by a proprietary screening process that narrows the investment universe to companies consistent with the investment philosophy. The investment team spends most of its time conducting fundamental research on companies elevated by this screening process. This research relies on extensive management meetings and a high level of collaboration with Wellington Management's Global Industry Analysts. Wellington was retained by the SBI in November 2016.

Small Cap Value (Russell 2000 Value)

Goldman Sachs Asset Management, L.P.
Goldman Sachs manages a small cap value portfolio using a strong valuation discipline to purchase well-positioned, cash generating businesses run by shareholder-oriented management teams. Portfolio managers are organized by industry, and use industry-specific valuation measures to evaluate companies within their area. They decompose the historical financial reports, meet with management to evaluate their competitive position within the industry, and evaluate each company's valuation attractiveness relative to other comparable companies within the sector. Goldman Sachs was retained by the SBI in January 2004.

Hotchkis and Wiley Capital Management, LLC
Hotchkis and Wiley seeks to exploit mispriced securities in the small cap market by investing in "undiscovered" and "out of favor" companies. They invest in stocks of which the present value of the company's future cash flows exceeds the current market price. Industry analysts determine a company's normal earnings power, or sustainable earnings level under equilibrium economic and competitive market conditions, which becomes the basis for security valuation. Hotchkis and Wiley was retained by the SBI in January 2004.

Martingale Asset Management, L.P.
Martingale employs a systematic, quantitatively-driven investment approach that seeks to exploit behavioral biases. The process uses a 21 factor model, where the factors are fairly evenly distributed among the three broad buckets of value, growth, and quality, culminating in an alpha score for each stock in the viable universe. This score is then added to an industry rating, yielding an overall composite score for each stock. Value traps are avoided by favoring stocks with positive relative strength and earnings estimate revisions versus peers. Martingale builds a risk-aware portfolio of the highest ranked stocks by maintaining industry, sector, style, and size exposures that are similar to the benchmark. Martingale was retained by the SBI in January 2004.

Peregrine Capital Management
Peregrine's small cap value investment process begins with their proprietary valuation analysis, which is designed to identify the small cap value stocks most likely to outperform. The valuation analysis identifies the most underpriced securities on a sector-by-sector basis. The firm analyzes sixty fundamental factors to identify the most relevant factors in each sector. The focus of the team's fundamental research is to determine if one or more of the style's "Value Buy Criteria" are present. These include resolvable short-term problems, unrecognized assets, take-over potential, fundamental undervaluation and catalysts for change. The portfolio is

diversified and sector weights are aligned closely to the benchmark allowing stock selection to drive performance. Peregrine was retained by the SBI in July 2000.

Semi-Passive Managers

Semi-Passive Managers (Russell 1000)

BlackRock Institutional Trust Company, N.A.
BlackRock has a disciplined, rigorous and repeatable investment process incorporating a unique blend of bottom-up stock selection insights across relative value, earnings quality and sentiment while combining broader top-down thematic insights to generate risk controlled and consistent active returns. The relative value criteria assesses intrinsic value relative to market price. Earnings quality criteria help identify companies likely to sustain earnings growth and avoid negative surprises. Sentiment criteria help identify market participants' beliefs regarding valuation. The thematic criteria seeks to exploit opportunities from a collection of stocks that move together because they share a common exposure which is currently less obvious to the market. In addition to insights, research is also emphasized in the continuous evolution of the strategy. For example, research is incorporated through top down thematic insights to capture macro views as well as through a program which utilizes big data techniques to capture alpha from the large volumes of unstructured data (text, internet search and social media). The strategy seeks to minimize investment and operational risks not associated with adding value. Implementation costs are also considered when balancing return potential with risk profile of trades. The firm was retained by the SBI for semi-passive management in January 1995.

J.P. Morgan Investment Management Inc.
J.P. Morgan believes that superior stock selection is necessary to achieve excellent investment results. To accomplish this objective, the firm uses fundamental research and a systematic valuation model. Analysts forecast earnings and dividends for the stock universe and enter these into a stock valuation model that calculates a dividend discount rate for each security. The stocks are ranked according to this valuation measure within their economic sectors. Stocks most undervalued are placed in the first quintile. The portfolio takes overweight positions in stocks in the first and second quintiles, while underweighting stocks in the fourth and fifth quintiles. In addition, the portfolio will closely approximate the sectors and style of the benchmark. The portfolio remains fully invested at all times. The firm was retained by the SBI in January 1995.

Passive Manager

Passive Manager (R3000)

BlackRock Institutional Trust Company, N.A. (formerly Barclays Global Investors)
For the passive account, BlackRock seeks to match the total rate of return of the Russell 3000 Index. BlackRock uses their proprietary risk management and optimization tools to identify a portfolio with characteristics that closely match those of the benchmark with less exposure to some of the less liquid stocks in the index. The firm was retained by the SBI for passive management in July 1995.

Passive Manager (R1000)

BlackRock Institutional Trust Company, N.A.
For this passive account, BlackRock seeks to match the total rate of return of the Russell 1000 Index. BlackRock aims to fully replicate the benchmark when managing against this index. BlackRock uses their proprietary risk management and optimization tools to help manage day-to-day activity in an attempt to keep transaction costs low. The firm was retained by the SBI for passive management in October 2016.

International Stock Program

The International Stock Program is used by the Combined Funds, the Broad International Stock Fund and the international portion of the Volunteer Firefighter Account in the Supplemental Investment Fund.

The following are the dollar values as of June 30, 2017 of each fund's participation in the International Stock Program:

Combined Funds (mixed)	$13.9 billion
Broad Int'l Stock Fund (mixed)	$179.2 million
Volunteer Firefighter Account (active and passive)	$11.3 million

Management Structure
Currently, the SBI uses three styles of management to invest the assets of the International Stock Program:

— ***Active Management.*** The target has been to have at least one-third of the International Stock Program managed actively. At the end of fiscal year 2017, approximately 36% of the program was actively managed by a group of 13 external managers with portfolios ranging in size from $283 million to over $868 million. Six of these managers manage portfolios in the developed markets and seven manage portfolios in the emerging markets.

— ***Semi-Passive Management.*** The target has been to have no more than 33% of the International Stock Program managed semi-passively. At the end of fiscal year 2017, 9% of the program was semi-passively managed by a group of three external managers with portfolios ranging in size from $343 million to $552 million.

— ***Passive Management.*** The target has been to have at least 50% of the International Stock Program managed passively. At the end of fiscal year 2017, approximately 55% of the International Stock Program was passively managed by a single manager in two separate portfolios, one a developed markets equity index account and the other an emerging markets equity index account, with $6.6 billion and $1.1 billion, respectively.

The goal of the International Stock Program is to outperform the asset class target, which is the MSCI ACWI ex USA Index (net). The SBI uses the market capitalization weights of the developed and emerging markets as they are represented in the program's benchmark index as target weights for the developed and emerging markets within the International Stock Program. At the end of fiscal year 2017, 76% of the International Stock Program was invested in the developed markets and 24% was invested in the emerging markets.

Six of the 13 ***active*** managers and the three ***semi-passive*** managers invest entirely in developed markets and use a variety of investment approaches in an effort to maximize the value added to the MSCI World ex USA Index (net) over time. These managers address currency management as part of their investment process. Their views on currency may be factored into their country and security selection, or they may explicitly hedge currency exposure on an opportunistic basis, or they may seek to add value by actively managing currency positions. Managers are not required to hedge currency risk.

Seven of the 13 ***active*** managers invest entirely in emerging markets. They are expected to add incremental value, over time, relative to the MCSI Emerging Markets Index (net) which is made up of markets in developing countries throughout the world.

The ***passive*** manager in the International Stock Program designs one of its portfolios to consistently and inexpensively track the developed markets MSCI World ex USA Index (net) and designs the other portfolio to track the MSCI Emerging Markets Index (net).

A description of each international stock manager's investment approach is included in the **Investment Manager Summaries** section beginning on page 36.

FY 2017 Changes
The SBI ended its relationship with Capital International, Inc. and transitioned these assets to an MSCI Emerging Markets passive portfolio in October 2016.

The following six emerging market equity managers were funded in March 2017: Macquarie Investment Management Advisers (formerly Delaware Investment Advisers), Earnest Partners LLC, Martin Currie Inc., Neuberger Berman Investment Advisers LLC, Pzena Investment Management, LLC and The Rock Creek Group, LP.

Investment Performance

Similar to the Domestic Stock Program, two long-term ***risk objectives*** have been established for the international equity managers:

— ***Investment Approach***. Each manager (active, semi-passive or passive) is expected to hold a portfolio that is consistent with the manager's stated investment approach.

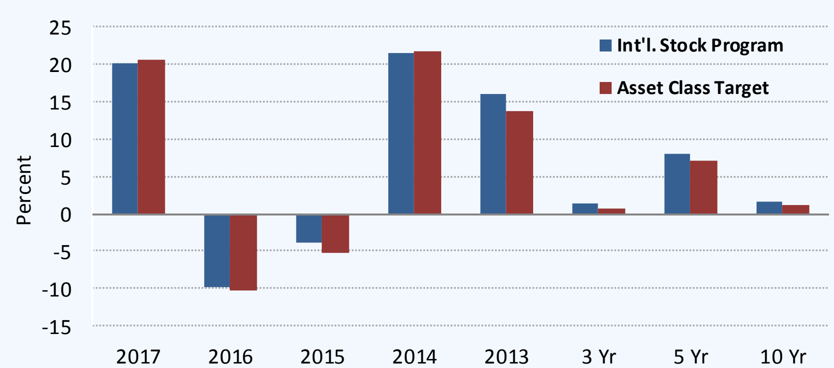
— ***Diversification***. The index manager is expected to hold a well-diversified portfolio which closely tracks its target index. The semi-passive managers are expected to hold risk-adjusted portfolios which modestly outperform the index, and each active manager is expected to hold a portfolio which represents its best ideas for outperforming the index.

The international stock managers successfully fulfilled their long-term risk objectives during fiscal year 2017. In general, the managers constructed portfolios consistent with their stated investment approaches and maintained appropriate levels of diversification.

The Board's ***return objectives*** for the International Stock Program are stated relative to the Morgan Stanley Capital International (MSCI) Standard indices which includes large and mid-capitalization stocks. The indices are capitalization weighted and measured in U.S. dollar terms, with currencies unhedged. Individual active managers are expected to exceed their benchmark by an amount appropriate for their level of active risk. The active risk level varies by manager and is influenced by the manager's stated strategy and style. Performance results for the International Stock Program are shown in Figure 23. In aggregate, performance over the last ten year period exceeded the benchmark by 0.4 percentage point and performance over the last five year period exceeded the benchmark by 0.8 percentage point. The program underperformed the target by 0.3 percentage point for the fiscal year.

Individual manager performance during fiscal year 2017 is shown in Figure 24. Three out of six active developed market managers outperformed the benchmark over the year. The one active emerging markets manager with a full year of performance underperformed its benchmark. Two of the three semi-passive developed market managers outperformed, while one underperformed over the year. Finally, the developed markets passively managed portion of the program matched the return of the MSCI World ex USA Index (net). The emerging markets passively managed portion of the program

Figure 23. Int'l. Stock Program Performance For Periods Ending June 30, 2017



	2017	2016	2015	2014	2013	Annualized 3 Yr.	5 Yr.	10 Yr.
Int'l. Stock Program	**20.2%**	**-9.7%**	**-3.8%**	**21.4%**	**16.1%**	**1.5%**	**8.0%**	**1.6%**
Asset Class Target*	20.5	-10.2	-5.3	21.8	13.6	0.8	7.2	1.2

* MSCI ACWI ex USA (net) since 10/1/03. Composite of EAFE-Free and Emerging Markets Free from 5/1/96 through 9/30/03.

underperformed the return of the MSCI Emerging Markets Index (net).

The International Stock Program's country weights are displayed in Figure 25.

Figure 24. International Stock Program Manager Performance for Periods Ending June 30, 2017

	1 Year Actual %	1 Year Bmk %	3 Years Actual %	3 Years Bmk %	5 Years Actual %	5 Years Bmk %	Market Value ($ in millions)
Active Managers							
Developed Mkts (MSCI World ex USA net)							
Acadian Asset Mgmt.	29.6	19.5	6.7	0.7	13.7	8.1	486.1
Columbia Mgmt. Investment Advisers	19.0	19.5	3.2	0.7	9.0	8.1	394.4
Fidelity Institutional Asset Management	19.0	19.5	2.1	0.7	9.7	8.1	395.0
J.P. Morgan Investment Management	24.4	19.5	1.2	0.7	8.0	8.1	328.5
Marathon Asset Management	19.6	19.5	3.1	0.7	10.8	8.1	868.4
McKinley Capital Management	17.1	19.5	0.6	0.7	8.5	8.1	322.8
Semi-Passive Managers							
Developed Mkts (MSCI World ex USA net)							
AQR Capital Management	20.9	19.5	1.9	0.7	10.1	8.1	387.2
Fidelity Institutional Asset Management	17.1	19.5	0.4	0.7	8.3	8.1	552.1
State Street Global Advisors	22.7	19.5	0.9	0.7	9.4	8.1	343.2
Active Managers							
Emerging Mkts (MSCI Emerging Markets net)							
Earnest Partners							284.7
Macquarie Investment Management Advisers							291.0
Martin Currie							294.6
Morgan Stanley Investment Management	21.7	23.7	2.3	1.1	5.4	4.0	578.3
Neuberger Berman Investment Advisers							289.5
Pzena Investment Management							283.6
Rock Creek							283.1
Passive Managers							
Developed Mkts (MSCI World ex USA net)							
State Street Global Advisors	20.0	19.5	1.1	0.7	8.6	8.1	6,613.6
Passive Managers							
Emerging Mkts (MSCI Emerging Markets net)							
State Street Global Advisors	23.4	23.7	1.3	1.1	4.1	4.0	1,082.3
Aggregate International Stock Program(1)	**20.2**	**20.5**	**1.5**	**0.8**	**8.0**	**7.2**	**14,084.3**
Asset Class Target							
MSCI ACWI ex USA (net)		20.5		0.8		7.2	

(1) Aggregate includes the performance of terminated managers.

Figure 25. International Stock Program Aggregate Country Weights for Period Ending June 30, 2017

Country	Program Weights* %	Benchmark Weights** %
Argentina	0.2	0.0
Australia	4.9	4.9
Austria	0.3	0.2
Belgium	0.9	0.8
Brazil	1.1	1.6
Canada	6.5	6.6
Chile	0.1	0.3
China	0.9	1.4
Colombia	0.1	0.1
Czech Republic	0.1	0.0
Denmark	1.6	1.3
Finland	1.0	0.7
France	7.4	7.2
Germany	6.5	6.7
Greece	0.0	0.1
Hong Kong	5.5	7.3
Hungary	0.2	0.1
India	1.0	2.1
Indonesia	0.5	0.6
Ireland	0.4	0.3
Israel	0.3	0.3
Italy	1.5	1.5
Japan	17.2	16.3
Luxembourg	0.1	0.0
Malaysia	0.3	0.6
Mexico	0.8	0.9
Netherlands	2.6	2.3
New Zealand	0.1	0.1
Norway	0.6	0.4
Peru	0.1	0.1
Philippines	0.2	0.3
Poland	0.2	0.3
Portugal	0.1	0.1
Qatar	0.0	0.2
Russia	0.4	0.8
Singapore	0.9	0.9
South Africa	0.6	1.5
South Korea	2.2	3.7
Spain	2.4	2.4
Sweden	2.0	2.0
Switzerland	5.9	5.9
Taiwan	1.5	3.0
Thailand	0.3	0.5
Turkey	0.2	0.3
United Arab Emirates	0.0	0.2
United Kingdom	13.5	12.3
United States	3.0	0.9
Miscellaneous Accounting Entries	3.6	--
Total* **	**100.0**	**100.0**

* Grouped by country of Domicile. Source: FactSet.
** Benchmark is the MSCI ACWI ex USA Index (net). Source: FactSet.
*** Totals may not add due to rounding.

International Program Managers

Active Developed Markets Managers

Acadian Asset Management LLC
Acadian uses stock factors in an effort to predict how well each security in its universe of over 40,000 stocks will perform relative to its region/industry peer group and then ranks all securities by their relative attractiveness. Acadian also applies separate models to forecast peer group returns, in an effort to predict how well each stock's region/industry peer group will perform relative to world equities. The two forecasts are then combined to determine a world base relative return forecast for each stock in the allowable universe. The stock and peer group valuation models are customized to each market. At the individual stock level, Acadian uses a wide range of quantitative factors including valuation, earnings, size and price movements. At the peer group level, Acadian utilizes valuation, risk, growth and economic indicators.
Acadian then uses a portfolio optimization system to trade off the expected return of the stocks with such considerations as the client's benchmark index, desired level of risk, transaction cost estimates, available liquidity, and other requirements. Portfolios are normally fully invested, with a minimal amount of cash. Country and sector weights fall out of the bottom-up stock selection process, with overall portfolio risk control ensuring the desired level of diversification. The last step of the process is a careful review of optimized portfolios by the investment team before trading, in an effort to ensure the portfolio meets the client's investment goals. Acadian was retained by the SBI in July 2005.

Columbia Threadneedle Investments
Columbia's objective is to focus on key forces of change in the markets and the companies that will benefit. They believe that a good understanding of the likely impact of these changes at a company level, complemented with an appreciation of the ability of management to exploit these changes, creates significant opportunities to pick winners and avoid losers. Companies are analyzed within a macroeconomic and global sector/thematic framework. "Top-down" views on macroeconomics and trends in global sectors combine with "bottom-up" company analysis along regional and global sector lines. Analysts propose a rating of A through E for approximately 150 to 200 stocks in each region reflecting the expected performance on a 12-month view. The Global Equity Team then takes the analysts research and conducts additional research to determine which ones are potential portfolio candidates and decide as a group which ones to add or delete. Final portfolio construction is the responsibility of the lead portfolio manager. Columbia was retained by the SBI in February 2000. In December 2003 Columbia acquired Threadneedle International LTD, a United Kingdom based asset manager to manage its international equity assets.

Fidelity Institutional Asset Management LLC
Fidelity's International Growth strategy is a core, growth-oriented strategy that provides diversified exposure to the developed international markets benchmark. The investment process combines active stock selection and regional asset allocation. Four portfolio managers in London, Smithfield, Rhode Island, and Toronto construct regional sub-portfolios, selecting stocks based on Fidelity analysts' bottom-up research and their own judgment and expertise. The four regional portfolios are combined according to the policy determined by Fidelity's Asset Allocation Group (AAG). The AAG is comprised of senior investment professionals who base their decisions from micro-economic data derived from portfolio manager inputs, analysts' field research, and proprietary data on liquidity, market activity, and fund flows. Portfolio guidelines seek to ensure risk is commensurate with the performance target and to focus active risk on stock selection. Resulting portfolios typically contain between 200 to 250 holdings. Fidelity was retained by the SBI in July 2005.

J.P. Morgan Investment Management Inc.
J.P. Morgan's international equity process focuses on stock selection as the primary source of added value, seeking to build a portfolio diversified by both sector and region. Analyst based locally in regional markets, providing insights on 1300 companies. These regional teams manage regional equity portfolios, generating local

market insights and conducting research on companies in an effort to identify the highest conviction stocks within their region. The highest conviction regional stocks are further analyzed by a team of London-based Global Sector Specialists who seek to identify global "industry winners", pinpointing well-managed, profitable companies that possess solid financial positions, whose earnings are growing faster than their competitors yet whose stocks are trading at or below market multiples. Each global sector specialist ranks each of the stocks within his or her sector on a scale from A to D. These rankings will be based on a variety of factors including: the information gathered from the regional investment professionals and the global sector specialists own knowledge of industry dynamics and relative valuations. The final stage of the investment process rests with a team of senior portfolio managers, who are responsible for constructing risk controlled portfolios, capturing the best thinking of both the local and global teams. The emphasis is on delivering alpha through bottom-up stock picking. J.P. Morgan was retained by the SBI in July 2005.

Marathon Asset Management LLP
At the heart of Marathon's investment philosophy is the "capital cycle" approach to investment. This approach is based on the idea that the prospect of high returns will attract excessive capital (and hence competition), and vice versa. In addition, the assessment of how management responds to the forces of the capital cycle, particularly whether they curtail investment when returns have been poor - and how they are incentivized, are critical to the investment outcome. Given the contrarian and long-term nature of the capital cycle, the approach results in strong views versus the market and long holding periods (5 years plus). The investment philosophy guides a focused team of investment generalists who seek investment opportunities in the growth and value universes and across the capitalization spectrum. Marathon was retained by the SBI in November 1993.

McKinley Capital Management, LLC
Using proprietary quantitative models, McKinley's investment process searches for and identifies signs of accelerating growth. The initial universe consists of all publicly traded non-U.S. stocks, from all capitalization categories in more than 60 countries. The primary model includes a risk-adjusted relative return measurement designed to identify inefficiently priced common stocks in U.S. dollars relative to the market while adjusting for risk. The remaining candidates after the risk adjusted relative return process has been applied then pass through liquidity and strength of earnings tests. The earnings tests identify securities with strong earnings acceleration. In the final portfolio construction process, McKinley examines a variety of qualitative factors which could ultimately impact earnings. These factors include a qualitative data check and street research analysis of economic factors, specific industry themes and company fundamentals. The final portfolio will hold between 50-75 stocks, providing diversification and risk control by issue, industry, sector and country. McKinley was retained by the SBI in July 2005.

Semi-Passive Developed Markets Managers

AQR Capital Management, LLC
AQR employs a disciplined quantitative approach emphasizing both top-down country/currency allocation and bottom-up security selection decisions to generate excess returns. AQR's investment philosophy is based on the fundamental concepts of value and momentum. AQR's international equity product incorporates stock selection, country selection, and currency selection models as the primary alpha sources. Dynamic strategy allocation (between the three primary alpha sources) and style weighting are employed as secondary alpha sources. AQR was retained by the SBI in July 2005.

Fidelity Institutional Asset Management LLC
Fidelity's Select International strategy combines active stock selection with quantitative risk control to provide consistent excess returns above the benchmark index while minimizing relative volatility and risk. Fidelity's investment philosophy is based on the premise that international markets are semi-efficient and pricing anomalies exist. Research conducted by the firm's international equity analysts and portfolio managers

provides the basis for stock selection and portfolio construction.

By combining five regional sub-portfolios in the U.K., Canada, Continental Europe, Japan, and the Pacific Basin ex Japan, the portfolio manager constructs a portfolio made up of the best ideas of the firm's research analysts located throughout the world. Each regional portfolio is created so that stock selection is the largest contributor to active return while systematic, sector, and factor risks are minimized. The portfolio manager uses a combination of proprietary and third-party optimization models to monitor and control risk within each regional module. Resulting in portfolios typically contain between 225 to 275 holdings. Fidelity was retained by the SBI in July 2005.

State Street Global Advisors (SSgA)

The International Alpha Strategy seeks to create value through superior security selection. Investment opportunities are quantitatively ranked according to those factors which have been shown to identify mispricing over a long term investment horizon and would fall into categories such as valuation, sentiment and quality, among others. Additionally, the strategy also incorporates a more immediate term signal with the understanding that the most effective themes in evaluating stocks may change through time, and an appropriate emphasis or de-emphasis on select characteristics will benefit the portfolio. The stock scores derived from the combination of these viewpoints are translated into forecasts of stock outperformance. Proprietary portfolio construction software is then used to generate a recommended buy/sell list based on the tradeoff between expected outperformance and the trading costs. State Street Global Advisor's risk management process permits multiple and simultaneous risk penalties and implies that, as industry, country and capitalization deviations become greater and greater, the incremental expected return from a stock must increase in order to compensate for the greater benchmark relative risk. The managers also impose country, sector, industry, and security specific bands relative to the benchmark as an additional risk management tool and manage other exposures such as capitalization, beta and yield to be similar to that of the underlying benchmark. The investment process creates core portfolios that provide clients with stringent risk control, the return of the asset class, and the benefit of active management. SSgA was retained by the SBI in July 2005.

Passive Developed Markets Managers

State Street Global Advisors

State Street uses a replication strategy to construct the portfolio. Exchange-traded stock index futures, approved by the Commodity Futures Trading Commission, are also used to minimize tracking error and trade cash flows in order to minimize transactions costs. SSgA was retained by the SBI in October 1992.

Active Emerging Markets Managers

Earnest Partners LLC

Earnest Partners is a fundamental, bottom-up investment manager. The firm's investment objective is to outperform the benchmark while controlling volatility and risk. Earnest Partners implements this philosophy using a proprietary screening process, fundamental analysis, and risk management that minimizes the likelihood of meaningfully underperforming the benchmark. Each company identified in the screening process is put through a fundamental review conducted by the investment team. In this step, the team develops an investment thesis for each company. This thesis must be tested and will typically reflect conversations with the company's management team and industry specialists, review of the company's financial reports, analysis of industry and company specific studies, and independent field research. The following questions arise during the review process: 1) Is the Company in a good industry? 2) Can it compete effectively? 3) Do the financials support the business plan and share price? 4) Will the current business environment help it succeed? 5) Is the management team competent and principled? In summary, Earnest seeks companies in attractive industries with developed strategies, talented and honest management teams, sufficient funding, and strong financial results. Earnest Partners was retained by the SBI in April 2017.

Macquarie Investment Management Advisers (formerly Delaware Investment Advisers)
Macquarie believes that market price and intrinsic business value are positively correlated in the long-run, and short-term divergences offer disciplined, bottom-up, fundamental investors the opportunity to generate attractive risk-adjusted returns. Macquarie's investment team focuses on companies with high quality, sustainable franchises that have identifiable competitive advantages, high barriers to entry and high replication costs. Several methods are employed to value a business, including discounted cash flow, replacement cost, private market transaction, and/or multiple analysis. The team generates the majority of ideas from meeting with management, competitors and suppliers, on-site company visits, conference participation, and observing current events. Macquarie was retained by the SBI in April 2017.

Martin Currie Inc.
The Martin Currie Global Emerging Market's (GEMs) team builds long term, high conviction stock-focused portfolios, driven by fundamental research within an appropriate risk framework. They seek to identify those emerging market companies that can sustain cash flow growth and generate returns in excess of their cost of capital. The Martin Currie GEMs team believes than an assessment of a company environmental, social and governance (ESG) performance, or sustainability, can help identify those business models that are most likely to sustain high returns and resist competitive pressures. The research process is designed to deliver high-conviction stock ideas based on fundamental bottom-up analysis. All GEMs portfolio managers are responsible for research, ideal generation and analysis and the management of client portfolios. All research is internally generated. Top-down factors are viewed as a source of risk to the strategy, not a source of alpha. A country-specific cost of equity is applied to all cash flow valuation models within the stock research process. Lastly, Martin Currie's investment team holds regular sector research meetings that bring together all portfolio managers and analysts. The purpose of these formal meetings is to generate and share potential investment ideas, discuss findings from company meetings and review corporate announcements. Martin Currie was retained by the SBI in April 2017.

Morgan Stanley Investment Management Inc.
The Morgan Stanley Investment Management (MSIM) Emerging Markets Equity team believes that future economic growth and currency movements are critical drivers of stock returns. MSIM conducts original macro-thematic research and integrates it with fundamental bottom-up company analysis to amplify returns in a growth-oriented portfolio. Using a proprietary "Rules of the Road" framework that includes rigorous credit and currency analysis, MSIM takes overweight positions in those countries where growth is likely to accelerate and underweights those countries with macro risks which may not be fully appreciated by consensus. MSIM focuses on investing in companies with quality management dedicated to expanding earnings growth, which can include privately managed as well as state-owned enterprises benefiting from reform. The team takes active position sizes to generate meaningful long-term returns. Morgan Stanley Investment Management was retained by the SBI for emerging markets management in January 2001.

Neuberger Berman Investment Advisers LLC
Neuberger Berman seeks to maximize performance by constructing its portfolios with high quality, growing companies trading at attractive valuations, which have the potential to outperform the MSCI Emerging Markets Index at low risk. It is their belief that emerging markets are less efficient than developed ones, and because of this inefficiency, or lack of market transparency, mispricing opportunities should be available for the team to capitalize on. The team's main emphasis is on bottom-up stock picking and focusing on fundamental analysis, while at different times during portfolio construction the team utilizes both qualitative and quantitative processes. Neuberger was retained by the SBI in April 2017.

Pzena Investment Management, LLC
Pzena is a classic value manager that seeks to buy very good businesses at very low prices. They focus exclusively on companies that are underperforming their

historically demonstrated earnings power. They apply fundamental research to these companies in an effort to determine whether the problems that caused the earnings shortfall are temporary or permanent. They include companies in the portfolio only when all three of the following criteria are met: 1) They judge that the problems are temporary; 2) Management has a viable strategy to generate earnings recovery; and 3) There is a meaningful downside protection in case the earnings recovery does not materialize. Pzena invests in a concentrated portfolio, exclusively focused on companies such as these that should generate meaningful excess returns for long term investors. The decision to dedicate research resources to a security is made by the four co-portfolio managers who review current publicly available information and sell-side research to make an initial judgement as to whether the causes of the under-valuation are likely temporary or permanent, and whether the research process is likely to reasonably forecast the company's normalized earnings power. Once the team becomes extremely knowledgeable about the company and industry, the analyst and one of the portfolio managers meet with company management, seeking a meaningful discussion about their business and the strategic options available to them over the next several years and their plans to restore the earnings power. Pzena was retained by the SBI in April 2017.

The Rock Creek Group, LLC
Rock Creek believes that decisions to deviate away from a pre-specified emerging markets benchmark are a significant contributor to total performance. The investment team interacts with well-established investors, policy makers, economists and strategists to refine their macroeconomic views on countries, sectors and investment themes. These market insights and data points are an important part of their investment process, allowing them to make specific calls on country, sector, and market capitalization exposures. They express their views via a combination of portfolio allocations to individual securities, ETF's, customized baskets of stocks, and index futures. The Emerging Markets portfolios utilize an actively managed all-cap approach in which their top-down views drive country and sector selection, while their local teams provide on-the-ground stock picking talent that drives security selection. The emerging markets investment team then adjusts the bottom-up derived portfolio using an overlay strategy to reflect top-down views on country exposures and betas. Rock Creek Group was retained by the SBI in April 2017.

Passive Emerging Markets Managers

State Street Global Advisors
State Street manages an emerging markets index portfolio designed to track the Morgan Stanley Capital International Emerging Markets index. State Street uses an optimized strategy to construct the portfolio. Exchange traded stock index futures, approved by the Commodity Futures Trading Commission, are also used to minimize tracking error, obtain exposure where local access is inaccessible, and trade cash flows in order to minimize transactions costs. SSgA was retained by the SBI in December 2011 for passive emerging markets management.

Fixed Income Program

The Fixed Income Program is used by the Combined Funds, the Supplemental Investment Fund Bond Fund and the bond portion of the Volunteer Firefighter Account.

The following are the dollar values as of June 30, 2017 of each fund's participation in the Program:

Combined Funds (active)	$12.4 billion
Supplemental Bond Fund (active)	$154.8 million
Volunteer Firefighter Account (active and semi-passive)	$34.1 million

Investment Management

The SBI uses a two part approach for the management of the Fixed Income Program:

— ***Active Management.*** The target has been to have no more than half of the Fixed Income Program managed actively. At the end of fiscal year 2017, approximately 47% of the Fixed Income Program was actively managed by four external investment managers with portfolios ranging in size from $1.1 billion to $1.6 billion.

— ***Semi-Passive Management.*** The target has been to have at least half of the assets of the Fixed Income Program managed semi-passively. At the end of fiscal year 2017, approximately 53% of the bond segment was invested by three managers with portfolios of $2.0 to $2.5 billion each.

The group of ***active*** bond managers is retained for its blend of investment styles. Each active manager has the goal of outperforming the Bloomberg Barclays U.S. Aggregate Bond Index by focusing on high quality fixed income securities across all sectors of the market. The managers vary, however, in the emphasis they place on interest rate anticipation (duration) and in the manner in which they approach security selection and sector weighting decisions. In keeping with the objective of utilizing the Fixed Income Program as a deflation hedge, the active managers are restricted regarding the duration of their portfolios. This requirement is designed to prevent the dilution of the deflation hedge of the total program due to an excessively short duration position. In addition, the duration restriction helps to avoid extreme variability in total returns relative to the benchmark. The SBI constrains the duration range of the active managers' portfolios to a band of plus or minus two years around the duration of the Bloomberg Barclays U.S. Aggregate. The active bond managers focus on high quality (BBB or better) rated bonds. Four managers have been granted authority to invest a limited portion of their portfolios in BB and B rated dollar denominated debt and three have been given authority to invest in investment grade non-dollar denominated issues. The managers use this additional authority on a tactical basis.

The goal of the ***semi-passive*** managers is to add incremental value relative to the Bloomberg Barclays U.S. Aggregate Bond Index through superior bond selection and sector allocation rather than through interest rate exposure. Semi-passive managers' portfolios are constrained to plus or minus 0.5 years around the duration of the Bloomberg Barclays U.S. Aggregate. One manager has been granted authority to invest a limited portion of its portfolio in BB and B rated dollar denominated debt and in investment grade non-dollar denominated issues. The manager uses this additional authority on a tactical basis.

A description of each bond manager's investment approach is included in the **Investment Manager Summaries** section beginning on page 44.

FY 2017 Changes

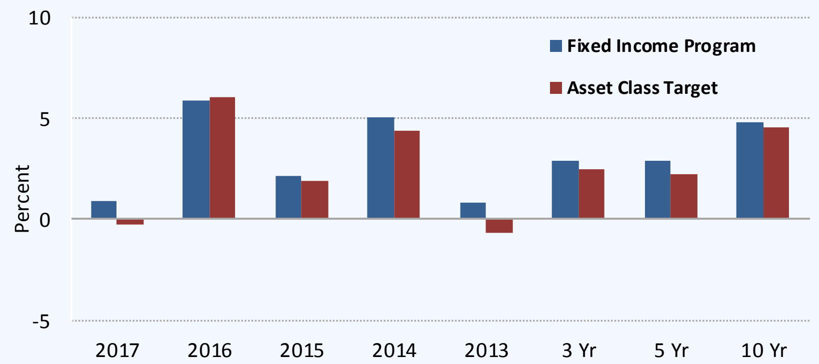
In November 2016, the SBI terminated its relationship with Aberdeen Asset Management and transitioned these assets to cash for benefit payments and passive developed markets exposure to align with the SBI's new asset allocation policy.

Investment Performance

The SBI constrains the ***risk*** of the active bond managers' portfolios to ensure that they fulfill their deflation hedge and total fund diversification roles. As noted earlier, the managers are restricted in terms of the duration of their portfolios and the quality of their fixed income investments. The active and semi-passive bond managers successfully fulfilled their long-term risk objectives during fiscal year 2017. The managers constructed portfolios consistent with stated investment approaches and maintained appropriate levels of quality and duration.

The ***returns*** of each of the bond managers are compared to the Bloomberg Barclays U.S. Aggregate Bond Index. Individual managers are expected to exceed the target, net of fees, on an annualized basis. In total, the program outperformed the Bloomberg Barclays U.S. Aggregate Bond Index by 1.2 percentage points for the recent fiscal year. Relative to the benchmark, the program benefited from overweight positions in CMBS and corporates, particularly financial and industrials. Managers also outperformed the benchmark over the long-term. The program outperformed the asset class target by 0.3 percentage point over the ten year period ending June 30, 2017. All four active managers outperformed the benchmark. Two semi-passive managers outperformed and one met the benchmark for the fiscal year. Figure 26 shows historical performance for the entire program. Individual manager performance is shown in Figure 27. Aggregate portfolio sector and portfolio characteristics are shown in Figure 28.

Figure 26. Fixed Income Program Performance For Periods Ending June 30, 2017



	2017	2016	2015	2014	2013	Annualized 3 Yr.	5 Yr.	10 Yr.
Fixed Income Program	**0.9%**	**5.9%**	**2.1%**	**5.0%**	**0.8%**	**2.9%**	**2.9%**	**4.8%**
Asset Class Target*	-0.3	6.0	1.9	4.4	-0.7	2.5	2.2	4.5

* The Fixed Income Program asset class target has been the Bloomberg Barclays U.S. Aggregate Bond Index since July 1994.

Figure 27. Fixed Income Program Manager Performance for Periods Ending June 30, 2017

	1 Year Actual %	Bmk %	3 Years Actual %	Bmk %	5 Years Actual %	Bmk %	Market Value ($ in millions)
Active Managers							
Columbia Mgmt.	2.0	-0.3	3.3	2.5	3.2	2.2	1,160.6
Dodge & Cox	2.7	-0.3	3.0	2.5	3.6	2.2	1,646.8
PIMCO	0.8	-0.3	3.0	2.5	3.1	2.2	1,575.5
Western Asset Mgmt.	2.4	-0.3	3.7	2.5	3.7	2.2	1,587.8
Semi-Passive Managers							
BlackRock Financial Mgmt.	-0.1	-0.3	2.6	2.5	2.4	2.2	2,066.8
Goldman Sachs Asset Mgmt.	0.2	-0.3	2.7	2.5	2.6	2.2	2,486.6
Neuberger Investment Mgmt.	-0.3	-0.3	2.6	2.5	2.4	2.2	2,231.3
Aggregate Fixed Income Program(1)	**0.9**	**-0.3**	**2.9**	**2.5**	**2.9**	**2.2**	**12,755.4**
Asset Class Target							
Bloomberg Barclays U.S. Aggregate Bond Index		-0.3		2.5		2.2	

(1) Aggregate includes the performance of terminated managers.

Figure 28. **Fixed Income Program Sector Weights and Portfolio Characteristics for Period Ending June 30, 2017**

	Active Managers %	Semi-Passive Managers %	Aggregate Fixed Income Program %	BB Barclays Benchmark %
Treasury	22.3	29.1	25.4	36.7
Government-Related	3.0	2.9	3.0	6.6
Corporate	33.6	31.7	33.0	25.5
U.S. Mortgage	28.4	28.3	28.3	28.2
Commercial Mortgage	3.7	2.7	3.2	1.8
Asset Backed	6.1	4.4	5.4	0.5
Municipal	1.9	0.3	0.9	0.7
Other	1.0	0.6	0.8	0.0

Note: May not equal 100% due to rounding.

	Active Managers %	Semi-Passive Managers %	Aggregate Fixed Income Program %	BB Barclays Benchmark %
Average Quality	A	A+	A	AA-
Average Yield to Maturity	2.79	2.65	2.71	2.54
Effective Duration*	5.27	5.80	5.56	5.84
Weighted Average Life**	7.7 Yrs.	7.9	7.8	7.99

* Measures the interest rate sensitivity of a bond. It is the approximation of the percentage price change of the bond per 100 bp increase or decrease in prevailing market interest rates. Effective duration takes into consideration how the cashflows of the bonds change when interest rates change. This measure is most appropriate for bonds (and portfolios) with optionality, such as callable bonds and mortgage bonds.

** The weighted average life (WAL) of a bond is the average number of years for which each dollar of unpaid principal of a bond remains outstanding. Once calculated, WAL tells how many years it will take to pay half of the outstanding principal.

Fixed Income Program Managers

Active Managers

Columbia Threadneedle Investments
Columbia manages portfolios using a bottom-up, relative value approach in combination with a top-down, macro outlook that guides the firm's relative value decisions. The firm employs in-depth fundamental research and credit analysis combined with proprietary valuation disciplines to identify individual relative value opportunities across market sectors. The duration and maturity structure of the portfolio are managed using rigorous analysis centered on the firm's proprietary interest rate research. Columbia is committed to diversification of sources of active risk in the portfolios it manages, and believes that proper diversification combined with consistent evaluation of risk-reward trade-offs leads to competitive risk-adjusted performance. Columbia was retained by the SBI in July 1993.

Dodge & Cox
Dodge & Cox manages a diversified portfolio of securities that are selected through bottom-up, fundamental analysis. The firm believes that by combining fundamental research with a long-term investment horizon it is possible to uncover and act upon inefficiencies in the valuation of market sectors and individual securities. When this fundamental research effort is combined with a disciplined program of risk analysis, the firm believes attractive returns are possible over the long-term. In seeking above average returns, Dodge & Cox emphasizes market sector and individual security selection, analyzes portfolio and individual security risk, and strives to build portfolios which have a higher yield than the broad bond market, and analyzes portfolio and individual security risk. Dodge & Cox was retained by the SBI in February 2000.

Pacific Investment Management Company LLC (PIMCO)
PIMCO's investment approach seeks to provide consistent excess returns with similar risk relative to the benchmark over a business cycle. PIMCO's approach to investing has three key principles: diversified sources of value, a long-term orientation and bond selection from a broad universe. PIMCO relies on multiple sources of value through the use of top-down and bottom-up strategies. PIMCO's investment process starts with an annual Secular Forum. The goal of the Secular Forum is to look beyond the current business cycle and determine how secular forces will play out over the next three to five years. Quarterly, PIMCO holds Economic Forums to evaluate global growth and inflation over the next six to twelve months. Following PIMCO's Secular and Economic Forums, the PIMCO Investment Committee (IC) works on a consensus basis to develop major strategies that serve as a model for all portfolios. The IC makes use of the top-down outlook provided by the Forums, PIMCO's Global Advisory Board (external committee of economic and policy experts), PIMCO's global economic strategists, and generalist portfolio managers as well as bottom-up input from the CIOs and specialists who each focus on their respective asset classes. The IC defines a set of target risk exposures for portfolios. Generalist portfolio managers collaborate with sector specialists, who perform in-depth research and recommend individual securities, for portfolio implementation. PIMCO was retained by the SBI in September 2008.

Western Asset Management Company
Western emphasizes the use of multiple strategies and active sector rotation and issue selection, while constraining overall interest rate risk relative to the benchmark. Multiple strategies are proportioned so that results do not depend on one or two opportunities, and no single adverse market event would have an overwhelming effect. Western believes that this approach adds consistent value over time and can reduce volatility. Long term value investing is Western Asset's fundamental approach. In making their sector decision, the firm seeks out the greatest long-term value by analyzing all fixed income market sectors and their economic expectations. Individual issues are identified based on relative credit strength, liquidity, issue structure, event risk, covenant protection, and market valuation. Western will tactically trade the portfolio's overall duration within a stated band around the benchmark. Western was retained by the SBI in July 1984.

Semi-Passive Managers

BlackRock Financial Management, Inc.
BlackRock manages a semi-passive portfolio that closely tracks the Bloomberg Barclays U.S. Aggregate Index. BlackRock employs a controlled-duration, relative value sector rotation and security selection approach, which can be described as active management with tighter duration, sector, and quality constraints. BlackRock seeks to add value through managing portfolio duration within a narrow band relative to the benchmark, relative value sector/sub-sector rotation and security selection, rigorous quantitative analysis of the valuation of each security and of the portfolio as a whole, intense credit analysis and review, and the judgment of experienced portfolio managers. Advanced risk analytics measure the potential impact of various sector and security strategies to ensure consistent risk-adjusted value is added. BlackRock was retained by the SBI in April 1996.

Goldman Sachs Asset Management
Goldman manages a semi-passive portfolio that closely tracks the Bloomberg Barclays U.S. Aggregate Index. Goldman manages the portfolio within a risk-controlled framework. The firm relies primarily on sector allocation and security selection strategies to generate incremental return relative to the benchmark. To a lesser degree, term structure and highly controlled interest rate anticipation strategies are also implemented. Portfolios are diversified among various sectors and individual securities. Goldman combines long-term strategic investments with short-term tactical trading opportunities. Strategic investments are based on fundamental and quantitative sector research and seek to optimize the long-term risk/return profile of portfolios. Tactical trades between sectors and securities within sectors are implemented to take advantage of short-term market anomalies. Goldman was retained by the SBI in July 1993.

Neuberger Berman Investment Advisers LLC
Neuberger manages a semi-passive portfolio that closely tracks the Bloomberg Barclays U.S. Aggregate Index. Neuberger's process relies on a combination of quantitative tools and active management judgment. Explicit quantification and management of risks are at the heart of their investment process. Neuberger's proprietary risk exposure analysis includes all relevant systemic factors, interest rate and spread-related, that determine a bond's expected return with respect to changes in interest rates and spreads. Neuberger analyzes every bond in the index for all relevant factors, and capitalization weights the results to calculate index level risk exposures. For each interest rate factor, the portfolio is very closely matched to the index to ensure that the portfolio earns the same return as the index for any change in interest rates. For each spread factor, the portfolio can deviate slightly from the index as a means of seeking value-added. Risk is controlled by setting target active risk exposures that must fall within pre-established maximums. To control credit risk, corporate holdings are diversified across a large number of issues. Neuberger was retained by the SBI in July 1988.

Money Market Account

State Street Global Advisors
The Money Market Account seeks to provide safety of principal, daily liquidity and a competitive yield over the long term. The Account is not a "money market fund" registered with the Securities and Exchange Commission, and is not subject to the various rules and limitations that apply to such funds. There can be no assurance that the Account will maintain a stable net asset value. The Account invests in a diversified portfolio of U.S. dollar-denominated securities issued or guaranteed by the U.S. Government or its agencies or instrumentalities; debt securities of domestic or foreign corporations; mortgage-backed and other asset-backed securities; taxable and tax-exempt municipal bonds; obligations of international agencies or supranational entities; inflation-indexed bonds; structured notes; loan participations; delayed funding loans and revolving credit facilities; and short-term investments, such as repurchase agreements, bank certificates of deposit, fixed time deposits, and bankers' acceptances.

Stable Value Manager

Galliard Capital Management, Inc.
Galliard Capital Management manages the Stable Value Fund in the Supplemental Investment Fund. The Stable Value Fund is managed to provide preservation of principal, maintain adequate liquidity to meet potential withdrawals, and produce a level of steady, positive income. The manager invests the Account in well diversified portfolios of U.S. dollar denominated, investment grade fixed income securities. The manager also invests in investment contracts issued by banks and insurance companies that assure that participants can transact at book value (principal plus accrued interest) as well as maintain a relatively stable return profile for the portfolio regardless of daily market changes. To maintain necessary liquidity, the manager invests a portion of the portfolio in its Stable Return Fund and in cash equivalents. The Stable Return Fund is a large, daily priced fund consisting of a wide range of stable value instruments that is available to retirement plans of all sizes. Galliard was retained by the SBI in November 1994.

Private Markets Program

Like the stock and bond segments, private markets assets (real estate, private equity, real assets, private credit, and distressed/opportunistic investments) are managed on a program basis. The Private Markets Program is not offered to the Supplemental Investment Fund.

Statutory Constraints
The statutory constraints for any private markets asset investment for the Combined Funds are as follows:

— Each investment must involve at least four other investors.

— SBI's participation in an investment may not exceed 20% of the total investment.

Management Structure

Given their long investment time horizon, the Combined Funds are especially well suited for private markets investments. Up to 20% of the market value of the Combined Funds is targeted for private markets investments. Market value plus unfunded commitments may be up to 35% of the total market value of the Combined Funds. A breakdown of the program by segment is shown in Figure 29. The SBI does not establish an allocation target for each segment. As of June 30, 2017, the market value of current private markets investments was $8.4 billion, or 13% of the Combined Funds.

Descriptions of each of the private markets investments are included in the **Investment Manager Summaries** section beginning on page 49.

Private Equity
The private equity investment strategy is to establish and maintain a broadly diversified private equity portfolio comprised of investments that provide diversification by industry type, stage of corporate development and location.

Prospective private equity managers are reviewed and selected based, primarily, on the manager's experience, investment strategy, diversification potential and performance history.

During fiscal year 2017, the SBI approved commitments with Permira, Thoma Bravo, Warburg Pincus, Goldman Sachs, Lexington Partners, Dyal Capital Partners, Oak Hill Capital, Adams Street Partners, Kohlberg Kravis Roberts, Silver Lake, Vestar Capital Partners, Asia Alternatives, and Nordic Capital. The SBI will continue to review and add new private equity investments as attractive opportunities are identified.

Private Credit
The strategy for private credit investments is to target funds that typically provide a current return and may have an equity component. Structures such as subordinated debt, mezzanine, and direct lending investments are typical private credit investments. Managers are selected based on the manager's performance, experience and investment strategy. During fiscal year 2017, the SBI approved commitments with Prudential and Kohlberg Kravis Roberts. The SBI will continue to review private credit investment opportunities for inclusion in the program.

Real Estate
The real estate investment strategy calls for the establishment and maintenance of a broadly diversified real estate portfolio comprised of investments that provide overall diversification by property type and location. The main components of this portfolio consist of investments in closed-end commingled funds. The remaining portion of the portfolio may include investments in less diversified, more focused (specialty) commingled funds and REITs.

Prospective real estate managers are reviewed and selected based on the manager's experience, investment strategy and performance history. During fiscal year 2017, the SBI approved commitments with Angelo Gordon & Co. and Lubert-Adler. The SBI will continue to review real estate managers for possible inclusion in the program.

Real Assets
The strategy for real asset investments is to establish and maintain a diversified portfolio of investment vehicles comprised of tangible assets, which provide an inflation hedge and additional diversification. Real asset investments may include natural resources, infrastructure, and agricultural and timber assets. The portfolio will be diversified by geographic area as well as by type.

Real asset investments are selected based on the manager's experience, investment strategy and performance history. During fiscal year 2017, the SBI approved a commitment with BlackRock. The SBI will continue to review real asset investments for possible inclusion in the program.

Distressed and Opportunistic

The strategy for distressed and opportunistic investments is to seek funds that target equity and/or debt investments in companies in some form of distress, as well as unique or idiosyncratic investments that may share characteristics of other private asset classes. Managers are selected based on the manager's performance, experience and investment strategy. During fiscal year 2017, the SBI approved commitments with Merced Capital Partners and Avenue Capital Group. The SBI will continue to review distressed and opportunistic investment opportunities for inclusion in the program.

Investment Performance

The SBI reviews performance of its private markets investments relative to inflation, as measured by changes in the Consumer Price Index (CPI), and expects that private markets investments in the aggregate will be accretive to other investments in the Combined Funds. The Private Markets Program provided a 19.2% return in fiscal year 2017 and has provided a 9.0% return annualized over the past ten years, which provided a positive contribution to overall fund performance for the Combined Funds. Performance of the Private Markets Program is shown in Figure 30 for the period ending June 30, 2017.

At this time, benchmarks have not been established for the private markets fund managers. The long-term nature of these investments and the lack of comprehensive data on the returns provided by the private markets investments preclude comprehensive performance evaluation. In the future, as markets for these asset classes become more institutionalized, the SBI hopes to integrate appropriate performance standards for these assets into its performance analysis. A listing of individual investment funds can be found in the **Investment Manager Summaries** section.

Figure 29. Private Markets Program Asset Mix as of June 30, 2017

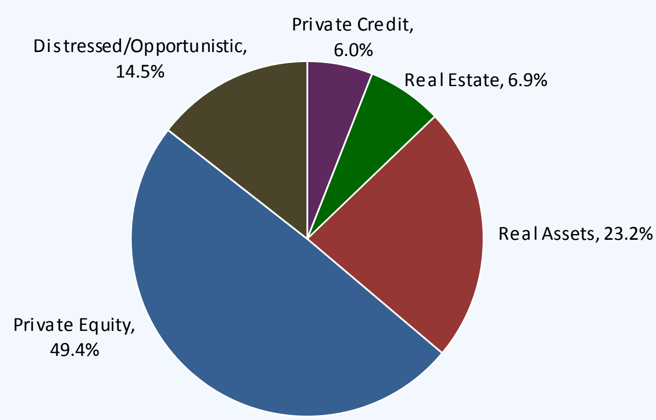
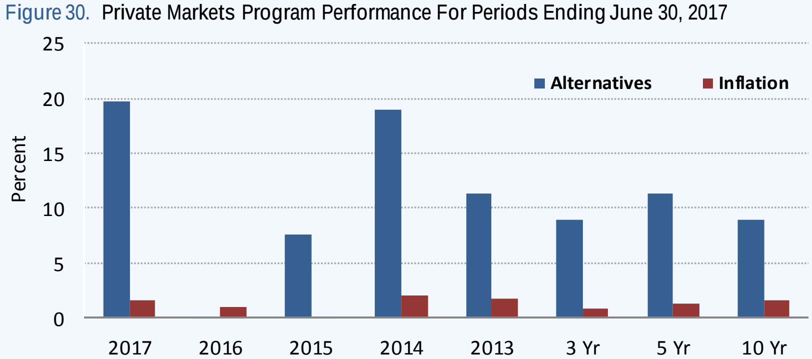


Figure 30. Private Markets Program Performance For Periods Ending June 30, 2017



	2017	2016	2015	2014	2013	Annualized 3 Yr.	5 Yr.	10 Yr.
Alt. Investments	**19.7%**	**0.2%**	**7.6%**	**18.9%**	**11.3%**	**8.9%**	**11.3%**	**9.0%**
Inflation	1.6	1.0	0.2	2.1	1.8	0.9	1.3	1.6

Private Markets Managers

Private Equity Managers

Adams Street Partners

Adams Street (formerly Brinson Partners) Global Secondary Fund 5 and Fund 6 was formed to invests exclusively in secondary venture capital and private equity limited partnership interests which are sold by investors who, for a variety of reasons, have decided to sell some or all of their partnership interests. Adams Street Partners is based in Chicago, IL. The funds were formed in 2012 and 2017, respectively.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Global Secondary Fund 5	54,281,342	27,470,250	2012
Global Secondary Fund 6	0	100,000,000	2017

Advent International

Advent International GPE VI, VII and VIII were formed for the purpose of investing primarily in buyout and recapitalization opportunities in upper middle-market companies in Europe and North America. Advent has regional headquarters in Boston, MA and London. The funds were formed in 2008, 2012 and 2016, respectively.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Advent International GPE VI	31,298,588	0	2008
Advent International GPE VII	84,516,831	9,000,000	2012
Advent International GPE VIII	22,974,471	76,600,000	2016

Affinity Capital

Affinity Ventures Funds IV and V were formed to make venture capital investments exclusively in the health care industry, with a focus on companies in the medical device, health care service, health care information technology, and biotechnology sectors. Affinity Capital is based in Minneapolis, MN.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Affinity Ventures IV	1,154,149	0	2004
Affinity Ventures V	2,886,784	0	2008

Apax Partners

Apax Partners VIII and Fund IX invests primarily in buyout and recapitalization opportunities in upper middle-market and large capitalization companies in Europe and North America. Apax is headquartered in London. The funds were formed in 2013 and 2016, respectively.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Apax VIII	208,803,242	18,017,529	2013
Apax IX	2,550,440	144,750,000	2016

The Banc Funds Co.

Based in Chicago, IL, Banc Fund VII, Banc Fund VIII and Banc Fund IX invest primarily in sub-regional banks, across the U.S., which have demonstrated above average growth and are likely acquisition targets.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Banc Fund VII	47,841,000	0	2005
Banc Fund VIII	156,858,108	0	2008
Banc Fund IX	104,940,885	21,441,186	2014

BlackRock

The BlackRock Tempus Fund was inherited from the Duluth Teachers Retirement Fund Administration in 2015. The Fund seeks to generate returns by making opportunistic investments in debt and equity. The firm is based in New York, NY.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
BlackRock Tempus Fund	726,609	0	2015

Blackstone Group

Blackstone Capital Partners Funds IV, V, VI and VII are limited partnerships which were formed in 2002, 2006, 2008 and 2015, respectively. Based in New York, NY, the funds will invest in a variety of private equity transactions in North America and Europe.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Blackstone Capital Partners Fund IV	7,426,131	1,945,831	2002
Blackstone Capital Partners Fund V	14,559,305	8,522,239	2006
Blackstone Capital Partners Fund VI	89,385,357	16,683,497	2008
Blackstone Capital Partners Fund VII	16,809,897	113,521,841	2015

Blum Capital

Blum Strategic Partners II, Blum Strategic Partners III, and Blum Strategic Partners IV were organized in 2001, 2005 and 2007, respectively. Based in San Francisco, CA, the funds will focus on value-oriented private and public equity investments located primarily in the U.S.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Blum Strategic Partners II	134,317	2,127,584	2001
Blum Strategic Partners III	0	471,064	2005
Blum Strategic Partners IV	0	5,896,033	2007

Brookfield Asset Management

Brookfield Capital Partners Fund IV was formed in 2015. Brookfield Asset Management is a global operator and asset manager of real assets related businesses. This fund will target investments in complex situations, out of favor sectors and companies that require operational changes. Brookfield Capital Partners is based in Toronto.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Brookfield Capital Partners Fund IV	34672881	71,489,160	2015

Carlyle Group

Carlyle Strategic Partners IV was formed in 2016. With offices in New York, NY, London and Hong Kong, the fund will invest in middle-market companies experiencing financial, operational or cyclical distress.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Carlyle Strategic Partners IV	10,303,676	91,245,001	2016

CarVal Investors

CVI Global Value Fund, Credit Value Funds I, II and III were formed in 2007, 2010, 2012, and 2015 respectively. The funds are based in Minneapolis, MN with offices in Beijing, Buenos Aires, London, Copenhagen, Delhi, Luxembourg, Paris, Singapore, Shanghai and Tokyo. The Funds will make investments in loan portfolios, corporate securities, international real estate and real estate loans and special opportunities.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
CVI Global Value Fund	26,609,733	10,000,000	2007
CVI Credit Value Fund I	41,609,805	5,000,000	2010
CVI Credit Value Fund II	127,845,275	7,500,000	2012
CVI Credit Value Fund A III	113,147,970	52,500,000	2015

Chicago Growth Partners (formerly William Blair)

Formed in 2001, 2005 and 2008 and based in Chicago, IL, the Chicago Growth Partners funds seek investments in a broad spectrum of private companies at various stages of corporate development.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
William Blair Capital Partners VII	59,631	1,650,000	2001
Chicago Growth Partners I	5,119,924	300,000	2005
Chicago Growth Partners II	21,503,013	1,652,374	2008

Court Square Capital

Court Square Capital Partners I, II and III were formed in 2001, 2006 and 2012, respectively, to make private equity investments in a diversified, global portfolio of companies. Court Square Capital is based in New York, NY.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Court Square Capital Partners I	104,698	1,920,943	2001
Court Square Capital Partners II	44,278,211	17,544,102	2006
Court Square Capital Partners III	56,930,988	85,547,995	2012

Crescendo Ventures

Crescendo Venture Fund IV was organized in 2000. They have offices in Minneapolis, MN and Palo Alto, CA. The funds will pursue opportunistic venture capital investments throughout the U.S.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Crescendo Venture Fund IV	14,424,384	0	2000

CVC Capital Partners

CVC European Equity Partners V and Capital Partners VI are based in London and were formed in 2008 and 2013, respectively. CVC invests primarily in the European mid and large buyout markets, with investment opportunities available from a broad range of sectors and geographies.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
CVC European Equity Partners V	55,106,428	1,628,978	2008
CVC Capital Partners VI	155,352,866	115,918,953	2013

Diamond Castle Partners

Diamond Castle Partners IV, based in New York, NY, was established in 2006 to make private equity investments primarily in the following sectors: energy and power, healthcare, media and telecom, and financial services.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Diamond Castle Partners IV	0	1,377,108	2006

DSV Management

DSV Partners IV limited partnership was formed in 1985. The firm has offices in Princeton, NJ. DSV focuses on start-up and early stage investments.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
DSV Partners IV	31,177	0	1985

Elevation Partners

Elevation Partners was formed in 2005 for the purpose of making private equity investments targeting the media and entertainment sectors, with a focus on content and intellectual property. Elevation has offices in Menlo Park, CA and New York, NY.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Elevation Partners	579,089	799,634	2005

Fox Paine and Company

Fox Paine Capital Fund II was formed in 2000. Based in Foster City, CA, the fund focuses on private equity investments in middle market operating businesses in a wide variety of industries.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Fox Paine Capital Fund II	4,068,672	11,953,212	2000

GTCR Golder Rauner

GTCR Golder Rauner Funds VI, IX, X and XI were formed in 1998, 2006, 2010 and 2013 are funds of a successor firm to the private equity firm of Golder, Thoma, Cressey and Rauner. The SBI has several investments with Golder, Thoma, Cressey and Rauner. Based in Chicago, IL, the funds focus primarily on a wide variety of private equity investments in consolidating and fragmented industries.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
GTCR Fund IX	6,468,482	3,585,067	2006
GTCR Fund X	66,852,726	6,751,396	2010
GTCR Fund XI	65,869,458	44,287,447	2013

Glouston Capital Partners (fka Permal Capital)

Glouston Private Equity Opportunities Fund was inherited from the Duluth Teachers Retirement Fund Administration in 2015. Glouston is a small investment firm based in New York, NY and was formed to purchase small portfolios of private equity investments on the secondary market.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Permal PE Opportunities IV, L.P.	2,056,536	1,090,000	2015

Goldman Sachs Capital Partners

GS Capital Partners 2000, GS Capital Partners V, and GS Capital Partners VI were formed in 2000, 2005 and 2007, respectively, by Goldman Sachs. West Street Capital Partners and Vintage VII were formed in 2016 by Goldman Sachs. The Capital funds focus on domestic and international investments in four areas: energy, telecommunications, broadband, and technology. Vintage Fund VII was formed to acquire and structured portfolios of private equity partnerships and assets in the secondary market. All of the funds are based in New York.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
GS Capital Partners 2000	165,394	0	2000
GS Capital Partners V	1,504,912	1,041,099	2005
GS Capital Partners VI	19,803,130	15,039,971	2007
West Street Capital Partners	12,822,165	136,500,00	2016
Vintage VII	2,000,000	98,000,000	2016

Goldner Hawn Johnson and Morrison

GHJM Marathon Fund V was organized in 2004. Trailhead Fund was formed by this group in 2012. Based in Minneapolis, MN, the funds will pursue primarily middle market private equity investments located in the Midwest and other parts of the U.S.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
GHJM Marathon Fund V	0	46,502	2004
GHJM Trailhead Fund	20,774,703	4,585,813	2012

HarbourVest

The HarbourVest funds were inherited from the Duluth Teachers Retirement Fund Administration in 2015. Based in Boston, MA, HarbourVest is a global investment firm with multiple investment products. The following funds were formed to make direct or secondary investments in established buyout and venture capital funds.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Dover Street VII Cayman Fund L.P.	746,213	127,500	2015
HarboutVest Intl PE Partners V-Cayman US	1,607,787	228,110	2015
HarboutVest Intl PE Partners VI-Cayman	3,859,212	459,071	2015
HarboutVest Partners VIII-Cayman Buyout	2,566,540	312,000	2015
HarboutVest Partners VIII-Cayman Venture	4,893,015	140,000	2015

Hellman and Friedman

Hellman and Friedman V, VI and VII were organized in 2004, 2007 and 2009. Based in San Francisco, CA the funds will pursue opportunistic private equity investments located in the U.S. and Europe.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Hellman and Friedman V	3,206,543	8,070,303	2004
Hellman and Friedman VI	38,626,990	5,087,265	2007
Hellman and Friedman VII	57,959,683	2,589,256	2009

IK Investment Partners

IK, based in London, makes investments in lower middle-market business in Europe's northern countries. IK's primary focus is businesses in the consumer industrial, businesses services and healthcare sectors. IK Fund VII was formed in 2013 and Fund VIII was formed in 2016.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
IK Fund VII	177,514,762	10,665,421	2013
IK Fund VIII	27,883,132	143,261,439	2016

Kohlberg, Kravis, Roberts & Co. (KKR)

KKR's Funds invest in large leveraged buyouts but may include other types of investments as well. The partnerships' portfolio companies are often mature, low technology companies with diversified operations. KKR Asia Fund was formed in 2017 to invest in large-leading businesses in Asia. Kohlberg, Kravis, Roberts and Co. is based in New York, NY with offices located across the Asian region.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
KKR Millennium Fund	19,253,695	0	2002
KKR 2006 Fund	89,063,198	3,360,223	2006
KKR Americas Fund XII	0	150,000,000	2016
KKR Asia Fund III	0	100,000,000	2017

Leonard Green & Partners (LGP)

LGP invests in middle-market companies in a variety of structured transactions. LGP typically makes investments in the retail, consumer & business services, and healthcare and distribution sectors. Green Equity Investors VI was formed in 2012 to continue this investment philosophy. LGP is based in Los Angeles, CA.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Green Equity Investors VI	204,976,510	10,758,975	2012

Lexington Capital Partners

Lexington Capital Partners VI, VII and VIII were formed in 2006, 2009 and 2014, respectively, for the purpose of making investments in established buyout, mezzanine and venture capital funds, primarily through secondary transactions. Lexington Middle Market was formed in 2016 to acquire U.S. growth capital, small and middle market buyout interests through negotiated secondary market purchases. The funds are based in New York, NY.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Lexington Capital Partners VI	21,316,397	1,634,703	2006
Lexington Capital Partners VII	79,548,367	41,166,114	2009
Lexington Capital Partners VIII	41,821,051	114,384,150	2014
Lexington Middle Market Investors IV	0	100,000,000	2016

Madison Dearborn Capital Partners

Madison Dearborn Capital Partners is a medium-sized private equity investment firm based in Chicago, IL. Madison Dearborn Capital Partners VII was formed in 2015 to make buyout and growth equity investments in established middle and upper middle-market companies located primarily in the United States.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Madison Dearborn Capital Partners VII	23,479,961	75,673,199	2015

MHR Institutional Partners

MHR is a medium-sized private equity investment firm based in New York, NY. MHR IV was formed in 2015 to invest in distressed companies with the goal of gaining influence or control of the company and creating value through the restructuring process and revenue growth.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
MHR Institutional Partners IV	15,071,115	58,509,011	2015

Merced Capital (formerly EBF & Associates)

Based in Minneapolis, MN, Merced Partners II, III and IV expect to invest in securities with strong downside protection from identifiable asset value and compelling return potential from some combination of current income, asset value appreciation, secondary market instrument appreciation, and enterprise value creation or appreciation. Merced Partners II, III, IV and V were formed in 2006, 2010, 2013 and 2017, respectively.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Merced Partners II	4,985,045	0	2006
Merced Partners III	56,370,960	0	2010
Merced Partners IV	133,349,775	0	2013
Merced Partners V	37,616,250	16,121,250	2017

Neuberger Berman

Neuberger Berman formed Dyal Capital Partners III in 2016 to make minority equity investments in established investment management companies. Dyal Capital is based in New York, NY.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Dyal Capital Partners III	72,283,473	112,598,331	2016

Nordic Capital

Nordic Capital is based in Stockholm, Sweden and performs buyouts of middle-market businesses, primarily in the Nordic region of Europe. Nordic focuses on healthcare and information technology businesses where they can use their expertise in these sectors to create value. Nordic Capital VIII was formed in 2013.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Nordic Capital VIII	146,944,838	61,083,226	2013

North Sky Capital

North Sky Capital funds were inherited from the Duluth Teachers Retirement Fund Administration in 2015. Based in Minneapolis, MN, North Sky manages several different investment strategies. The following funds were formed to make direct investments in established buyout and venture capital funds.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
North Sky Capital LBO Fund III, LP	504,060	350,000	2015
North Sky Capital Venture Fund III, LP	522,505	106,250	2015

Oak Hill Capital Management

Oak Hill Capital is a private equity firm based in New York and has offices in Menlo Park, CA and Stamford, CT. Oak Hill Fund IV was formed in 2016 to invest in middle market firms adhering to a theme-based approach.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Oak Hill Capital Partners IV	9,034,530	135,000,000	2016

Oaktree Capital Management

Oaktree Capital Management is a global private equity firm based in Los Angeles, CA. The Oaktree Principal Fund VI was formed in 2015 to invest in the debt or equity of companies experiencing a significant element of distress or dislocation or that are otherwise out of favor. Oaktree will seek to create control positions at attractive valuations which will allow for the maximization of value of the companies after control is obtained.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Oaktree Principal Fund VI	32,160,874	72,509,912	2015

Paine & Partners

Paine & Partners is a small private equity firm with offices in New York, NY, Chicago, IL and San Mateo, CA. Paine & Partners IV was formed in 2014 to make control investments in companies involved in the global food and agribusiness sectors.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Paine & Partners Capital Fund IV	34,583,049	36,688,304	2014

Permira

Permira performs buyouts of middle-market companies across geographies in Europe and North America. Permira typically makes investments in the retail, consumer & business services, healthcare and telecom, media and technology sectors. Permira V and VI were formed in 2013 and 2016, respectively, to continue this investment philosophy. Permira is based in London.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Permira V	186,219,659	17,193,792	2013
Permira VI	20,882,024	114,762,143	2016

Public Pension Capital Management (PPC)

PPC developed an innovated approach to private equity investing, tailored to the needs and demands of modern public pensions in the United States. The fund's evergreen structure allows flexibility, increased transparency and alignment of interests of the GP and LPs. The fund invests in middle-market businesses in the technology, financial and industrial sectors. PPC was formed in 2014 and is based in New York, NY.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Public Pension Capital Fund	50,205,944	50,012,642	2014

RWI Ventures

RWI Ventures I was formed in 2000 to make venture capital investments. The Fund is based in Menlo Park, CA. The RWI Funds were transferred to the SBI from the Minneapolis Teachers Retirement Fund Association (MTRFA) on June 30, 2006 pursuant to the merger of MTRFA into TRA.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
RWI Ventures I	483,933	0	2006

Silver Lake Partners

Silver Lake Partners II, III, IV, and V were formed in 2004, 2007, 2012, and 2017, respectively. With offices in New York, NY and Menlo Park, CA the funds will focus primarily on large-scale private equity investing in technology companies.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Silver Lake Partners II	14,494,024	11,771,953	2004
Silver Lake Partners III	56,864,658	10,675,428	2007
Silver Lake Partners IV	80,704,541	35,839,166	2012
Silver Lake Partners V	0	135,000,000	2017

Split Rock Partners

Split Rock Partners and Split Rock Partners II were formed in 2005 and 2008, respectively, by Split Rock Partners Management (formerly part of St. Paul Venture Capital). With offices in Minneapolis, MN and Menlo Park, CA, the funds will focus on private equity investments in seed and early-stage healthcare and software companies.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Split Rock Partners I	26,715,874	2,545,457	2005
Split Rock Partners II	45,374,980	1,155,000	2008

Strategic Partners (formerly Credit Suisse)

Strategic Partners II B, III B, III VC, IV B, IV VC, V, VI and VII were formed to invest in secondary leveraged buyout, venture capital, and mezzanine debt limited partnership interests which are sold by investors who, for a variety of reasons have decided to liquidate all or a portion of their private equity holdings. All of the funds are based in New York, NY. In 2013, the Strategic Partners funds platform was sold to The Blackstone Group and is now wholly-owned by Blackstone.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Strategic Partners Fund II B	614.433	4,692,847	2003
Strategic Partners Fund III B	16.646.763	15,070,182	2005
Strategic Partners Fund III VC	6.201.521	1,138,329	2005
Strategic Partners Fund IV B	22.290.928	18,379,014	2008
Strategic Partners Fund IV VC	13,806,172	2,965,229	2008
Strategic Partners Fund V	35,977,546	41,339,010	2011
Strategic Partners Fund VI	84,312,285	71,617,717	2014
Strategic Partners Fund VII	17,789,543	135,299,591	2016

Summit Partners

Summit Ventures V, VIII and IX are limited partnerships formed in 1998, 2011 and 2015. Summit Partners focuses on profitable, expansion stage firms that have not yet received any venture backing. The majority of the partnership investments are in high tech firms. Investments are diversified by location and industry type. Summit Partners is based in Boston, MA.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Summit Ventures V	104,865	875,000	1998
Summit Partners Growth Equity VIII	102,805,193	12,212,734	2011
Summit Partners Growth Equity IX	6,248,724	94,000,000	2015

Thoma Cressey Bravo Equity Partners

Thoma Cressey Bravo is one of two successor firms to the private equity firm of Golder, Thoma, Cressey and Rauner. Thoma Cressey VI, VII and VIII were formed in 1998, 2000, and 2006. Based in Chicago, IL, the funds focus primarily on a wide variety of private equity investments in consolidating and fragmented industries.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Thoma Cressey Fund VI	1,891	1,085,000	1998
Thoma Cressey Fund VII	919,353	0	2000
Thoma Cressey Fund VIII	1,524,016	770,000	2006

Thoma Bravo Equity Partners

Thoma Bravo is one of two successor firms to the private equity firm of Golder, Thoma, Cressey and Rauner. Thoma Bravo XII was formed in 2016. Based in Chicago, IL, the fund will make control buyouts of software and technology-enabled services companies in North America.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Thoma Bravo Fund XII	28,986,407	44,625,509	2016

Thomas H. Lee Partners

Thomas H. Lee was formed in 2015 to invest in operating companies and create value through acquisitions and restructurings. Thomas H. Lee is located in Boston, MA.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Thomas H. Lee Equity Fund VI	52,737,225	61,747,709	2015

Thomas, McNerney & Partners

Thomas, McNerney & Partners is based in Connecticut with additional offices in Minneapolis, MN and San Francisco, CA. The Thomas, McNerney & Partners Fund I and Fund II were formed in 2003 and 2006 to make venture capital investments in all stages of development and across all sectors of the health care industry.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Thomas, McNerney & Partners Fund I	3,032,665	0	2003
Thomas, McNerney & Partners Fund II	16,473,698	1,875,000	2006

TPG

TPG Partners VII was formed in 2015 to invest in operating companies and create value through acquisitions and restructurings. TPG has 17 offices around the world, including Dallas, TX, San Francisco, CA, New York, NY and London.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
TPG Partners VII	34,651,220	65,676,741	2015

T. Rowe Price

T. Rowe Price, a Baltimore-based money management firm, manages stock distributions from the SBI's private markets limited partnerships. T. Rowe Price has extensive research capabilities in the small capitalization company area. In addition, the firm has a large trading staff with particular expertise in the trading of small capitalization and illiquid stocks.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
T. Rowe Price	23,376,640	0	N/A

Varde Partners

Varde Fund IX, X and XI are limited partnerships formed in 2008, 2010 and 2013, respectively. Based in Minneapolis, MN, the funds will invest in distressed and/or mispriced private and public investments.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Varde Fund IX	15,105,454	0	2008
Varde Fund X	119,311,838	0	2010
Varde Fund XI	260,254,600	0	2013

Vestar Capital Partners

Vestar Capital Partners IV, V and VI are limited partnerships that were formed in 1999, 2006, and 2011, respectively. Based in New York, NY, the funds invest primarily in a number of private middle market companies.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Vestar Capital Partners IV	746,203	57,313	1999
Vestar Capital Partners V	19,529,057	63,188	2006
Vestar Capital Partners VI	84,508,588	21,715,434	2011

Warburg Pincus & Co.

Warburg Pincus is based in New York, NY and has a global presence with seven additional offices around the world. These funds will invest private equity in a wide variety of businesses located domestically and abroad. Warburg Pincus China is a companion fund and will invest alongside the current Warburg Pincus global fund. The funds listed were formed in 1998, 2002, 2005, 2007, 2012, 2016, and 2017.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Warburg Pincus Equity Partners	390,972	0	1998
Warburg Pincus Private Equity Partners VIII	11,074,352	0	2002
Warburg Pincus Private Equity Partners IX	12,404,649	0	2005
Warburg Pincus Private Equity Partners X	77,286,049	0	2007
Warburg Pincus Private Equity Partners XI	204,226,676	13,200,000	2012
Warburg Pincus Private Equity Partners XII	40,061578	89,342,000	2016
Waburg Pincus China	5,882,686	38,835,000	2017

Wayzata Investment Partners

Wayzata Opportunities Funds I, II, and III were formed in 2005, 2007 and 2012, respectively, for the purpose of making investments in distressed securities where it can expect to exert significant influence on the restructuring process and potentially control the reorganized company. The Funds are based in Wayzata, MN.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Wayzata Opportunities Fund I	1,138,130	18,920,000	2005
Wayzata Opportunities Fund II	23,895,941	30,000,000	2007
Wayzata Opportunities Fund III	43,584,874	101,910,000	2012

Welsh, Carson, Anderson and Stowe

Welsh, Carson, Anderson and Stowe Funds VIII, IX, X, XI and XII were formed in 1998, 2000, 2005, 2008 and 2014. Based in New York, NY, the funds focus on private equity investments in the healthcare and information services industries.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Welsh, Carson, Anderson and Stowe Fund X	17,696,356	2,000,000	2005
Welsh, Carson, Anderson and Stowe Fund XI	68,864,265	754,736	2008
Welsh, Carson, Anderson and Stowe Fund XII	49,043,335	108,290,239	2014

Real Estate Managers

Angelo, Gordon & Co.

Angelo, Gordon & Co is based in New York and has offices in London, Amsterdam, Frankfurt and Milan, these funds will invest primarily in opportunistic commercial real estate investments. AG Realty Fund IX was formed in 2015 and the majority of investments located in North America and up to 25% of exposure to Europe AG Asia Realty Fund III was formed in 2016 and will make opportunistic investments in real estate in Asia with an emphasis on China, Japan, Hong Kong and South Korea.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
AG Realty Fund IX	63,856,791	39,461,640	2015
AG Asia Realty Fund III	21,388,430	30,953,750	2016

Blackstone Real Estate Partners

Based in New York, NY, Blackstone Real Estate Partners V, VI, VII and VIII were formed in 2006, 2007, 2011 and 2015 to make real estate investments in a variety of sectors, geographic locations and business climates. Blackstone will consider investments in major urban office buildings, the lodging sector, distribution and warehousing centers, retail, and a variety of real estate operating companies.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Blackstone Real Estate Partners V	33,641,998	4,174,052	2006
Blackstone Real Estate Partners VI	18,643,123	4,907,906	2007
Blackstone Real Estate Partners VII	86,658,179	16,659,681	2011
Blackstone Real Estate Partners VIII	67,814,761	93,833,542	2015

Colony Advisors

Colony Investors III is a closed-end commingled real estate fund managed by Colony Capital Inc. of Los Angeles, CA. The fund’s strategy is to invest in undervalued equity and debt real estate-related assets.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Colony Investors III	5,175,300	0	1997

SilverPeak

Silverpeak Legacy Pension Partners II and III were formed in 2005 and 2007, respectively, to invest in properties, real estate companies and service businesses ancillary to the real estate industry on a global basis. The funds’ worldwide headquarters are in New York, NY, with regional headquarters in London and Tokyo. In 2010, the funds were renamed Silverpeak Legacy Pension Partners II and III to reflect the General Partner ownership change after the Lehman Brothers bankruptcy in 2008.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Silverpeak Legacy Pension Partners II	5,544,602	7,742,386	2005
Silverpeak Legacy Pension Partners III	16,833,935	79,861,480	2007

Strategic Partners (formerly Credit Suisse)

Strategic Partners III RE and Strategic Partners IV RE were formed in 2005 and 2008, respectively, for the purpose of purchasing secondary interests of real estate funds. The funds will follow a strategy similar to that of the Strategic Partners private equity funds, in which the SBI is also an investor. Credit Suisse sold the Strategic Partners funds platform to The Blackstone Group in 2013. Blackstone is based in New York, NY.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Strategic Partners III RE	4,182,246	9,006	2005
Strategic Partners IV RE	10,825,903	1,368,796	2008

Rockpoint

Rockpoint Real Estate Fund V was formed in 2015 to invest in opportunistic real estate transactions in the United States. Rockpoint is headquartered in Boston, MA and has offices in Dallas, TX and San Francisco, CA.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Rockpoint Real Estate Fund V	33,061,832	69,697,752	2015

Rockwood

Rockwood Capital RE Partners X was formed in 2016 to make value add investments in commercial real estate. Rockwood is headquartered in New York, NY.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Rockwood Capital Real Estate Partners X	23,462,533	75,384,398	2016

TA Associates Realty

TA Realty Associates Funds VII, VIII, IX, X and XI are closed-end, commingled real estate funds managed by TA Associates Realty of Boston, MA. The funds invest in small to medium sized properties generally diversified by location and type. On-site management of properties is contracted to outside firms. The SBI committed to the funds in 2004, 2006, 2008, 2012 and 2015, respectively.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Realty Associates Fund VIII	42,930,264	0	2006
Realty Associates Fund IX	17,413,825	0	2008
Realty Associates Fund X	84,426,736	0	2012
Realty Associates Fund XI	39,828,160	60,000,000	2015

Real Asset Managers

Apache Corporation

Apache Corporation is a Houston, TX based oil and gas company. Apache Acquisition Net Profits Interest is a private placement that was formed in 1986 to acquire a non-operating interest in the net profit generated by oil and gas properties acquired in 1986 from Occidental Petroleum Company. The fund will remain in effect throughout the producing life of the properties.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
1986 Net Profits Interest	371,580	0	1986

EIG Global Energy Partners (formerly TCW Asset Management Company)

Energy Partners XIV, XV and XVI were formed in 2007, 2010 and 2013 respectively, for the purpose of making mezzanine and equity investments in energy and energy-related infrastructure projects and companies on a global basis. The funds operate from offices in Washington D.C., Los Angeles, CA, Houston, TX, New York, NY and London. EIG was formally spun out of TCW in 2011.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
EIG Energy Fund XIV	13,906,276	2,761,129	2007
EIG Energy Fund XV	94,110,712	6,322,679	2010
EIG Energy Fund XVI	118,881,745	81,730,852	2013

EnCap Investments

EnCap Energy Capital Funds VII, VIII, IX, and X were formed in 2007, 2010, 2012 and 2015 for the purpose of making privately negotiated equity and equity-linked investments in the independent sector of the oil and gas industry. EnCap Investments is based in Houston, TX.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
EnCap Energy Capital Fund VII	8,574,882	3,860,151	2007
EnCap Energy Capital Fund VIII	44,967,799	8,379,469	2010
EnCap Energy Capital Fund IX	71,072,669	18,569,791	2012
EnCap Energy Capital Fund X	46,276,284	54,200,820	2015

Energy & Minerals Group (formerly known as NGP Midstream & Resources)

Based in Houston, TX, Energy & Minerals Group will make direct investments in selected areas of the energy infrastructure and natural resources sectors, primarily targeting the midstream energy sector and all facets of the mining, minerals and related power sectors. The funds were formed in 2007, 2011, 2014 and 2015.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
NGP Midstream & Resources	77,916,245	230,871	2007
Energy & Minerals Group II	128,825,694	5,533,640	2011
Energy & Minerals Group III	162,453,744	14,793,996	2014
Energy & Minerals Group IV	99,061,001	72,583,810	2015

Energy Capital Partners

Energy Capital specializes in building and managing energy infrastructure assets to achieve capital appreciation. Energy Capital is based in Short Hills, NJ. Fund II and III were formed in 2010 and 2013, respectively.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Energy Capital Partners II	49,527,211	30,099,613	2010
Energy Capital Partners III	109,839,479	93,043,420	2013

EnerVest Energy

EnerVest XIV was formed in 2015 to acquire, develop, operate and manage oil and gas properties. EnerVest is headquartered in Houston, TX.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
EnerVest Energy Institutional Fund XIV	77,813,840	17,540,521	2015

First Reserve

The First Reserve funds were formed in 2003, 2006, 2008 and 2013, respectively, and are structured as limited partnerships. The general partner's long-term investment strategy is to create diversified portfolios of oil and gas and other energy-related investments. First Reserve is headquartered in Greenwich, CT.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
First Reserve X	430,477	0	2003
First Reserve XI	12,807,276	0	2006
First Reserve XII	44,713,115	3,440,286	2008
First Reserve XIII	71,045,244	135,620,253	2013

Merit Energy Company

Merit Energy Partners B, C, D, E, F, H and I were formed in 1996, 1998, 2000, 2003, 2005, 2011 and 2014, respectively. Based in Dallas, TX, the funds focus on resource investments in producing oil and gas properties.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Merit Energy Partners B	10,225,460	0	1996
Merit Energy Partners C	18,668,994	0	1998
Merit Energy Partners D	35,229,708	0	2000
Merit Energy Partners E	26,049,011	0	2003
Merit Energy Partners F	24,964,326	0	2005
Merit Energy Partners H	74,637,538	0	2011
Merit Energy Partners I	178,277,842	26,621,519	2014

Natural Gas Partners

Natural Gas Partners is based in Irving, TX and will focus primarily on the sectors of the energy industry that are related to the production and development of crude oil and natural gas in North America. Funds IX, X and XI were formed in 2007, 2011 and 2014, respectively.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Natural Gas Partners IX	7,907,594	1,473,974	2007
NGP Natural Resources X	69,642,472	9,621,253	2011
Natural Gas Capital Resources XI	88,614,495	68,431,215	2014

Sheridan Production Partners

Sheridan Production Partners I, II and III were formed in 2007, 2010 and 2014 respectively to pursue a strategy of acquiring a portfolio of currently producing oil and gas properties and optimizing the operations of those properties through production acceleration and recovery enhancement, appropriate use of capital reinvestment and aggressive cost control. The Funds are headquartered in Houston, TX.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Sheridan Production Partners I	65,723,992	0	2007
Sheridan Production Partners II	66,365,005	0	2010
Sheridan Production Partners III-B	41,942,015	65,650,000	2014

Private Credit Managers

Audax

Audax Mezzanine Fund III and IV were formed in 2010 and 2015. Based in New York, NY, the funds expect to invest in a diversified portfolio of mezzanine securities, with a specific focus on the middle market.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Audax Mezzanine III	50,995,033	18,332,960	2010
Audax Mezzanine Fund IV	9,968,061	88,724,551	2015

Avenue Capital Partners

Avenue Capital is mid-sized global investment firm based in New York, NY. Avenue Energy Opportunities was formed in 2015 to make investments in debt, equity and other obligations of North American energy and utility companies that are experiencing financial distress.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Avenue Energy Opportunities	120,354,100	0	2015

Citicorp Capital Investors

Citicorp Mezzanine Partners III is a limited partnership formed in 1999 by Citicorp Capital Investors Ltd. of New York, NY. The Fund will invest in a broad range of transactions utilizing subordinated debt and equity securities.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Citicorp Mezzanine Partners III	11,799,488	0	1999

Crescent Capital Group (formerly TCW/Crescent)

TCW/Crescent Mezzanine Partners III is a Los Angeles, CA based limited partnership formed in 2001. The Fund makes mezzanine investments including subordinated debt with equity participations primarily in profitable, middle market companies. Crescent Capital Group became formerly independent of TCW in 2011.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
TCW/Crescent Mezzanine Partners III	2,437,594	29,733,852	2001

Gold Hill Venture Lending Partners

Gold Hill Venture Lending and Gold Hill 2008 were formed in 2004 and 2008, respectively. The funds generate returns through secured loans, gains on the sales of securities acquired upon the exercise of warrants, and through the disposition of direct equity investments. Prior to forming Gold Hill, the partners executed a similar mandate for Silicon Valley Bank, and they expect to continue a close relationship for purposes of deal-sourcing. Gold Hill has offices in Santa Clara, CA and Boston, MA.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Gold Hill Venture Lending	1,101,058	0	2004
Gold Hill 2008	9,033,754	0	2008

Goldman Sachs Mezzanine Partners

GS Mezzanine Partners 2006 and V are limited partnerships formed in 2006 and 2007 respectively. Based in New York, NY, the Funds' investment objectives are to achieve long-term capital appreciation and current returns through investments in mezzanine securities. These securities will principally include fixed income securities such as debt and preferred stock, often with an equity component, such as warrants, options, a convertible feature, or common stock associated with the debt or preferred stock purchase.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
GS Mezzanine Partners 2006	3,801,267	9,858,563	2006
GS Mezzanine Partners V	6,380,624	38,044,131	2007

KKR

Based in New York, NY, KKR is a large global investment firm with a variety of private equity investment products. KKR Lending Partners II was formed in 2015 to make investments primarily in the senior debt securities of middle-market US companies.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
KKR Lending Partners II	25,685,799	74,998,833	2015

Merit Capital Partners (formerly William Blair Mezzanine Partners)

William Blair Mezzanine Capital Partners III, Merit Capital Partners IV, Merit Capital Partners V, and Merit Capital Partners VI are limited partnerships formed in 1999, 2004, 2009 and 2016. Based in Chicago, IL, the Funds will invest primarily in fixed rate subordinated debt securities. These securities generally will be purchased with a significant equity component in the form of warrants, common stock or contingent interest.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
William Blair Mezzanine Capital Partners III	616,399	2,756,759	1999
Merit Capital Partners IV	17,960,267	4,821,429	2004
Merit Capital Partners V	54,724,865	4,579,592	2009
Merit Capital Partners VI	19,182,859	43,386,522	2016

Oaktree Capital Management

Oaktree Capital Management is a global private equity firm based in Los Angeles, CA. The Oaktree Opportunities Funds X and Xb were formed in 2015 to invest in the debt or equity of companies during periods of financial distress. Oaktree Opportunities Fund Xb will only be invested if the management determines that the investment opportunity exists.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Oaktree Opportunities Fund X	19,695,225	35,000,000	2015
Oaktree Opportunities Fund Xb	0	100,000,000	2015

Pimco Bravo

The Pimco Bravo funds were inherited from the Duluth Teachers Retirement Fund Administration in 2015. Based in Newport Beach, CA, Pimco is a global investment management firm with a variety of public and private investment products. The Pimco Bravo Funds primarily invest in distressed commercial and residential mortgage credit.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Pimco Bravo OnShore Feeder I	310,309	2,086,707	2015
Pimco Bravo OnShore Feeder II	5,529,874	625,000	2015

Portfolio Advisors (formerly DLJ/Credit Suisse)

DLJ Investment Partners II and III are limited partnerships formed in 1999 and 2006. Based in New York, NY, the Funds will invest in a variety of securities, including subordinated debt with warrants, preferred stock with warrants, common stock or other securities, including interests in joint ventures. Credit Suisse sold the DLJ Investment Partners platform to Portfolio Advisors in 2013.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
DLJ Investment Partners II	82,683	0	1999
DLJ Investment Partners III	5,677,044	29,739,249	2006

Prudential Capital Group

Prudential Capital Partners I, II, III, IV, and V were formed in 2001, 2005, 2009 2012 and 2016, respectively. Based in Chicago, IL, the Funds make mezzanine investments, typically including convertible debt, preferred stock and warrants, with a specific focus on middle market companies.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Prudential Capital Partners II	5,231,021	3,053,595	2005
Prudential Capital Partners III	39,326,728	7,149552	2009
Prudential Capital Partners IV	75,202,925	5,131,007	2012
Prudential Capital Partners V	8,847,899	141,005,747	2016

Summit Partners

Summit Subordinated Debt Funds III and IV are limited partnerships formed in 2004 and 2007, respectively. Based in Boston, MA, the funds invest in many of the same companies as the Summit Venture funds. Investments by those partnerships principally take the form of subordinated debt with equity features. These yield-oriented investments provide current income over the life of the investment with the potential for additional returns.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Summit Subordinated Debt Fund III	9,745,381	2,250,000	2004
Summit Subordinated Debt Fund IV	19,821,367	16,044,207	2007

TCW Asset Management

Based in Los Angeles, TCW is a large asset management firm that makes investments in public and private companies. TCW Direct Lending was formed in 2014 to pursue a strategy of originating and investing in loans to middle-market companies primarily in the United States.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
TCW Direct Lending LLC	58,855,835	32,729,586	2014

Windjammer Capital Investors

Windjammer Funds II, III and IV are limited partnerships formed in 2000, 2005 and 2012, respectively. Based in Newport Beach, CA, the Funds provide subordinated debt and/or preferred stock accompanied by warrants or other forms of equity participation and, in certain instances, common stock to middle market companies. The Funds seek to generate both current income and substantial capital gains while limiting risk.

Fund	Market Value ($)	Unfunded Commitment ($)	Vintage Year
Windjammer Mezzanine & Equity Fund II	68,519	10,139,363	2000
Windjammer Senior Equity Fund III	19,235,282	13,380,380	2005
Windjammer Senior Equity Fund IV	67,187,676	24,987,467	2012

The State Deferred Compensation Plan (Plan) provides public employees with a tax-sheltered retirement savings program that is a supplemental plan to their primary retirement plan. (In most cases, the primary plan is TRA, PERA, or MSRS.) On June 30, 2017 the market value of the State Deferred Compensation Plan was $6.4 billion.

Program Structure

The State Deferred Compensation Plan offers plan participants three sets of investment options. The first is a set of four actively managed mutual funds, five passively managed mutual funds, a Money Market Fund, and a Stable Value 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.

Actively Managed Options
The Plan offers a range of actively managed options that allows participants the flexibility to create an investment program to meet their needs.

- ***Large-Cap Equity***
  This option is a concentrated portfolio of high quality stocks that generally offer current dividends. The fund is expected to outperform the NASDAQ U.S. Dividend Achievers Select Index. The fund currently offered is the Vanguard Dividend Growth Fund.

- ***Small-Cap Equity***
  This option invests primarily in companies with small market capitalizations. The fund is expected to outperform the Russell 2000 over time. T. Rowe Price Small-Cap Stock Fund is the fund currently offered.

- ***Bond Fund***
  This option invests primarily in investment grade securities in the U.S. bond market. The fund is expected to outperform the Bloomberg Barclays U.S. Aggregate Bond Index over time. The fund currently offered is the Dodge & Cox Income Fund.

- ***International Equity***
  This option invests primarily in stocks of companies in developed countries located outside the United States. The fund is expected to outperform the Morgan Stanley Capital International (MSCI) Index of Europe, Australasia and the Far East (EAFE) over time. The fund currently offered is the Fidelity Diversified International Fund.

- ***Money Market Fund***
  This option invests in high quality short-term debt instruments and is expected to outperform the return on three month U.S. Treasury bills. This option is the SIF Money Market Fund invested by State Street Global Advisors (see page 73).

- ***Stable Value Fund***
  The fund is invested in a well-diversified portfolio of high quality fixed income securities. The fund also holds insurance 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, and maintain a relatively stable return profile for the portfolio.

  The option is expected to outperform the return of the three year Constant Maturity Treasury plus 45 basis points (0.45%), over time. Currently, Galliard Capital Management, Inc. manages the option (see page 73).

Passively Managed Options
The plan offers a range of passively managed options that allows participants the flexibility to create a lower cost investment program to meet their needs.

- ***Large-Cap Equity***
  This option is a passive domestic stock portfolio that tracks the S&P 500. The fund currently offered is the Vanguard Institutional Index Plus Fund.

- ***Mid-Cap Equity***
  This option invests in companies with medium market capitalizations that track the CRSP U.S. Mid-Cap Index. The fund currently offered is the Vanguard Mid-Capitalization Index Institutional Fund.

- ***Balanced Fund***
  This option is a mix of stocks and bonds. The fund is expected to track a weighted benchmark of 60% CRSP U.S. Total Market Index and 40% Bloomberg Barclays U.S. Aggregate Bond Index. The fund currently offered is the Vanguard Balanced Index Fund.

- ***Bond Fund***
  This option invests in a broad range of U.S. fixed income securities. The fund is expected to track the performance of the Bloomberg Barclays U.S. Aggregate Bond Index. The fund currently offered is the Vanguard Total Bond Market Index Fund.

- ***International Equity***
  This option invests in international equities and is expected to track the FTSE Global All Cap ex U.S. Index, an index designed to measure equity market performance in developed and emerging markets, excluding the United States. The fund currently offered is the Vanguard Total International Stock Index Fund.

Minnesota Target Retirement Funds

The plan offers a range of target date funds which are diversified options with allocations that change over time to reduce risk and become more conservative as the target retirement date approaches. The funds are currently offered by State Street Global Advisors (SSgA.)

Performance results for the mutual fund investment options for periods ending June 30, 2017 are shown in Figure 31.

Performance results for the target date fund option for periods ending June 30, 2017 are shown in Figure 32.

Figure 31. State Deferred Compensation Plan (457b Plan) for Periods Ending June 30, 2017

	RETURNS[1]						
	1 Year		3 Years		5 Years		Market
Fund/Benchmark	**Actual %**	**Bmk %**	**Actual %**	**Bmk %**	**Actual %**	**Bmk %**	**Value[2] ($ in millions)**
Actively Managed							
Vanguard Dividend Growth[3]							567.7
T. Rowe Price Small-Cap (Russell 2000)	21.2	24.6	8.0	7.4	14.5	13.7	657.6
Fidelity Diversified Int'l. (MSCI EAFE)	18.0	20.3	2.7	1.1	9.5	8.7	284.4
Dodge & Cox Income Fund (BB Barclays U.S. Aggregate)	3.2	-0.3	2.8	2.5	3.4	2.2	227.2
SIF Money Market (3 Month T-Bills)	0.7	0.5	0.4	0.2	0.3	0.2	69.9
SIF Stable Value (3 year Constant Maturity Treas. +45 basis points)	2.0	1.7	2.0	1.5	2.1	1.3	1,351.2
Passively Managed							
Vanguard Institutional Index (S&P 500)	17.9	17.9	9.6	9.6	14.6	14.6	1,146.2
Vanguard Mid-Cap Index (CRSP US Mid-Cap)	17.3	17.3	8.1	8.1	14.8	14.8	501.7
Vanguard Total Int'l Stock Index (FTSE Global All Cap ex US)	20.1	20.2	1.4	1.2	7.7		180.3
Vanguard Balanced Index Inst. (60% CRSP US Total Market, 40% BB Barclays U.S. Aggregate)	10.6	10.7	6.5	6.5	9.6	9.6	747.7
Vanguard Tot. Bond Market Index (BB Barclays U.S. Aggregate)	-0.4	-0.3	2.4	2.5	2.1	2.2	205.4

(1) Returns are reported net of fund operating expenses, but do not include the MSRS administrative fee.

(2) Market value of SBI participation in fund.

(3) Fund retained September 2016.

Figure 32. State Deferred Compensation Plan (457b Plan) for Periods Ending June 30, 2017

	RETURNS[1]						
	1 Year		3 Years		5 Years		Market
	Actual %	Bmk[2] %	Actual %	Bmk[2] %	Actual %	Bmk %	Value[3] ($ in millions)
MN Target Retirement Funds							
Income Fund	5.4	5.5	2.4	2.4	4.3	4.4	77.2
2020 Fund	6.8	6.9	2.8	2.9	5.8	5.9	106.1
2025 Fund	9.1	9.3	3.7	3.7	7.4	7.5	91.5
2030 Fund	11.4	11.7	4.5	4.5	8.5	8.6	61.9
2035 Fund	12.7	12.9	4.7	4.8	9.2	9.2	48.9
2040 Fund	13.9	14.1	4.9	5.0	9.7	9.8	34.7
2045 Fund	15.0	15.2	5.0	5.1	10.2	10.3	27.8
2050 Fund	15.8	16.0	5.2	5.2	10.3	10.4	19.5
2055 Fund	15.8	16.0	5.2	5.2	10.3	10.4	10.3
2060 Fund	15.8	16.0	5.2	5.2	10.3	10.4	10.0

(1) Returns are reported net of fund operating expenses, but do not include the MSRS administrative fee.

(2) Managed by SSgA, each Fund benchmark is the aggregate of the returns of the Fund's underlying index funds weighted by the Fund's asset allocation.

(3) Market value of SBI participation in fund.

State Deferred Compensation Plan Managers

Dodge & Cox Income Fund

The objective of this fund is to seek a high and stable rate of current income, consistent with long term preservation of capital, with capital appreciation being a secondary consideration. This portfolio invests primarily in investment-grade quality corporate and mortgage bonds, government issues, and, to a lesser extent, fixed income securities rated below investment grade. While it invests primarily in the U.S. bond market, the fund may invest up to 25% of its total assets in U.S. dollar-denominated securities of non-U.S. issuers, including emerging market issuers. The fund was retained by the SBI in July 1999.

Fidelity Diversified International Fund

The goal of this fund is capital appreciation by investing in securities of companies located outside the United States. The fund invests primarily in larger companies located in developed countries. The manager uses a bottom-up stock selection process based on the extensive fundamental research available from the company's many security analysts across the globe. The process seeks to invest in companies with durable earnings, strong competitive position, and improving profitability. Sector and country weightings are reviewed for risk control, preference is given to companies with strong balance sheets which tend to perform better in down markets. As part of the portfolio construction process and quarterly portfolio review, quantitative portfolio analysis is evaluated to examine risks exposures including style factors, sectors and geography. The fund does not employ currency hedging, to provide currency diversification to U.S. based investors. The fund was retained by the SBI in July 1999 and in November of 2016 participants invested in the retail mutual fund transitioned into the Commingled Investment Trust (CIT), a lower-cost investment vehicle of the same fund.

T. Rowe Price Small Cap Stock Fund

The fund seeks to provide long-term capital growth by investing primarily in stocks of small companies. The fund will normally invest at least 80% of its net assets (including any borrowings for investment purposes) in stocks of small companies. The fund defines a small company as one whose market capitalization falls within or below the current range of companies in either the Russell 2000 Index or the S&P Small Cap 600 Index. When choosing stocks, the fund manager generally looks for one or more of the following characteristics: capable management, attractive business niches, pricing flexibility, sound financial and accounting practices, a potential or demonstrated ability to grow earnings, revenues, and cash flow consistently, and the potential for a catalyst (such as increased investor attention, asset sales, strong business prospects, or a change in management) to cause the stock's price to rise. In September of 2016 the T. Rowe Price Institutional Small Cap Stock Fund replaced the retail mutual fund vehicle that was retained in July of 1999.

Vanguard Dividend Growth Fund

The fund is an actively managed U.S. stock fund and uses the NASDAQ US Dividend Achievers Select Index as its benchmark. The fund investment objective is to provide, primarily, a growing stream of income over time and, secondarily, long-term capital appreciation and current income. The fund invests primarily in stocks that tend to offer current dividends. The fund focuses on high-quality companies that have prospects for long-term total returns as a result of their ability to grow earnings and willingness to increase dividends over time. These stocks typically, but not always, will be undervalued relative to the market and will show potential for increasing dividends. The fund will be diversified across industry sectors. The fund was retained by the SBI in September 2016.

Vanguard Institutional Index Plus Fund Plus

The passively managed fund tracks the S&P 500 index. The fund employs an indexing investment approach designed to track the performance of the Standard & Poor's 500 Index, which is dominated by the stocks of large U.S. companies. The fund attempts to replicate the target index by investing all, or substantially all, of its assets in the stocks that make up the index. The fund was retained by the SBI in July 1999.

Vanguard Mid-Capitalization Index Institutional Fund Plus
The fund is passively managed to track the performance of the CRSP US Mid Cap Index, a broadly diversified index of stocks of medium-size U.S. companies. The fund attempts to replicate the target index by investing all, or substantially all, of its assets in the stocks that make up the index, holding each stock in approximately the same proportion as its weighting in the index. The fund was retained by the SBI in January 2004.

Vanguard Balanced Index Fund Institutional
The fund portfolio provides a diversified portfolio of stocks and bonds by investing in a mix of 60 percent stocks and 40 percent bonds. The manager does not change the asset mix. The fund is passively managed with the equity portfolio to track the returns of the CRSP US Total Market Index, which covers all regularly traded U.S. stocks. The bond portfolio is invested to track the returns of the Bloomberg Barclays U.S. Aggregate Float Adjusted Bond Index, which covers virtually all taxable fixed income securities. The fund was retained by the SBI in December 2003.

Vanguard Total Bond Market Index Fund Institutional Plus
The fund is passively managed to track the performance of the Bloomberg Barclays U.S. Aggregate Float Adjusted Bond index. The manager uses an index sampling technique to invest in investment-grade corporate, U.S. Treasury, international dollar denominated bonds, mortgage-backed and asset-backed securities of varying maturities in order to create a portfolio of intermediate duration like the Bloomberg Barclays U.S. Aggregate Float Adjusted Bond Index, which currently ranges between 5 and 10 years. The fund was retained by the SBI in December 2003.

Vanguard Total International Stock Index Fund Plus
The fund is passively managed to track the returns of the FTSE Global All Cap ex US Index, a free-float-adjusted market-capitalization-weighted index designed to measure equity market performance in developed markets and emerging markets, excluding the U.S. The fund invests in small, mid and large cap stocks in the market index and includes more than 5,300 stocks of companies located in 46 countries. The fund invests substantially all of its assets in the common stocks included in its target index. Fund assets are allocated based on each regions weighting in the index. The fund was retained by the SBI in December 2003.

SIF Money Market Fund Manager

State Street Global Advisors
The Money Market Account seeks to provide safety of principal, daily liquidity and a competitive yield over the long term. The Fund is not a "money market fund" registered with the Securities and Exchange Commission, and is not subject to the various rules and limitations that apply to such funds. There can be no assurance that the Fund will maintain a stable net asset value. The Fund invests in a diversified portfolio of U.S. dollar-denominated securities issued or guaranteed by the U.S. Government or its agencies or instrumentalities; debt securities of domestic or foreign corporations; mortgage-backed and other asset-backed securities; taxable and tax-exempt municipal bonds; obligations of international agencies or supranational entities; inflation-indexed bonds; structured notes; loan participations; delayed funding loans and revolving credit facilities; and short-term investments, such as repurchase agreements, bank certificates of deposit, fixed time deposits, and bankers' acceptances.

SIF Stable Value Fund Manager

Galliard Capital Management, Inc.
Galliard Capital Management manages the Stable Value Fund in the Supplemental Investment Fund. The Stable Value Fund is managed to provide preservation of principal, maintain adequate liquidity to meet potential withdrawals, and produce a level of steady, positive income. The manager invests the Fund in well diversified portfolios of U.S. dollar denominated, investment grade fixed income securities. The manager also invests in investment contracts issued by banks and insurance companies that assure that participants can transact at book value (principal plus accrued interest) as well as maintain a relatively stable return profile for the portfolio regardless of daily market changes. To maintain necessary liquidity, the manager invests a portion of the

portfolio in its Stable Return Fund and in cash equivalents. The Stable Return Fund is a large, daily priced fund consisting of a wide range of stable value instruments that is available to retirement plans of all sizes. The firm was retained by the SBI in November 1994.

Minnesota Target Retirement Funds

State Street Global Advisors
The MN Target Retirement Funds managed by State Street Global Advisors, seek to offer complete, low cost investment strategies with asset allocations which become more conservative as employees near retirement. Each Fund seeks to achieve its objective by investing in a set of underlying SSgA collective trust funds representing various asset classes. Over time, the allocation to asset classes and funds change according to a predetermined "glide path". (The glide path represents the shifting of asset classes over time and does not apply to the Income Fund.) Each Fund's asset allocation will become more conservative as it approaches its target retirement date. This reflects the need for reduced investment risks as retirement approaches and the need for lower volatility of a portfolio, which may be a primary source of income after retiring.

NON-RETIREMENT PROGRAM

Non-Retirement Funds

The State Board of Investment established the various Non-Retirement Funds to provide certain Minnesota public sector entities the opportunity to invest in a U.S. equity fund, a U.S. bond fund, or a money market to facilitate the achievement of its investment objectives. The funds are available to those non-retirement entities that are authorized to invest in these asset classes with the SBI. Currently, all or some of these options are available to designated trust funds, local Other Postemployment Benefit (OPEB) trusts, and other state and public sector entities. Participants may allocate their investments among one or more funds that are appropriate for their needs and are within the rules and eligibility established for the participating entities (Figure 34).

Investment Options

There are a total of three investment options and each one offers different advantages and risks. As of June 30, 2017, participating plans invested a total of $3.3 billion with the Funds (Figure 33).

Investment Management

Equity Fund

The equity segment is passively managed, by internal SBI staff in the Non-Retirement Equity Fund and tracks the performance of the S&P 500 Index (see page 87).

Bond Fund

The bond segment is actively managed by internal SBI staff to add incremental value through sector, security and yield curve decisions (see page 88).

Money Market Fund

The Money Market Fund provides safety of principal by investing in high-quality short-term money market securities. It is managed by SSgA (see page 89).

Figure 33. Non-Retirement Fund Options

Fund Options	Assets as of 6/30/17
Non-Retirement Equity Fund	$2,107,706,062
Non-Retirement Bond Funds	$1,112,419,466
Non-Retirement Money Market Fund	$62,072,358
Total Assets Invested	**$3,282,197,886**

Figure 34. Non-Retirement Funds Participants

Participants

Trusts	Assets
Permanent School Fund	$1,316,578
Environmental Trust Fund	1,028,370
Assigned Risk Plan(1)	65,944
Closed Landfill Investment Fund	81,194
IRRRB (Iron Range Resources and Rehabilitation Board)	132,039
Other Trusts*	82,913
Total	**$2,707,038**

(1) The Assigned Risk Plan additionally has $256,957 invested with an external investment manager.

* Duluth Community Investment Trust, Emergency Medical Services, Ethel Currey, Life Time Fish and Wild Life, Metro Landfill Contingency Action, Natural Resources Conservation, Saint Louis County Environmental, Water and Soil Conservation Easement, Winona State

OPEBs	Assets
Anoka County	$ 59,599
Duluth	52,609
Metropolitan Council	249,047
Ramsey County	67,592
Washington County	51,984
Other OPEBs**	94,335
Total	**$575,166**

** Carver County, City of Eagan, City of Virginia, Crosby-Ironton ISD #182, Fillmore Central Schools #2198, Foley ISD #51, Hastings ISD #200, Kingsland ISD #2137, Mendota Heights Eg WSP #197, Metro Mosquito Control District, Mounds View ISD #621, Mt. Iron-Buhl District #712, Ogilvie ISD #333, Roseville District #623, Scott County, Staples Motley #2170, Yellow Medicine ISD #2190

The Permanent School Fund is a trust fund created by the Minnesota State Constitution and is designated as a long-term source of revenue for public schools. Proceeds from land sales, mining royalties, timber sales, lake shore and other leases are invested in the Fund. Income generated by the Fund's assets is appropriated directly to school districts. On June 30, 2017, the market value of the Fund was $1.3 billion.

Investment Objective

The State Board of Investment invests the Permanent School Fund to produce a growing level of spendable income for school districts, within the constraints of maintaining adequate portfolio quality and liquidity.

Investment Constraints
The Fund's investment objectives are influenced by the legal provisions under which its investments must be managed. These provisions require that the Fund's principal remain inviolate. Any net realized capital gains from stock or bond investments must be added to the principal. Moreover, if the Fund realizes net capital losses, these losses must be offset against interest and dividend income before such income can be distributed. Finally, all interest and dividend income must be distributed in the year in which it is earned.

Asset Allocation

In order to produce a growing level of spendable income, the Fund is invested to grow over time, and, therefore, has exposure to equities. The current asset allocation is 50% stock/48% fixed income/2% cash.

Prior to fiscal year 1998, the Permanent School Fund had been invested entirely in fixed income securities for more than a decade. While this asset allocation maximized current income, it limited the long term growth of the Fund and caused the income stream to lose value in inflation adjusted terms, over time.

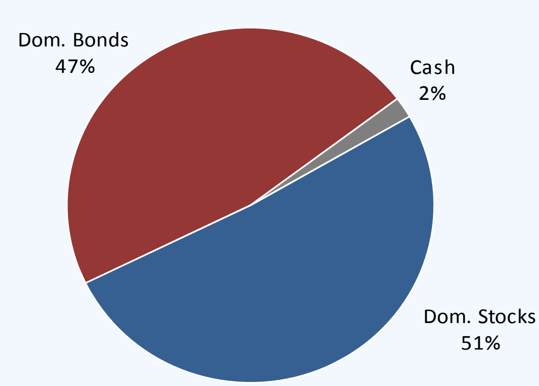
To solve both issues, a proposal to introduce equities to the Fund's asset mix was presented during fiscal year 1997. Since this modification would reduce short term income and have budgetary implications for the state, the consent of the executive and legislative branches was necessary. It was favorably received by the Legislature and incorporated into the K-12 education finance bill. As a result, the Fund allocation was shifted to a 50% stock/48% fixed income/2% cash allocation during July 1997.

Figure 35 presents the actual asset mix of the Permanent School Fund at the end of fiscal year 2017.

Investment Management

Assets of the Permanent School Fund are invested in the Non-Retirement Equity, Bond and Money Market Funds.

Figure 35. Permanent School Fund Asset Mix as of June 30, 2017



Investment Performance

During the fiscal year, the ***stock*** segment of the Permanent School Fund tracked its benchmark, the S&P 500.

The ***bond*** segment outperformed its benchmark by 1.1 percentage points during the current fiscal year, primarily due to an overweight to the corporate sector and a short duration position relative to the benchmark.

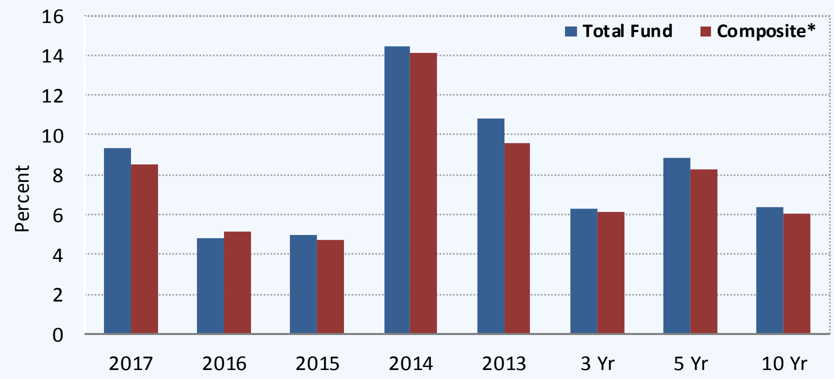
Overall, the Permanent School Fund provided a return of 9.3% for fiscal year 2017, outperforming its composite index by 0.8 percentage point. The Fund outperformed its composite index over the ten year periods.

Total account performance results for the last three, five and ten years are shown in Figure 36.

Spendable income generated by the portfolio over the last five fiscal years is shown below:

Fiscal Year	Millions
2013	$25
2014	$24
2015	$26
2016	$28
2017	$30

Figure 36. Permanent School Fund Performance For Periods Ending June 30, 2017



	2017	2016	2015	2014	2013	Annualized 3 Yr.	5 Yr.	10 Yr.
Total Fund	**9.3%**	**4.8%**	**5.0%**	**14.4%**	**10.8%**	**6.3%**	**8.8%**	**6.4%**
Composite*	8.5	5.1	4.7	14.1	9.6	6.1	8.3	6.0
Stock Segment	**17.9**	**4.0**	**7.5**	**24.5**	**20.5**	**9.7**	**14.6**	**7.2**
S&P 500	17.9	4.0	7.4	24.6	20.6	9.6	14.6	7.2
Bond Segment	**0.8**	**5.7**	**2.5**	**5.0**	**1.4**	**3.0**	**3.1**	**5.1**
BB Barclays Agg.	-0.3	6.0	1.9	4.4	-0.7	2.5	2.2	4.5

* 50% S&P 500/ 48% Bloomberg Barclays U.S. Aggregate/ 2% 3 Month T-Bills.

The Environmental Trust Fund was established in 1988 by the Minnesota Legislature to provide a long-term, consistent and stable source of funding for activities that protect and enhance the environment. On June 30, 2017, the market value of the Fund was $1.0 billion.

By statute, the State Board of Investment invests the assets of the Environmental Trust Fund. The Legislature funds environmental projects from a portion of the market value of the Fund.

Investment Objective

The Environmental Trust Fund's investment objective is long-term growth in order to produce a growing level of funding within the constraints of maintaining adequate portfolio liquidity.

A constitutional amendment passed in November 1998 continues the mandate that 40% of the net proceeds from the state lottery be credited to the Fund through 2025.

The amendment provides for spending 5.5% of the Fund's market value annually. The amendment eliminated accounting restrictions on capital gains and losses and the provision that the principal must remain inviolate.

Asset Allocation

After the constitutional amendment was adopted in November 1998, SBI staff worked with the Legislative Citizen Commission on Minnesota Resources to establish an asset allocation policy that is consistent with the Commission's goals for spending and growth of the Fund. The allocation positions the Fund for the best long-term growth potential while meeting the objective of the Fund to produce a growing level of funding.

The current long term asset allocation targets for the Fund are:

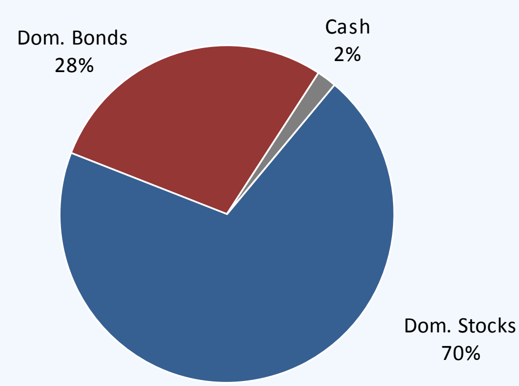
Domestic Stocks	70%
Domestic Bonds	28%
Cash	2%

Figure 37 presents the actual asset mix of the Fund at the end of fiscal year 2017.

Investment Management

The Environmental Trust Fund is invested in the Non-Retirement Equity, Bond and Money Market Funds.

Figure 37. Environmental Trust Fund Asset Mix as of June 30, 2017



Investment Performance

During the fiscal year, the ***stock*** segment tracked its benchmark.

The ***bond*** segment outperformed its benchmark by 1.1 percentage points during the fiscal year, primarily due to the overweight to the corporate sector and a short duration position relative to the benchmark.

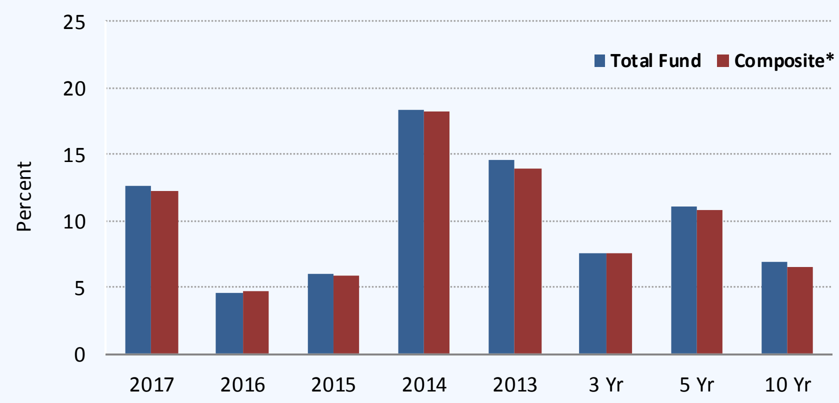
Overall, the Environmental Trust Fund provided a return of 12.6% for fiscal year 2017 and outperformed its composite index by 0.4 percentage point. The Fund outperformed its composite index over the ten year time period by 0.4%.

Performance results are presented in Figure 38.

Spendable income generated by the Fund over the last five fiscal years is shown below:

Fiscal Year	Millions
2013	$25
2014	$34
2015	$34
2016	$46
2017	$46

Figure 38. Environmental Trust Fund Performance For Periods Ending June 30, 2017



						Annualized		
	2017	2016	2015	2014	2013	3 Yr.	5 Yr.	10 Yr.
Total Fund	**12.6%**	**4.5%**	**6.0%**	**18.3%**	**14.6%**	**7.6%**	**11.1%**	**6.9%**
Composite*	12.2	4.7	5.8	18.2	13.9	7.5	10.8	6.5
Stock Segment	**17.9**	**4.0**	**7.5**	**24.5**	**20.5**	**9.7**	**14.6**	**7.2**
S&P 500	17.9	4.0	7.4	24.6	20.6	9.6	14.6	7.2
Bond Segment	**0.8**	**5.7**	**2.5**	**5.0**	**1.4**	**3.0**	**3.1**	**5.1**
BB Barclays Agg.	-0.3	6.0	1.9	4.4	-0.7	2.5	2.2	4.5

* Weighted 70% S&P 500/ 28% Bloomberg Barclays U.S. Aggregate/ and 2% 3 month T-Bill.

The Closed Landfill Investment Fund is a trust fund created by the Minnesota Legislature to invest money to pay for the long-term costs of maintaining the integrity of landfills in Minnesota once they are closed. On June 30, 2017 the market value of the Fund was $81 million.

Investment Objective

The investment objective of the Closed Landfill Investment Fund is to increase the market value of the Fund and to reduce volatility in order to meet future expenditure needs.

Asset Allocation

The Fund is invested in a balanced portfolio of common stocks (70%) and bonds (30%). Common stocks provide the potential for significant capital appreciation, while bonds act as a deflation hedge and provide portfolio diversification. Figure 39 presents the actual asset mix of the Closed Landfill Investment Fund at the end of fiscal year 2017.

Investment Management

Assets of these accounts are invested by the SBI in the Non-Retirement Equity and Bond Funds.

Investment Performance

During the fiscal year, the ***stock*** segment of the Closed Landfill Investment Fund tracked its benchmark, the S&P 500.

The ***bond*** segment outperformed its benchmark by 1.1 percentage points during the current fiscal year, primarily due to an overweight to the corporate sector and a short duration position relative to the benchmark.

For fiscal year 2017, the Fund outperformed its composite benchmark by 0.5 percentage point. The fund outperformed its composite index by 0.1 percentage point for the ten year period. Performance results are shown in Figure 40.

Figure 39. Closed Landfill Investment Fund Asset Mix as of June 30, 2017

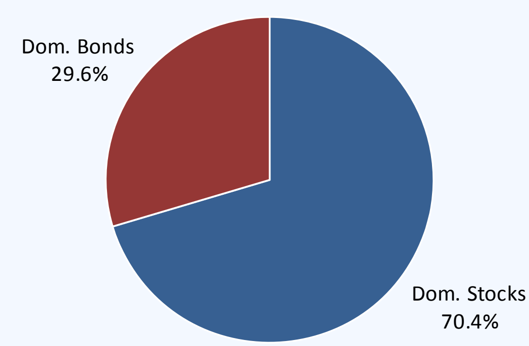
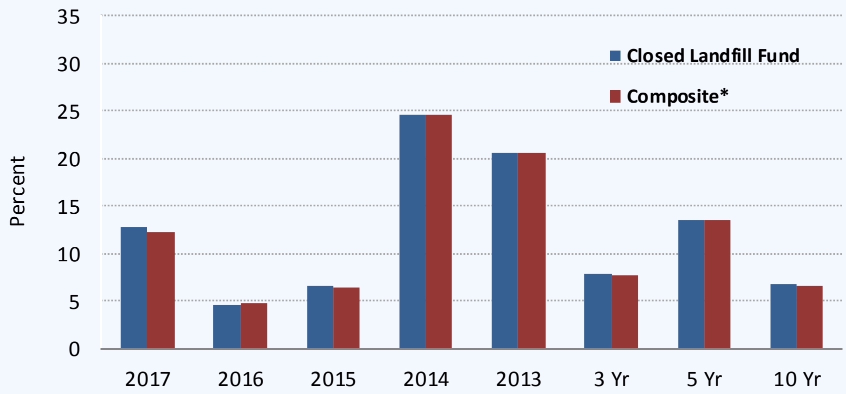


Figure 40. Closed Landfill Investment Fund Performance For Periods Ending June 30, 2017



	2017	2016	2015	2014	2013	Annualized 3 Yr.	5 Yr.	10 Yr.
Total Fund	**12.7%**	4.5%	**6.6%**	**24.5%**	**20.5%**	**7.9%**	**13.5%**	**6.7%**
Composite Index*	12.2	4.8	6.4	24.6	20.6	7.7	13.4	6.6
Stock Segment	**17.9**	**4.0**	**7.5**	**24.5**	**20.5**	**9.7**	**14.6**	**7.2**
S&P 500	17.9	4.0	7.4	24.6	20.6	9.6	14.6	7.2
Bond Segment	**0.8**	**5.7**						
BB U.S. Gov't Intermediate	-0.3	6.0						

* 70% S&P 500/30% Bloomberg Barclays U.S. Aggregate. Prior to 9/20/14 the fund allocation was 100% domestic equities.

Other Postemployment Benefits Accounts (OPEBs)

These accounts are the assets set aside by local units of government for the payment of retiree benefits trusteed by the Public Employees Retirement Association. On June 30, 2017, the total market value of these accounts was $575 million.

Under the provisions of *Minnesota Statutes*, Section 471.6175, local units of government, including school districts, may choose PERA as the trustee to administrator of their postemployment health benefits. Assets of these accounts are invested by the SBI Non-Retirement Equity and Bond Funds (see pages 43 and 44).

As of June 30, 2017, there were 22 entities with OPEB investment accounts invested by the SBI. In total, these accounts represented $575 million. Staff anticipates that the number of these accounts will increase in the future.

Duluth OPEB

The SBI is required to report the returns provided on assets invested by the City of Duluth for this purpose. Duluth made its first investment with the SBI in July 2007. As of June 30, 2017, the market value of the Duluth OPEB Fund was $52.6 million and the returns were as follows:

	1 Yr.	3 Yr.	5 Yr.
Public Equity	17.9%	9.7%	14.6%
Fixed Income	0.8	3.0	3.1
Total	**12.7%**	**7.7%**	**10.7%**

Duluth is responsible for the asset allocation decisions in this account and as of June 30, 2017, the asset allocation was the following:

	Actual Asset Mix
Public Equity	72.4%
Fixed Income	27.6
Total	**100.0%**

The Minnesota Workers Compensation Assigned Risk Plan was established in 1983 to provide workers' compensation coverage to Minnesota employers rejected by a private insurance carrier. On June 30, 2017, the market value of the Plan's portfolio was $323 million.

The Assigned Risk Plan operates as a non-profit, tax-exempt entity and is administered by the Department of Commerce. The Plan provides disability income, medical expenses, retraining expenses and death benefits with payments being made either periodically or in lump sum.

Investment Objectives

The SBI recognizes that the Assigned Risk Plan has limited tolerance for risk due to erratic cash flows, no allowance for surplus, and generally short duration liabilities.

Therefore, the SBI has established two investment objectives for the Plan:

— To minimize mismatch between assets and liabilities.

— To provide sufficient liquidity (cash) for payment of on-going claims and operating expenses.

Performance relative to these objectives is measured against a composite index that reflects the asset allocation of the portfolio.

Asset Allocation

The SBI believes that due to the uncertainty of premium and liability cash flows, the Plan should be invested very conservatively.

The ***bond*** segment is invested to fund the shorter-term liabilities (less than 10 years) and the common stock segment is invested to fund the longer-term liabilities. The result is a high fixed income allocation which minimizes the possibility of a future fund deficit. The smaller ***stock*** exposure provides higher expected returns and hedges some of the inflation risk associated with the liability stream.

The current long term asset allocation targets for the Plan are as follows:

Domestic Stocks	20%
Domestic Bonds	80%

The asset allocation may fluctuate in response to changes in the liability stream projected by the Plan's actuary and further analysis by the SBI staff. Figure 41 presents the actual asset mix of the Assigned Risk Plan at the end of fiscal year 2017.

Investment Management

RBC Global Asset Management (U.S.) manages the bond segment of the Assigned Risk Plan, and the stock portfolio is currently managed in the Non-Retirement Equity Fund.

Bond Segment

The bond segment is designed to fund the shorter-term liabilities of the Plan with a target duration of about three years. The segment is actively managed to add incremental value through sector, and security decisions (see page 88).

Stock Segment

The stock segment is structured to fund the longer-term liabilities of the Plan and is currently managed in the Non-Retirement Equity Fund (see page 87) which was transitioned from State Street Global Advisors (legacy GE Asset Management) during fiscal year 2017.

Investment Performance

Due to the focus on liability matching, the Assigned Risk Plan's investment portfolio is conservatively structured. While active management is utilized, return enhancement plays a secondary role.

The Assigned Risk Plan is measured against a composite index which is weighted to reflect the asset allocation of the Plan:

— The target for the fixed income component is a custom benchmark which reflects the duration target established for the bond segment (approximately three years).

— The target for the equity component is the S&P 500.

During fiscal year 2017, the ***bond*** segment outperformed its benchmark by 0.1%. The ***stock*** segment outperformed its benchmark by 1.7 percentage points.

Overall, the Assigned Risk Plan provided a return of 2.9% for fiscal year 2017, which was 0.5 percentage point above the composite index. For the ten year period, the portfolio underperformed by 0.2 percentage point.

Historical performance results are presented in Figure 42.

Fixed Income Manager

RBC Global Asset Management (U.S.) Inc.
RBC Global Asset Management (U.S.) Inc. ("RBC GAM-US") manages the fixed income portfolio for the Assigned Risk Plan. The main objective for the portfolio is to provide cash for the payment of workers compensation claims on the required dates. Because of the uncertainty of premium and liability cash flows, the fund is invested conservatively and is benchmarked to the Bloomberg Barclays Intermediate Government Index. RBC GAM-US uses a fundamental approach in managing the portfolio, with a focus primarily on security selection and secondarily on sector analysis. RBC GAM-US has managed the bond portfolio since July 1991.

Figure 41. Assigned Risk Plan Asset Mix as of June 30, 2017

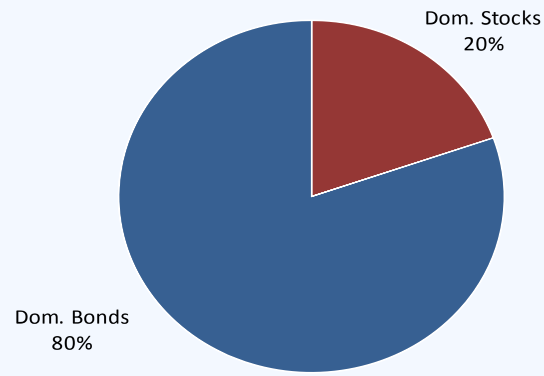
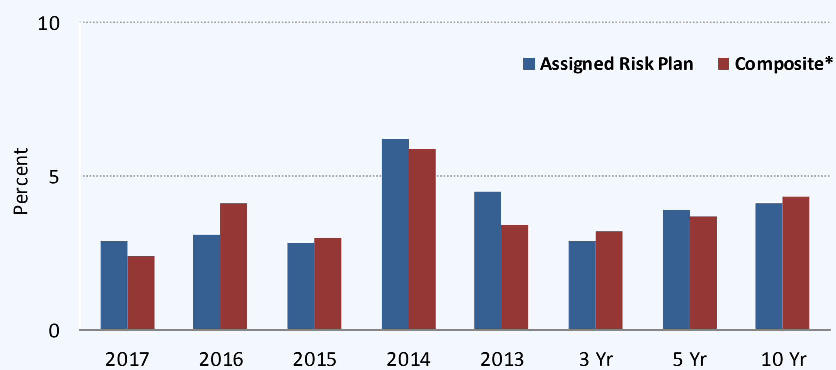


Figure 42. Assigned Risk Plan Performance For Periods Ending June 30, 2017



	2017	2016	2015	2014	2013	Annualized 3 Yr.	Annualized 5 Yr.	Annualized 10 Yr.
Total Fund	**2.9%**	**3.1%**	**2.8%**	**6.2%**	**4.5%**	**2.9%**	**3.9%**	**4.1%**
Composite Index*	2.4	4.1	3.0	5.9	3.4	3.2	3.7	4.3
Stock Segment	**19.6**	**-1.1**	**6.7**	**25.3**	**23.2**	**8.0**	**14.3**	**7.1**
S&P 500	17.9	4.0	7.4	24.6	20.6	9.6	14.6	7.2
Bond Segment	**-1.1**	**4.0**	**1.7**	**1.5**	**-0.5**	**1.5**	**1.1**	**3.2**
BB U.S. Gov't Intermediate	-1.2	3.9	1.8	1.5	-0.6	1.5	1.1	3.4

* Weighted 20% stocks, 80% bonds.

The State Board of Investment manages the Non-Retirement Equity Fund that is used by various state trust funds such as the Permanent School Fund, Environmental Trust Fund, Assigned Risk Plan, and Closed Landfill Investment Fund. On June 30, 2017, the total market value of the Non-Retirement Equity Fund was $2.1 billion.

The Non-Retirement Equity Fund is an investment vehicle that provides domestic equity exposure to entities that have received authority to use this vehicle. The types of entities that invest in the Non-Retirement Equity Fund include State and other Trust funds, OPEB funds, and endowment funds.

Investment Objectives

The investment objective of the Non-Retirement Equity Fund is to track the S&P 500 index. The portfolio is expected to have a realized active risk level relative to the benchmark of 0.20 or less, where active risk is the annualized standard deviation of the Manager's excess returns relative to the benchmark. Over time, the annual return shortfall relative to the benchmark, due to fees and trading expenses, should be no more than 0.1%.

Asset Allocation

The purpose of the pool is to provide domestic equity exposure so the asset allocation is 100% domestic equity.

Investment Management

The Non-Retirement Equity Fund is managed by the SBI investment staff. The strategy replicates the S&P 500 by owning all of the names in the index at the weightings assigned by the index.

To maintain appropriate liquidity for daily cash flows, cash is held in the portfolio and equitized by using S&P 500 futures contracts.

Investment Performance

The SBI measures the Non-Retirement Equity Fund against the S&P 500 Index.

For fiscal year 2017, the Non-Retirement Equity Fund matched its benchmark, the S&P 500 Index. Performance results are shown in Figure 43.

Figure 43. Non-Retirement Equity Fund Performance for Periods Ending June 30, 2017

		Annualized		
	1 Yr.	**3 Yr.**	**5 Yr.**	**10 Yr.**
Non-Retirement Equity Fund*	17.9%	9.7%	14.6%	7.2%
S&P 500 Index	17.9	9.6	14.6	7.2

* Actual returns are calculated net of fees.

The State Board of Investment internally manages the Non-Retirement Bond Fund that is used by various state trust funds such as the Permanent School Fund, Environmental Trust Fund, and Closed Landfill Investment Fund. On June 30, 2017, the total market value of the Non-Retirement Bond Fund was $1.1 billion.

Investment Objectives

The investment objectives for the Non-Retirement Bond Fund are to deliver cumulative returns in excess of the Bloomberg Barclays U.S. Aggregate Bond Index, and to manage the level and composition of active risk in the portfolio relative to this benchmark.

Asset Allocation

The composition of the Fund as of June 30, 2017 is shown in Figure 44. At the end of fiscal year 2017, the Non-Retirement Bond Fund had an effective duration of 5.7 years vs. the benchmark duration of 5.8 years and a yield to maturity of 2.6% vs. the benchmark yield to maturity of 2.5%.

Investment Management

SBI staff is required to adhere to investment guidelines in managing the account. These guidelines give the investment staff the flexibility to actively manage the portfolio through duration, yield curve, sector and security selection decisions, while maintaining a maximum five year active risk level of 1.5. SBI staff is required to maintain the duration of the portfolio within +/- one year of the index duration. The fund primarily invests in U.S. government, corporate and mortgage securities.

Current Positioning

Characteristics of the portfolio as of June 30, 2017 are shown in Figure 45. SBI staff has the portfolio duration positioned roughly equal to the benchmark, and has modestly reduced its exposure to corporate bonds as the outlook for further spread tightening is diminished.

Investment Performance

The benchmark for the Non-Retirement Bond Fund is the Bloomberg Barclays U.S. Aggregate Bond Index, a broad-based index of investment grade, U.S. dollar denominated, fixed rate taxable bonds. For fiscal year 2017, the Non-Retirement Bond Fund outperformed its benchmark for all the periods. Historical performance results are presented in Figure 46.

Figure 44. Non-Retirement Bond Fund Distribution as of June 30, 2017

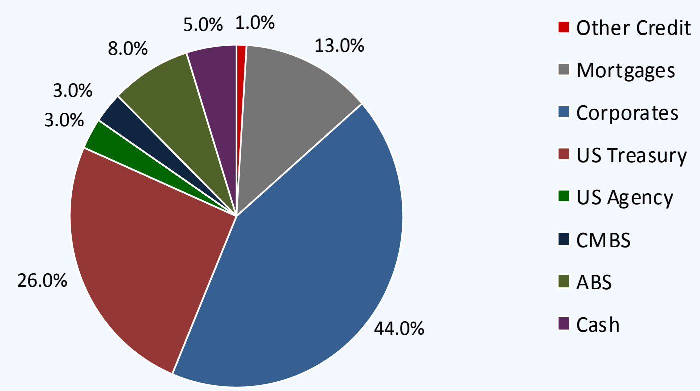


Figure 45. Fixed Income Characteristics for Period Ending June 30, 2017

	Bond Fund	Benchmark
Effective Duration	5.73	5.84
Convexity	0.68	0.16
Coupon Rate	3.20	3.14
Yield to Maturity	2.63	2.54
Option Adjusted Spread	72	48
Rating – Moody's	A1	Aa2

Figure 46. Non-Retirement Bond Fund Performance for Periods Ending June 30, 2017

		Annualized		
	1 Yr.	3 Yr.	5 Yr.	10 Yr.
Non-Retirement Bond Fund	0.8%	3.0%	3.1%	5.1%
Bloomberg Barclays U.S. Agg.	-0.3%	2.5%	2.2%	4.5%

State Street Global Advisors manages the Non-Retirement Money Market Fund that is used by various state trust funds such as the Permanent School Fund and Environmental Trust Fund. On June 30, 2017, the total market value of the Non-Retirement Money Market Fund was $154 million.

The Non-Retirement Money Market Fund is an investment vehicle that provides high quality short-term cash exposure to entities that have received authority to use this fund. The types of entities that invest in the Fund include State and other Trust funds, OPEB funds, and endowment funds.

Investment Objectives

The objective of the Non-Retirement Money Market Fund is to provide safety of principal by investing in high quality, short-term securities. The return of the fund is based on the interest income generated by the fund's investments.

Asset Allocation

The objective of the fund is to provide safety of principal by investing in high-quality, short-term money market securities.

Investment Management

The Non-Retirement Money Market Fund is managed by State Street Global Advisors, the organization that provides short-term investment management for a substantial portion of the Board's cash reserves.

Investment Performance

The SBI measures the Non-Retirement Money Market Fund against the IMoneyNet All Taxable Money Fund Average.

For fiscal year 2017, the Non-Retirement Money Market outperformed its benchmark, the iMoney Net All Taxable Money Fund Average. Performance is shown in Figure 47 below.

Figure 47. Non-Retirement Money Market Fund Performance for Periods Ending June 30, 2017

		Annualized		
	1 Yr.	**3 Yr.**	**5 Yr.**	**10 Yr.**
Non-Retirement Money Market Fund*	0.6%	0.3%	0.3%	0.8%
iMoney Net All Taxable Money Fund Average	0.3	0.1	0.1	0.9

* Actual returns are calculated net of fees.

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MINNESOTA
COLLEGE SAVINGS PLAN

The Minnesota College Savings Plan is an education savings plan designed to help families set aside funds for future college costs. It is established under the provisions of the Internal Revenue Code Section 529, which authorized these types of savings plans to help families meet the costs of qualified colleges nationwide. On June 30, 2017, the market value of the Plan was just over $1.3 billion.

Program Structure

The Minnesota Legislature authorized establishment of the Minnesota College Savings Plan (the Plan) in 1997 and in 2001 the Plan was launched. The State Board of Investment (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. (TFI) to provide administrative, marketing, communication, recordkeeping and investment management services.

Objective

The objective of the Plan is to be competitive in the market place by providing quality investment options with low fees to its participants. The Plan is a direct-sold plan (i.e. may be purchased directly without an investment advisor) and offers nine Age Based Managed Allocation Options, three Risk-Based Allocation Options and seven Static Investment Options. The Plan has both active and passive management through TIAA's mutual funds. While all options are priced daily, participants may re-allocate their investment twice per calendar year.

Age Based Managed Allocation Option

This investment option seeks to align the investment objective and level of risk to the investment horizon by taking into account the beneficiary's age and the number of years before the beneficiary turns 18 and is expected to enter college. Depending on the beneficiary's age, the assets contributed to this option are placed in one of nine age bands. As the beneficiary ages, assets are moved from one age band to the next. The age bands for younger beneficiaries seek a favorable long-term return by investing in a high level of risk but greater potential for higher returns than more conservative investments. As a beneficiary nears college age, the age bands allocate less to equity and real estate and more to fixed-income and money market securities to preserve capital.

Risk Based Allocation Option

These Investment Options provide a fixed risk level and do not change as the beneficiary ages. There are three separate Risk Based Allocation Options: Aggressive, Moderate or Conservative.

The aggressive option seeks to generate a favorable long-term return by investing in mutual funds that invest primarily in equity securities and, to a less extent invest in debt securities. Approximately 48% of the fund is allocated to U.S. equity securities; 19% to developed international equities; 5% to emerging markets equities; 8% real estate securities; 14% to public, investment-grade, taxable debt securities denominated in U.S. dollars; 4% to inflation-linked bonds and 2% to high yielding debt securities.

The moderate option seeks to provide moderate growth by investing in a balanced mix of domestic and foreign equity securities, fixed income and real estate-related securities. Approximately 36% of the fund is allocated to U.S. equity securities; 14% to developed international equities; 4% to emerging markets equities; 6% real estate securities; 28% to public, investment-grade, taxable debt securities denominated in U.S. dollars; 8% to inflation-linked bonds and 4% to high yielding debt securities.

The conservative allocation option seeks to provide a conservative to moderate total return by investing in mutual funds that invest primarily in debt securities and, to a lesser extent, invests in equity securities. This option also invests in a funding agreement. Approximately 18% of the fund is allocated to U.S. equity securities; 7% to developed international equities; 2% to emerging markets equities; 3% real estate securities; 32% to public, investment-grade, taxable debt securities denominated in U.S. dollars; 9% to inflation-linked bonds; 4% to high yielding debt securities and

25% in a funding agreement issued by TIAA-CREF Life (see the Principal Plus Interest Option for further detail on the funding agreement).

Static Options

- ***International Equity Index Option***
  This Investment Option seeks to provide a favorable long-term total return, mainly through capital appreciation. Approximately 80% of the fund is allocated to equity securities of issuers located in developed markets and 20% is allocated to equity securities of issuers located in emerging markets.

- ***U.S. and International Equity Option***
  This investment option seeks to provide a favorable long-term total return, mainly from capital appreciation, by allocating primarily in a blend of equity and real estate-related securities.

  Approximately 60% of the fund is allocated to U.S. equity securities, 24% to equity issuers located in developed markets and 6% to equity securities of issuers located in emerging markets and 10% to real estate-related securities.

- ***U.S. Large Cap Equity Option***
  This investment option seeks to provide a favorable long-term total return mainly from capital appreciation. All assets of the fund are invested in an S&P 500 index fund.

- ***Equity and Interest Accumulation Option***
  This investment seeks to provide a moderate long-term total return. Approximately half of its assets are invested in an equity index fund and the other half in a funding agreement.

- ***100% Fixed-Income Option***
  This investment option seeks to provide preservation of capital along with a moderate rate of return through a diversified mix of fixed income investments. Approximately 70% of the fund is allocated to public, investment-grade, taxable bonds denominated in U.S. dollars, and 20% to inflation-linked bonds and 10% is allocated to a high yield fund.

- ***Money Market Option***
  This investment option seeks to provide current income consistent with preserving capital.

  The fund converted to a “governmental money market fund” in October 2016. As a result, the Fund is limited to U.S. Government securities and will invest at least 99.5% of its total assets in cash, short-term U.S. Government securities and/or repurchase agreements collateralized fully by cash or U.S. Government securities.

- ***Principal Plus Interest Option***
  This investment option seeks to preserve capital and provide a stable return. The contributions into this investment option 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 and allows for the possibility that additional interest may be credited as declared periodically by TIAA-CREF Life.

As of June 30, 2017, the Minnesota College Savings Plan distribution of assets is shown in Figure 48 and performance is shown in Figure 49.

Figure 48. MN College Savings Plan Assets by Investment Option as of June 30, 2017

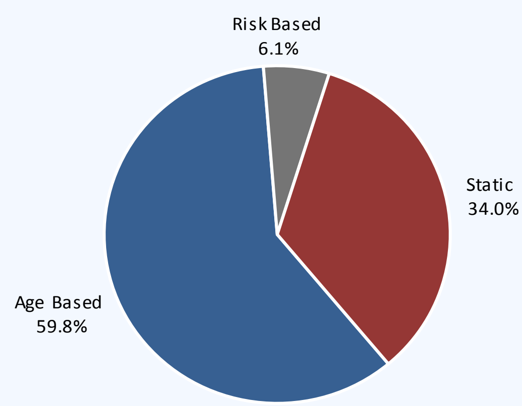


Figure 49. Minnesota State College Savings Plan (529 Plan) for Periods Ending June 30, 2017

	RETURNS[1]				
	1 Year		3 Year		Market
	Actual %	Bmk[2] %	Actual %	Bmk[2] %	Value[3] ($ in millions)
Age Based Managed Allocation Option					
Age Band 0-4Years	13.7	13.9	--	--	$27.3
Age Band 5-8 Years	12.1	12.2	--	--	70.4
Age Band 9-10 Years	10.5	10.5	--	--	69.7
Age Band 11-12 Years	8.8	8.8	--	--	103.9
Age Band 13-14 Years	7.3	7.2	--	--	138.2
Age Band 15 Years	5.7	5.5	--	--	73.6
Age Band 16 Years	4.9	4.6	--	--	69.2
Age Band 17 Years	4.2	3.8	--	--	67.9
Ages 18 Years and Over	3.4	3.0	--	--	179.8
Risk Based Allocation Option					
Aggressive Allocation	13.7	13.9	--	--	14.6
Moderate Allocation	10.5	10.5	4.9	5.1	60.7
Conservative Allocation	5.6	5.5	--	--	6.8
Static Options					
International Equity Index	20.6	21.0	1.2	1.2	3.2
U.S. and International Equity	17.0	17.4	6.6	6.8	294.5
U.S. Large Cap Equity	17.7	17.9	--	--	16.2
Equity and Interest Accumulation	9.8	9.2	--	--	2.0
100% Fixed-Income	0.5	0.8	2.0	2.3	13.0
Money Market	0.3	0.2	0.1	0.1	9.5
Principal Plus Interest[4]	1.4	0.5	1.3	0.2	114.1

(1) Returns are reported net of investment management fees, Program Management Fees and State Administrative Fees.

(2) Each Fund benchmark is the aggregate of the returns of the Fund's underlying index funds weighted by the Fund's asset allocation.

(3) Market value of SBI participation in fund.

(4) The credit rating of 1.45% for the underlying Funding Agreement was guaranteed through 8/31/17.

CASH MANAGEMENT
AND RELATED PROGRAMS

The State Board of Investment manages the cash balances of more than 400 state agency accounts with the objectives of preserving capital and providing competitive money market returns. On June 30, 2017, the total market value of these accounts was $12.0 billion.

Invested Treasurer's Cash (ITC)

Most of the cash accounts are invested in a short-term pooled fund referred to as the Invested 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.

Approximately $144 million of assets are in separately managed dedicated accounts because of special legal restrictions. The vast majority of these assets are related to state or state agency debt issuance including debt service reserves and proceeds.

Investment Objectives

The investment objectives for investing the state cash accounts are to preserve capital, to meet the state's cash needs without the forced sale of securities at a loss, and to provide a level of current income consistent with the goal of preserving capital.

Asset Allocation

The SBI generates current income while preserving capital 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, short term corporates, and certificates of deposit. The composition of the Pool as of June 30, 2017 is shown in Figure 50. At the end of the fiscal year, the Pool had a current yield of 1.09% and a weighted average maturity of 169 days.

Investment Management

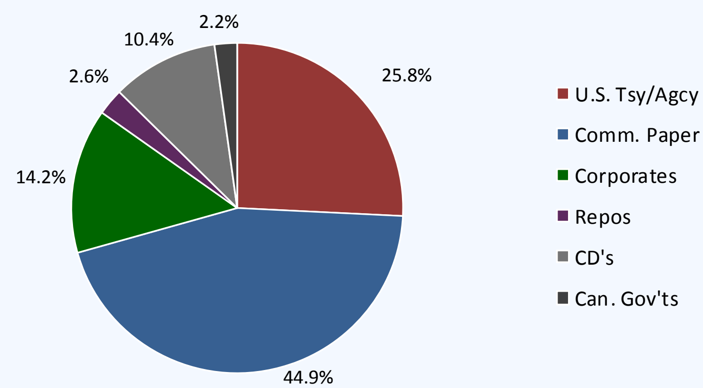
All state cash accounts are managed by SBI investment staff, and most of the assets of the cash accounts are invested in the Invested Treasurer's Cash Pool.

Investment Performance

The SBI measures the performance of the Invested Treasurer's Cash Pool against a benchmark which reflects the maturity structure of the pool.

For fiscal year 2017, the Treasurer's Cash Pool outperformed its benchmark, the iMoneyNet's All Taxable Money Fund Index, by 0.5 percentage point. Performance results are shown in Figure 51.

Figure 50. Invested Treasurer's Cash Fund Distribution as of June 30, 2017*



* Totals may not add due to rounding.

Figure 51. Invested Treasurer's Cash Pool Performance for Periods Ending June 30, 2017

	Annualized			
	1 Yr.	**3 Yr.**	**5 Yr.**	**10 Yr.**
Invested Treasurer's Cash Pool*	0.8%	0.7%	0.6%	1.3%
Custom Benchmark**	0.3	0.1	0.1	0.5
3 month T-Bills	0.3	0.2	0.2	0.4

* Actual returns are calculated net of fees.

** The Treasurer's Cash Pool is measured against the iMoneyNet, All Taxable Money Fund Report Average.

Securities Lending Program

The SBI participates in a securities lending program in which securities held by the SBI on behalf of the retirement systems are loaned to banks and security dealers for a daily fee. These loans are fully collateralized. Currently, the SBI's securities lending activity is undertaken by the SBI's master custodian bank, State Street Corporation. State Street generated additional income for the retirement systems of approximately $43.6 million during fiscal year 2017.

Certificate of Deposit Program

The SBI manages a certificate of deposit (CD) program in which it purchases CDs from Minnesota financial institutions. The return SBI receives is based on CD rates quoted in the national market.

The SBI's Certificate of Deposit program provides a reliable source of capital to Minnesota financial institutions, regardless of size, many of which do not have access to the national CD market. The Board designed the program so that no single institution is favored in the allocation of assets. Only the cash reserves of the retirement funds are used in the program.

During fiscal year 2017, the SBI purchased $289.5 million of CDs from all Minnesota financial institutions.

Securities Repurchase Program

The SBI created the Securities Repurchase Program to help meet the increased needs of some banks throughout the state.

Under the program, the SBI temporarily buys securities such as Treasuries and Agencies from banks under a repurchase agreement (repo). At the end of the agreement period, the securities are returned to the selling banks ("repurchased") and the bank pays the SBI principal and interest.

The transactions are fully collateralized and range in size from $100,000 to $2 million per institution. For ease of administration, the program uses the same rates, offering dates and maturity dates as the SBI's CD program, and uses only the cash reserves of the retirement funds.

During fiscal year 2017, the SBI purchased $28.3 million in repos from Minnesota financial institutions.

Excess Debt Reserve

The SBI manages excess debt reserve accounts separate from the ITC Pool in order to align with requirements related to the issuance of general obligation bonds.

When the full faith and credit of the state has been pledged for the payment of the state's bonds, the Minnesota Constitution and statutes require the state to have on hand by December 1 of each year an amount sufficient to pay principal and interest on the state's general obligation debt for the next nineteen months. The Tax Return Act of 1986 and the 1986 Internal Revenue Code have established rules regarding how states and other local units of government issue debt, the amounts they can hold to pay debt service and more importantly, rules that govern the yields those funds may earn.

The SBI complies with these rules by splitting the nineteen months of funds set aside for debt service into two accounts: a "bona fide debt service account" to comply with federal regulations and an "excess reserve account," to comply with the Minnesota Constitution and statutes.

The primary investments used for the reserve accounts are U.S. Treasuries and municipal bonds.

As of fiscal year end 2017, the SBI had $77.6 million invested in the Excess Debt Service Reserve.

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POLICY AND INVESTMENT RESTRICTIONS

2017 Legislative Update

The 2017 omnibus retirement bill was included in legislation that was vetoed by Governor Dayton. The bill contained various sustainability measures for plans administered by the Public Employees Retirement Association (PERA) and Minnesota State Retirement System (MSRS). The sustainability measures included lowering the actuarial interest rate assumption to 7.5% for plans administered by PERA and MSRS; cost of living adjustment (COLA) reductions; and employer and employee contribution increases. Sustainability provisions affecting the Teachers Retirement Association were not part of the legislation presented to the Governor. The goal of the sustainability provisions was to address funding deficiencies in the plans through the principle of shared sacrifice. The bill also included changes to augmentation, contribution stabilizers, automatic COLA increases, and administrative and technical provisions.

In a separate bill signed into law by Governor Dayton, the State Board of Investment was granted the authority to invest certain assets of qualifying cities, counties, and self-insurance pools through the SBI's non-retirement program. In order to invest through the SBI, the city, county, or self-insurance pool must meet certain criteria to be considered a "qualifying government." A qualifying government may invest a limited portion of its long-term assets in the SBI's non-retirement equity program which PERA will administer. In additional legislation, the SBI was granted authority to invest the assets of a fund administered by the Center for Rural Policy Development.

Sudan Issues

Minnesota Statutes, section 11A.243 concerns the SBI's investment in companies with operations in Sudan. The law requires the SBI to make its best efforts to identify all "scrutinized companies" in which the SBI has direct or indirect holdings or could possibly have holdings in the future.

The SBI receives a list of companies from Empowering Responsible Investment (EIRIS) Conflict Risk Network. Staff sends a list of restricted Sudan companies to managers quarterly and has required divestment of holdings in compliance with the law. Staff reports to the Board each quarter on its actions to implement the law.

Iran Issues

Minnesota Statutes, section 11A.244, requires the SBI to take a series of steps to identify companies that do business in Iran, communicate with those companies, and divest stock and bonds over a specified period of time if the companies continue their business activities in Iran.

The SBI retains the firm Institutional Shareholder Services, Inc. (ISS) to provide a list of companies to implement the law. Staff sends a list of restricted Iran companies to managers quarterly and has required divestment of holdings in compliance with the law. Staff reports to the Board each quarter on its actions to implement the law.

Tobacco Issues

At its September 1998 meeting, the Board adopted a resolution that required each active and semi-passive equity manager to divest by September 2001 shares of any company which obtained more than 15% of its revenues from the manufacture of consumer tobacco products. Staff notified each active and semi-passive equity manager of the policy.

At the close of fiscal year 2001, the SBI had divested from its active and semi-passive portfolios all shares of companies covered by its divestment resolution.

PROXY
SHAREHOLDER INITIATIVES

Proxies

Shareholder Resolutions

In previous years, the SBI co-sponsored a number of tobacco related shareholder resolutions. The SBI did not co-sponsor a tobacco related resolution for the 2017 proxy season.

As a stockholder the State Board of Investment (SBI) is entitled to participate in corporate annual meetings through direct attendance or by casting its votes by proxy. Through proxy voting, the Board directs company representatives to vote its shares in a particular way on resolutions under consideration at annual meetings. These resolutions range from issues involving the election of corporate directors and ratification of auditors to matters such as merger proposals and corporate social responsibility issues. In effect, as a shareholder the SBI can participate in shaping corporate policies and practices.

The Board recognizes its fiduciary responsibility to cast votes on proxy issues. Except for the shares held by the international managers, the SBI does not delegate the duty to its external investment managers. Rather, the SBI actively votes all shares according to guidelines established by its Proxy Committee.
The Board delegates proxy voting responsibilities to its Proxy Committee which is comprised of a designee of each Board member. The four member Committee meets only if it has a quorum and casts votes on proxy issues based on a majority vote of those present. In the event that it reaches a tie vote or a quorum is not present, the Committee will cast a vote to abstain.

Proxy Voting Guidelines

The Committee has formulated guidelines by which it votes on a wide range of corporate governance and social responsibility issues. Each year the Proxy Committee reviews existing guidelines and determines which issues it will review on a case-by-case basis.

Corporate Governance Issues

The voting guidelines for major corporate governance issues are summarized below:

Routine Matters

In general, the SBI supports management on routine matters such as uncontested election of directors, selection of auditors, and limits on director and officer liability or increases in director and officer indemnification permitted under the laws of the state of incorporation.

Shareholder Rights Issues

In general, the SBI opposes proposals that would restrict shareholder ability to effect change. Such proposals include instituting super-majority requirements to ratify certain actions or events, creating classified boards, barring shareholders from participating in the determination of the rules governing the board's actions (e.g. quorum requirements and the duties of directors), prohibiting or limiting shareholder action by written consent, and granting certain stockholders superior voting rights over other stockholders.

In general, the SBI supports proposals that preserve or enhance shareholder rights to effect change. Such proposals include requiring shareholder approval of poison pill plans, repealing classified boards, adopting secret balloting of proxy votes, reinstating cumulative voting, and adopting anti-greenmail provisions.

Executive Compensation

In general, the SBI supports efforts to have boards of directors comprised of a majority of independent directors, to have compensation committees made up entirely of independent directors, and to have executive compensation linked to a company's long-term performance.

Buyout Proposals

In general, the SBI supports friendly takeovers and management buyouts.

Special Cases

The Proxy Committee evaluates hostile takeovers, contested elections of directors, and re-capitalization plans on a case-by-case basis.

Social Responsibility Issues

The voting guidelines for major social responsibility issues are shown below:

Northern Ireland

The SBI supports resolutions that call for the adoption of the MacBride Principles as a means to encourage equal employment opportunities in Northern Ireland.

Tobacco and Liquor

In general, the SBI supports a variety of tobacco and liquor related resolutions including those that call for corporations to limit their promotion of tobacco and liquor products and to report on their involvement in tobacco issues.

Environmental Protection
In general, the SBI supports resolutions that require a corporation to report or disclose to shareholders company efforts in the environmental arena.

Other Social Responsibility Issues
In general, the SBI supports proposals that require a company to report or disclose to shareholders company efforts concerning a variety of social responsibility issues. In the past, these reporting resolutions have included issues such as affirmative action programs, animal testing procedures and nuclear plant safety procedures.

Summary of FY 2017 Proxy Proposals

During fiscal year 2017 the SBI voted proxies for approximately 2,000 U.S. corporations.

The 2017 proxy season was notable for the continued rise of shareholder activism related to environmental, social, and governance (ESG) issues. For example, in support of additional gender diversity on corporate boards, State Street Global Advisors voted against the election of directors on boards with insufficient diversity. On the issue of climate change, BlackRock, Vanguard and Fidelity publically supported and helped pass several shareholder proposals related to climate change disclosure. In addition, proposals related to increased disclosure on companies' lobbying activities and political contributions were common. Proxy access has become the new norm, with the majority of the S&P 500 now having related bylaws up from just a few in 2014. While the issue of executive compensation remains a focus, the overall number of shareholder proposals in this area has decreased because of the Dodd-Frank Act requiring advisory votes on executive compensation. A prevailing trend over the last several years has been the increase in corporate engagement with shareholders on a variety of governance issues that has resulted in a steady decline of proposals being included in the proxy statement.

Mandate on Northern Ireland

Requirements
The SBI is responsible for implementing certain statutory provisions concerning its investments in U.S. companies with operations in Northern Ireland. The statute requires the State Board of Investment (SBI) to:

— Annually compile a list of U.S. corporations with operations in Northern Ireland in which the SBI invests.

— Annually determine whether those corporations have taken affirmative action to eliminate religious or ethnic discrimination. The statute lists nine goals modeled after the MacBride Principles.

— Sponsor, co-sponsor and support resolutions that encourage U.S. companies to pursue affirmative action in Northern Ireland, where feasible.

The statute does not require the SBI to divest existing holdings in any companies and does not restrict future investments by the SBI.

Implementation
The SBI uses the services of ISS to monitor corporate activity in Northern Ireland. In January 2017, the SBI held stocks or bonds in 96 of 188 corporations identified by ISS as having operations in Northern Ireland.

Shareholder Resolutions
The SBI did not file any shareholder resolutions for the 2017 proxy season regarding the MacBride Principles. Shareholder activity has been greatly reduced over the last several years due to many companies having signed the Principles.

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Table of Contents

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NOTES TO THE FINANCIAL SCHEDULES
JUNE 30, 2017

Financial Report Background:
The State Board of Investment (SBI) is the investment management vehicle for numerous retirement and non-retirement funds. The funds are separated by legal requirements and grouped into four major investment types: the Retirement Funds, the Non-Retirement Funds, the Assigned Risk Plan, and Other Funds Under Management. The SBI's goal is to maximize returns for each investment type given the appropriate level of risk. For each investment type, the funds are further broken down and reported by the entity responsible for the financial accounting and presentation of the funds. The information provided by the SBI is audited in conjunction with the audit of the reporting entities.

Retirement Funds: The Retirement Funds consist of funds administered by Teachers Retirement Association (TRA), Public Employees Retirement Association (PERA), Minnesota State Retirement System (MSRS), and Local Volunteer Fire Relief Associations. A list of plan participants is provided in a schedule beginning on page 112. Comprehensive Financial Reports are prepared by the respective agencies. These reports can be obtained by contacting TRA at (800) 657-3669, PERA at (800) 652-9026, MSRS at (800) 657-5757.

The Supplemental Investment Fund (SIF) is an investment option within the retirement funds that is available to various groups of participants according to state statute. SBI provides a financial schedule on the SIF as required by statute.

Non-Retirement Funds: The Non-Retirement Funds represent investment vehicles for Trusts and OPEBs. A listing of the Trusts and OPEBs is provided in the participation schedule on page 130. The Comprehensive Financial Reports for the OPEBs are prepared by PERA and are available by calling (800) 652-9026. The Comprehensive Financial Reports for the Trusts are prepared by Minnesota Management and Budget and are available by calling (800) 627-3529.

Assigned Risk Plan: The Assigned Risk Plan is a dedicated governmental fund for which the SBI is the investment vehicle for the assets made available for investment. The Comprehensive Financial Reports can be obtained from Minnesota Management and Budget by calling (800) 627-3529.

Other Funds Under Management: The Other Funds Under Management are the assets the State has made available for investment with SBI. The financial statement presented for the Other Funds represent the investment information at the State Board of Investment. The SBI grouped the financial information for the Other Funds into four major categories: Invested Treasurer's Cash, Debt Service, Housing Finance, and Public Facilities. The detailed financial statements, supporting schedules, and further breakdown of Debt Service, Housing Finance, and Public Facilities can be found in the State's Comprehensive Annual Financial Report available from Minnesota Management and Budget at (800) 627-3529.

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

Financial Reporting: The SBI reporting requirements changed under the legislation passed during the 2012 legislative session. References in *Minnesota Statutes,* Section 11A.07, subdivision 4 and 11A.14, subdivision 14 to fund and participant annual statements prepared in accordance with generally accepted accounting principles were deleted. These requirements were deemed redundant to statements prepared for the State of Minnesota's Comprehensive Financial Statements and those of PERA, MSRS, and TRA retirement systems.

As required by state statute the SBI has prepared schedules for the SIF, a schedule of participation for all pooled investments, and a schedule of external manager fees.

Authorized Investments: *Minnesota Statutes*, Section 11A.24 authorizes investments to obligations and stocks of the U.S. and Canadian governments, their agencies and their registered corporations; short-term obligations of specified high quality; international securities; participation as a limited partner in venture capital, real estate or resource equity investments; and participation in registered mutual funds.

Security Valuation: All securities are valued at fair value except for U.S. Government short-term securities and commercial paper, which are valued at fair value less accrued interest. Accrued short-term interest is recognized as income as part of "Short-Term Gain". For long-term fixed income securities, SBI uses the Financial Times Interactive Data Services valuation system. This service provides prices for both actively traded and privately placed bonds. For equity securities, SBI uses a valuation service provided by Reuters. The basis for determining the fair value of investments that are not based on market quotations may include audited financial statements, analysis of future cash flows, and independent appraisals.

Recognition of Security Transactions: Security transactions are accounted for as of the date the securities are purchased or sold.

Income Recognition: Pool dividend income is recorded on the ex-dividend date. Pool interest and dividend income are accrued monthly. Short-term interest is accrued monthly and is presented as "Accrued Short-Term Gain."

Amortization of Fixed Income Securities: Premiums and discounts on fixed income purchases are amortized over the remaining life of the security using the "Effective Interest Method."

State Board of Investment
Retirement Fund - Supplemental Investment Accounts
Schedule of Net Position
As of June 30, 2017
Amounts in (000)'s

	Stable Value Fund	Money Market Fund	Bond Fund
Assets			
Security Lending Collateral			$ 29,184
Short Term Investments			
Stable Value Fixed Interest	$ 1,565,310		
Money Fund		$ 383,817	
Fixed Income Investments			
Bond Pool			154,814
Equity Investments			
Domestic Stock Pool			
International Stock Pool			
Total Investments	$ 1,565,310	$ 383,817	$ 154,814
Total Supplemental Position Assets	$ 1,565,310	$ 383,817	$ 183,998
Liabilities			
Accrued Investment Expense	$ 985		$ 34
Security Lending Collateral			29,184
Total Liabilities	$ 985		$ 29,218
Net Supplemental Position Assets Held in Trust	$ 1,564,325	$ 383,817	$ 154,780

Unaudited

Balanced Fund	U.S. Stock Index Fund	U.S. Stock Activiely Managed Fund	Broad International Stock Fund	Volunteer Fire Fighter Account	Total Supplemental Investment Fund
$ 64,624	$ 87,440	$ 7,136	$ 4,655	$ 10,872	$ 203,911
					1,565,310
18,807				3,448	406,072
141,210				34,052	330,076
243,097	559,315	229,167		26,597	1,058,176
			179,233	11,335	190,568
$ 403,114	$ 559,315	$ 229,167	$ 179,233	$ 75,432	$ 3,550,202
$ 467,738	$ 646,755	$ 236,303	$ 183,888	$ 86,304	$ 3,754,113
$ 34	$ 7	$ 81	$ 95	$ 13	$ 1,249
64,624	87,440	7,136	4,655	10,872	203,911
$ 64,658	$ 87,447	$ 7,217	$ 4,750	$ 10,885	$ 205,160
$ 403,080	$ 559,308	$ 229,086	$ 179,138	$ 75,419	$ 3,548,953

Unaudited

State Board of Investment
Retirement Fund - Supplemental Investment Accounts
Schedule of Changes in Net Position
For the Fiscal Year Ended June 30, 2017
Amounts in (000)'s

	Stable Value Fund	Money Market Fund	Bond Fund
Investment Income			
Interest, Dividends and Other	$ 3,940	$ (5,489)	$ 14,690
Security Lending Gross Earnings			282
Less Borrower Rebates			(133)
Less Fees Paid to Agents			(38)
Security Lending Net Earnings			$ 111
Net Increase in Fair Value of Investments	$ 31,973		1,135
Total Investment Income (Loss)	$ 35,913	$ (5,489)	$ 15,936
Expenses			
Administrative Expenses	$ (93)	$ (19)	$ (9)
Investment Expenses	(3,901)		(137)
Total Expenses	$ (3,994)	$ (19)	$ (146)
Net Income - Supplemental Investments	$ 31,919	$ (5,508)	$ 15,790
Participant Transactions			
Additions	$ 80,100	$ 78,942	$ 10,103
Withdrawals	(91,360)	(55,425)	(14,458)
Net Participant Transactions	$ (11,260)	$ 23,517	$ (4,355)
Total Change in Assets	$ 20,659	$ 18,009	$ 11,435
Net Supplemental Investment Assets Held in Trust:			
Beginning of Fiscal Year	1,543,666	365,808	143,345
End of Fiscal Year	$ 1,564,325	$ 383,817	$ 154,780

Balanced Fund	U.S. Stock Index Fund	U.S. Stock Activiely Managed Fund	Broad International Stock Fund	Volunteer Fire Fighter Account	Total Supplemental Investment Fund
$ (574)	$ (4,183)	$ (7,444)	$ 5,405	$ (4)	$ 6,341
800	1,249	958	116	129	3,534
(362)	(554)	(348)	(17)	(57)	(1,471)
(108)	(168)	(92)	(34)	(18)	(458)
$ 330	$ 527	$ 518	$ 65	$ 54	$ 1,605
42,044	88,364	40,984	31,664	6,501	242,665
$ 41,800	$ 84,708	$ 34,058	$ 37,134	$ 6,551	$ 250,611
$ (24)	$ (32)	$ (15)	$ (13)	$ (91)	$ (296)
(140)	(36)	(347)	(372)	(51)	(4,984)
$ (164)	$ (68)	$ (362)	$ (385)	$ (142)	$ (5,280)
$ 41,636	$ 84,640	$ 33,696	$ 36,749	$ 6,409	$ 245,331
$ 23,717	$ 22,262	$ 8,272	$ 5,609	$ 17,692	$ 246,697
(36,871)	(28,933)	(21,578)	(29,430)	(2,939)	(280,994)
$ (13,154)	$ (6,671)	$ (13,306)	$ (23,821)	$ 14,753	$ (34,297)
$ 28,482	$ 77,969	$ 20,390	$ 12,928	$ 21,162	$ 211,034
374,598	481,339	208,696	166,210	54,257	3,337,919
$ 403,080	$ 559,308	$ 229,086	$ 179,138	$ 75,419	$ 3,548,953

Unaudited

State Board of Investment
Retirement Plans Participation
As of June 30, 2017

	Stable Value Fund	Money Market Fund	Bond Fund
Combined Retirement Funds			
Correctional Employees Retirement Fund		$ 27,809,985	$ 197,493,313
Highway Patrolmen's Retirement Fund		17,761,014	133,670,158
Judges Retirement Fund		5,629,369	35,578,471
Public Employee Corrections		14,956,182	116,764,239
Public Employee Police & Fire Fund		188,309,493	1,535,287,939
Public Employees Retirement Fund		485,110,350	3,895,018,197
State Employees Retirement Fund		312,411,438	2,412,541,127
Teacher's Retirement Fund		622,772,681	4,098,976,802
		$1,674,760,512	$ 12,425,330,246
Fire Relief Funds & Other Plans			
Alaska		$ 1,653	$ 12,411
Albertville			46,001
Almelund		56,916	62,340
Amboy			11,163
Argyle		3,745	28,116
Arrowhead		1,403	30,484
Askov		2,363	17,742
Audubon		17,791	255,388
Austin		23,190	174,121
Avon			
Backus			
Bagley		6,755	84,482
Balsam		17,282	73,697
Battle Lake		24,620	184,856
Beardsley		189	51,198
Beaver Creek			22,311
Benson		2,938	58,021
Bertha		5,500	41,297
Bigfork		1,014	7,612
Bird Island		4,276	32,103
Blackduck			
Blooming Prairie		4,308	81,727
Bloomington		1,021	54,738,599
Boyd		1,159	8,704
Brimson		6,600	52,147
Brooklyn Park		212,615	1,596,379
Brooten			
Brownsville		14,682	42,813

Unaudited

Alternative Investment Pool	U.S. Stock	Broad International Stock Fund	Total
$ 133,652,204	$ 440,487,005	$ 220,832,252	$ 1,020,274,759
90,460,433	298,136,508	149,466,738	689,494,851
24,077,551	79,353,844	39,782,984	184,422,219
79,019,051	260,429,748	130,562,965	601,732,185
1,038,993,714	3,424,290,144	1,716,721,952	7,903,603,242
2,635,922,350	8,687,407,786	4,355,315,415	20,058,774,098
1,632,670,024	5,380,906,336	2,697,645,217	12,436,174,142
2,773,952,135	9,142,314,785	4,583,376,907	21,221,393,310
$ 8,408,747,462	$ 27,713,326,156	$ 13,893,704,430	$64,115,868,806
	$ 82,944		$ 97,008
	49,198	$ 29,758	124,957
	302,948		422,204
	85,504		96,667
	112,746		144,607
	89,689		121,576
	81,348		101,453
	259,246		532,425
	799,575		996,886
	82,844		82,844
	23,910		23,910
	147,072		238,309
	294,413		385,392
	318,234		527,710
	139,344	39,097	229,828
	38,680		60,991
	159,925		220,884
	179,480		226,277
	248,127	19,784	276,537
	145,918		182,297
	15,710	33,797	49,507
	143,505		229,540
	80,416,739	21,981,468	157,137,827
	38,136		47,999
	85,685	11,836	156,268
	8,908,618	298,779	11,016,391
	322,944		322,944
	138,362	25,282	221,139

Unaudited

State Board of Investment
Retirement Plans Participation
As of June 30, 2017

	Stable Value Fund	Money Market Fund	Bond Fund
Buffalo Fire		$ 16,917	$ 13,148
Buffalo Lake		9,005	67,615
Carlton		1,982	54,907
Ceylon		4,725	35,475
Chatfield		99,334	105,831
Cherry		4,955	37,203
Chisago City		24,437	184,053
Chokio		10,300	77,333
Clarissa			39,297
Clarkfield		8,478	108,311
Clear Lake		460,746	52,733
Cloquet (Perch Lake)		2,161	182,690
Columbia Heights			361,892
Coon Rapids		76,295	1,664,210
Cotton		1,215	37,428
Courtland		43,520	24,921
Cyrus			31,666
Dakota		3,822	77,755
Dawson		13,572	101,902
Dayton Fire		63,433	71,483
Deer Creek		4,478	33,622
Dover		29,609	83,870
East Grand Forks		50,054	375,820
Edgerton		15,022	112,786
Edina		126,811	1,674,356
Elbow Lake		8,856	66,496
Excelsior			1,641,237
Eyota		101,008	116,437
Fairmont		29,079	218,333
Fergus Falls		27,003	1,060,271
Forest Lake		13,708	102,923
Franklin			
Ghent			8,134
Glencoe			
Glenville		10,267	82,203
Glenwood		10,392	198,474
Golden Valley		50,609	801,785
Gonvick		3,374	25,333
Good Thunder		8,055	60,477

Unaudited

Alternative Investment Pool	U.S. Stock	Broad International Stock Fund	Total
	$ 165,424		$ 195,489
	399,555		476,175
	175,947	$ 25,648	258,484
	271,369		311,569
	228,807	22,598	456,570
	244,111		286,269
	629,710	213,912	1,052,112
	133,131	35,106	255,870
	69,843		109,140
	147,568		264,357
	224,524		738,003
	233,342	34,528	452,721
	1,365,312		1,727,204
	986,170		2,726,675
	187,402	33,462	259,507
	42,902		111,343
	66,457	15,179	113,302
	126,307		207,884
	234,156		349,630
	344,218		479,134
	250,053		288,153
	186,025	44,554	344,058
	646,983		1,072,857
	401,227		529,035
	5,104,238		6,905,405
	253,425	29,311	358,088
	2,662,233	1,577,475	5,880,945
	117,650		335,095
	375,866		623,278
	1,127,059	97,650	2,311,983
	212,452		329,083
	254,563		254,563
	36,062	$6,630	50,826
	293,403		293,403
	176,226	66,227	334,923
	467,099		675,965
	2,064,768	439,233	3,356,395
	120,162		148,869
	271,002		339,534

State Board of Investment
Retirement Plans Participation
As of June 30, 2017

	Stable Value Fund	Money Market Fund	Bond Fund
Goodland		$ 511	$ 3,838
Grand Meadow		6,040	67,882
Grey Eagle		10,615	79,702
Hackensack		12,519	188,486
Hanover Regular		25,446	425,147
Hanover Special		856	14,311
Hanska		10,880	20,805
Harmony		2,536	19,039
Hawley		171	
Hayward		334,664	28,072
Hector		34,885	261,930
Herman			35,811
Hills		349	2,621
Holdingford		880	6,611
Holland		2,001	61,159
Jacobson		9,344	18,530
Kabetogama			
Kandiyohi		5,432	102,128
Kelsey			22,347
Kerkhoven		3,713	95,796
Kiester			22,667
Kilkenny		6,286	47,200
Kimball		2,400	18,020
La Crescent		9,066	86,441
La Salle		951	7,142
Lafayette		9,569	76,910
Lake City		47,039	364,123
Lakeville			
Leroy		5,059	61,101
Lewiston		7,116	53,432
Littlefork		9,194	69,035
Lonsdale		4,781	35,894
Lowry			
Lyle		2,863	21,493
Madison		4,480	33,620
Madison Lake		1,279	9,606
Maple Hill		11,846	133,145
Mapleton		1,970	14,793
Mapleview		4,140	79,831

Unaudited

Alternative Investment Pool	U.S. Stock	Broad International Stock Fund	Total
	$ 32,751		$ 37,100
	296,300		370,222
	137,209	$ 41,801	269,327
	161,820	143,530	506,355
	328,912		779,505
	11,064		26,231
	178,403		210,088
	117,379	41,773	180,727
	129,379		129,550
	152,891	28,841	544,468
	450,918		747,733
	113,384	25,898	175,093
	20,788	4,483	28,241
	51,262		58,753
	110,759	87,947	261,866
	102,342	37,639	167,855
	186,812		186,812
	303,656		411,216
	33,944	22,808	79,099
	209,263		308,772
	62,725		85,392
	365,250		418,736
	115,161		135,581
	647,849		743,356
	62,338		70,431
	277,364	22,596	386,439
	628,840		1,040,002
	5,195,239	458,916	5,654,155
	65,396		131,556
	258,944		319,492
	417,404		495,633
	355,775	106,765	503,215
	121,401		121,401
	112,202	7,918	144,476
	231,052		269,152
	39,790	16,060	66,735
	153,119		298,110
	80,924		97,687
	163,309	33,163	280,443

State Board of Investment
Retirement Plans Participation
As of June 30, 2017

	Stable Value Fund	Money Market Fund	Bond Fund
Maplewood			$ 758,539
Marietta		$ 3,416	25,652
Marine St. Croix		122,494	138,015
Maynard		6,374	47,857
McDavitt		3,630	36,751
McGrath		1,114	20,418
McIntosh		1,988	14,927
Medford		1,884	106,331
Medicine Lake			204,784
Menahga		7,649	198,725
Mendota Heights		15,072	645,352
Milan		3,299	48,823
Minneota		2,907	49,307
MSRS Empower	$1,561,109,515	393,456,412	191,544,528
Minnetonka		380,635	3,490,546
Morristown		20,538	154,205
Morse-Fall Lake		19,320	59,429
Murdock		1,899	14,256
Myrtle		58,985	63,493
Nassau		1,432	32,786
New Brighton			1,344,625
New Germany		11,429	85,813
New Ulm			
New York Mills		6,836	51,330
Nicollet		14,871	81,912
Nodine		67,494	32,361
North Branch		2,740	20,573
Northfield		1,062,521	751,031
Northrop		3,969	29,798
Oronoco		4,542	34,100
Owatonna		150,022	396,053
Pequot Lakes		18,681	364,598
Pine Island		17,977	171,013
Pipestone		8,555	64,234
Pera DCP	4,200,962	3,130,973	14,124,457
Randolph		17,016	127,761
Red Lake Falls Regular		5,678	42,635
Red Lake Falls Special			
Redwood Falls			53,340

Unaudited

Alternative Investment Pool	U.S. Stock	Broad International Stock Fund	Total
	$ 3,447,424	$ 343,810	$ 4,549,773
	159,534		188,602
	237,597		498,106
	82,387		136,618
	129,820	15,143	185,344
	28,716		50,248
	166,812		183,727
	346,956	38,359	493,530
	591,009	265,593	1,061,386
	98,874		305,248
	1,556,380	292,671	2,509,475
	158,413		210,535
	97,352	14,085	163,651
	598,464,507	73,509,615	2,818,084,577
	4,919,979	882,292	9,673,452
	876,231		1,050,974
	253,095		331,844
	109,385	21,517	147,057
	109,305		231,783
	230,663	42,709	307,590
	2,571,315		3,915,940
	147,730		244,972
	461,604		461,604
	88,366		146,532
	384,240	119,740	600,763
	153,139	21,399	274,393
	174,869	28,694	226,876
	4,231,883		6,045,435
	150,886		184,653
	209,374		248,016
	808,760	303,595	1,658,430
	476,421		859,700
	427,217		616,207
	320,474		393,263
	39,268,637	3,160,588	63,885,617
	576,244	60,567	781,588
	73,397		121,710
		8,505	$8,505
			53,340

Unaudited

State Board of Investment
Retirement Plans Participation
As of June 30, 2017

	Stable Value Fund	Money Market Fund	Bond Fund
Renville		$ 3,915	$ 75,164
Robbinsdale		260,039	170,761
Rose Creek		830	6,234
Roseau			
Rosemount		672,828	330,514
Roseville			2,734,133
Ruthton		24,712	15,442
Saint Clair		11,580	99,251
Saint Peter		2,181	17,162
Sandstone		543	4,078
Savage		102,948	772,964
Schroeder			173,427
Sherburn		24,679	185,294
Silver Bay		12,964	97,341
SPTRFA			
Starbuck		4,098	30,765
Stewart		6,441	48,364
Sturgeon Lake			9,066
Tofte		4,800	36,042
Truman		1,883	56,139
Two Harbors		9,671	239,916
Tyler		11,225	84,283
Vadnais Heights		24,745	109,260
Vermilion Lake		11,732	88,089
Verndale			
Viking Fire		3,194	10,091
Warroad Area		23,238	221,103
Watkins Fire		16,502	70,003
Williams		9,003	67,596
Willow River			8,263
Woodbury		380,266	4,118,753
Woodstock		3,225	39,633
Wrenshall			65,429
Wykoff		5,505	41,335
Wyoming		12,127	205,421
Zumbro Falls		14,916	68,116
	$ 1,565,310,477	$ 402,624,265	$ 296,024,580

Unaudited

Alternative Investment Pool	U.S. Stock	Broad International Stock Fund	Total
	$ 180,708		$ 259,787
	1,139,067	$ 97,584	1,667,451
	48,413	4,780	60,257
	2,225		2,225
	1,484,008		2,487,350
	7,614,812	611,074	10,960,019
	121,917		162,071
	728,723		839,554
	433,007	121,570	573,920
	7,021		11,642
	1,330,677		2,206,589
	26,868		200,295
	318,988		528,961
	500,588	26,812	637,705
	218,583,408	71,085,958	289,669,366
	234,945	10,288	280,096
	161,298		216,103
	81,073		90,139
	190,698		231,540
	207,863		265,885
	354,417	127,114	731,118
	145,094		240,602
	282,963		416,968
	151,647		251,468
	39,074		39,074
	29,061	3,466	45,812
	331,358		575,699
	309,675	69,622	465,802
	211,889		288,488
	126,973		135,236
	5,405,889	1,745,747	11,650,655
	170,353		213,211
	63,323	15,284	144,036
	71,158		117,998
	156,747		374,295
	253,363	23,856	360,251
	$ 1,031,579,199	$ 179,233,489	$ 3,474,772,010

Unaudited

State Board of Investment
Retirement Plans Participation
As of June 30, 2017

	Stable Value Fund	Money Market Fund	Bond Fund
PERA Voluntary Share			
Aitkin Fire		$ 42,872	$ 423,461
Albert Lea		14,036	138,634
Alborn		8,860	87,509
Alden		10,788	106,554
Ashby		20,379	201,292
Aurora		10,371	102,440
Barnum		15,698	155,052
Barrett		6,977	68,913
Belview		11,017	108,815
Biwabik		11,971	118,244
Blomkest		8,155	80,548
Brandon		14,939	147,557
Breitung		14,440	142,630
Brevator		8,626	85,206
Bricelyn		19,888	196,442
Brook Park		11,181	110,438
Browerville		15,930	157,349
Buyck		4,603	45,463
Cambridge Fire		33,127	327,202
Canby		24,840	245,353
Carsonville		8,930	88,201
Center City		18,988	187,548
Central Lakes		1,732	17,109
Clarks Grove		7,085	69,982
Clifton		20,296	200,469
Colvill		5,953	58,799
Colvin		4,412	43,574
Cosmos		13,215	130,531
Cottage Grove		114,695	1,132,870
Crane Lake		7,300	72,107
Crookston		28,551	282,002
Culver		4,156	41,051
Dalbo Fire Department		19,476	192,365
De Graff		2,460	24,298
Delavan		9,990	98,679
Dent		16,288	160,883
Eagle's Nest		1,127	11,130
Echo Fire		12,734	125,777

Unaudited

Alternative Investment Pool	U.S. Stock		Broad International Stock Fund		Total
$	330,750	$	140,959	$	938,042
	108,282		46,148		307,100
	68,350		29,130		193,849
	83,225		35,469		236,036
	157,222		67,005		445,898
	80,012		34,100		226,923
	121,105		51,613		343,468
	53,825		22,939		152,654
	84,992		36,222		241,046
	92,356		39,361		261,932
	62,913		26,812		178,428
	115,251		49,118		326,865
	111,403		47,478		315,951
	66,551		28,363		188,746
	153,434		65,391		435,155
	86,259		36,762		244,640
	122,899		52,377		348,555
	35,510		15,134		100,710
	255,566		108,917		724,812
	191,636		81,672		543,501
	68,890		29,360		195,381
	146,487		62,430		415,453
	13,363		5,695		37,899
	54,660		23,295		155,022
	156,579		66,731		444,075
	45,926		19,573		130,251
	34,034		14,505		96,525
	101,953		43,450		289,149
	884,843		377,103		2,509,511
	56,321		24,003		159,731
	220,262		93,871		624,686
	32,064		13,665		90,936
	150,249		64,033		426,123
	18,979		8,088		53,825
	77,074		32,848		218,591
	125,660		53,554		356,385
	8,693		3,705		24,655
	98,240		41,868		278,619

State Board of Investment
Retirement Plans Participation
As of June 30, 2017

	Stable Value Fund	Money Market Fund	Bond Fund
Elbow Tulaby		$ 5,378.00	$ 53,117.00
Ellsburg		5,316	52,509
Elmore		11,950	118,031
Ely		21,482	212,185
Embarrass		11,206	110,687
Emmons		18,874	186,424
Evergreen		1,364	13,471
Fairfax		16,734	165,287
Federal Dam		7,064	69,770
Forada		23,812	235,194
Fredenberg		11,367	112,280
French		7,745	76,497
Frost		10,038	99,146
Geneva		9,784	96,643
Gilbert		10,924	107,904
Gnesen		14,181	140,071
Goodview Fire		19,029	187,952
Grand Lake		21,663	213,972
Grand Marais		19,452	192,135
Granite Falls		27,139	268,057
Greenwood		29,066	287,093
Hardwick		8,080	79,810
Henning		19,676	194,341
Hermantown		68,448	676,080
Hewitt		6,583	65,017
Hill City		9,688	95,694
Hitterdal		11,073	109,370
Hollandale		7,255	71,663
Houston		22,039	217,685
Hovland Fire Department		8,227	81,259
Hoyt Lakes		14,353	141,766
Industrial Township		16,478	162,760
Isanti		116,445	1,150,154
Kelliher		10,940	108,057
Kettle River		5,488	54,202
Lake Bronson		8,799	86,910
Lakeland		16,223	160,242
Lancaster		6,714	66,318
Lester Prairie		17,992	177,713

Unaudited

Alternative Investment Pool	U.S. Stock	Broad International Stock Fund	Total
	$ 41,487.00	$ 17,681.00	$ 117,663.00
	41,013	17,479	116,317
	92,190	39,290	261,461
	165,730	70,631	470,028
	86,454	36,845	245,192
	145,609	62,056	412,963
	10,522	4,484	29,841
	129,099	55,020	366,140
	54,495	23,225	154,554
	183,702	78,290	520,998
	87,698	37,375	248,720
	59,749	25,464	169,455
	77,439	33,003	219,626
	75,484	32,170	214,081
	84,280	35,918	239,026
	109,404	46,626	310,282
	146,803	62,565	416,349
	167,126	71,226	473,987
	150,070	63,957	425,614
	209,370	89,229	593,795
	224,238	95,566	635,963
	62,337	26,567	176,794
	151,793	64,691	430,501
	528,062	225,050	1,497,640
	50,783	21,643	144,026
	74,743	31,854	211,979
	85,425	36,406	242,274
	55,974	23,855	158,747
	170,026	72,462	482,212
	63,468	27,049	180,003
	110,728	47,190	314,037
	127,126	54,179	360,543
	898,343	382,857	2,547,799
	84,399	35,969	239,365
	42,336	18,043	120,069
	67,882	28,930	192,521
	125,159	53,340	354,964
	51,799	22,076	146,907
	138,805	59,156	393,666

State Board of Investment
Retirement Plans Participation
As of June 30, 2017

	Stable Value Fund	Money Market Fund	Bond Fund
LeSueur		$ 53,474	$ 528,180
Lexington		28,915	285,597
Lino Lakes Fire		2,168	21,409
Linwood		37,236	367,788
Lutsen		11,458	113,178
Lynd		3,887	38,391
Mahtomedi		86,628	855,650
Mahtowa		11,005	108,701
Manchester		8,354	82,515
Mayer		36,563	361,143
McGregor		33,943	335,264
McKinley		4,905	48,452
Melrose		24,387	240,879
Milaca		33,154	327,468
Montrose		42,555	420,332
Mountain Iron		14,678	144,975
Newfolden		8,336	82,339
Normanna		3,683	36,374
North Star		3,861	38,133
Northhome		7,494	74,020
Northland Fire		3,756	37,094
Norwood-Young America		35,610	351,732
Oak Grove		64,495	637,037
Oakdale		138,696	1,369,936
Ogilvie		13,611	134,439
Osakis		37,869	374,037
Ottertail		23,817	235,242
Palisade		10,076	99,524
Palo		15,633	154,414
Parkers Prairie		18,407	181,812
Pennock		19,660	194,183
Pequaywan Lake		4,835	47,753
Pike Sandy Britt		16,626	164,218
Plato Fire		17,473	172,586
Porter		28,171	278,250
Raymond		14,997	148,126
Rice Lake		25,303	249,926
Sabin Elmwood Fire		16,614	164,097
Sacred Heart		6,018	59,440

Unaudited

Alternative Investment Pool	U.S. Stock	Broad International Stock Fund	Total
$	412,542	$ 175,818	$ 1,170,014
	223,069	95,068	632,649
	16,722	7,127	47,426
	287,266	122,427	814,717
	88,400	37,674	250,710
	29,986	12,779	85,043
	668,317	284,824	1,895,419
	84,902	36,184	240,792
	64,450	27,467	182,786
	282,076	120,215	799,997
	261,862	111,601	742,670
	37,844	16,129	107,330
	188,142	80,183	533,591
	255,773	109,006	725,401
	328,306	139,918	931,111
	113,234	48,258	321,145
	64,312	27,408	182,395
	28,411	12,108	80,576
	29,785	12,694	84,473
	57,814	24,639	163,967
	28,973	12,348	82,171
	274,725	117,082	779,149
	497,566	212,053	1,411,151
	1,070,007	456,017	3,034,656
	105,005	44,751	297,806
	292,147	124,507	828,560
	183,739	78,306	521,104
	77,735	33,129	220,464
	120,607	51,400	342,054
	142,007	60,521	402,747
	151,670	64,639	430,152
	37,299	15,896	105,783
	128,265	54,664	363,773
	134,801	57,450	382,310
	217,331	92,622	616,374
	115,696	49,307	328,126
	195,209	83,194	553,632
	128,171	54,624	363,506
	46,426	19,786	131,670

State Board of Investment
Retirement Plans Participation
As of June 30, 2017

	Stable Value Fund	Money Market Fund	Bond Fund
Saint Francis		$ 33,384	$ 329,739
Saint Leo Fire		8,573	84,676
Saint Paul Park		37,045	365,906
Scandia		28,761	284,082
Scandia Valley		16,402	162,008
Shevlin		14,963	147,793
Silver Lake		16,883	166,760
Solway (Main)		5,973	58,995
Solway(Cloquet)		11,854	117,085
Spring Grove		9,666	95,471
Spring Lake Park		692,174	6,836,790
Stephen		13,081	129,201
Sunburg		9,887	97,658
Tower		9,956	98,334
Twin Valley		14,157	139,836
Ulen		11,429	112,887
Vesta		6,309	62,318
Victoria		49,847	492,352
Waconia		57,860	571,495
Waite Park		31,051	306,702
Warba - Feeley - Sago		9,441	93,247
Willmar		64,798	640,025
Winnebago		22,932	226,510
Wolf Lake		10,619	104,884
Wright		7,996	78,977
		$ 3,447,547	$ 34,052,308
Total Pool Participation	$ 1,565,310,477	$2,080,832,324	$ 12,755,407,134

Unaudited

Alternative Investment Pool	U.S. Stock	Broad International Stock Fund	Total
	$ 257,547	$ 109,762	$ 730,432
	66,137	28,186	187,572
	285,796	121,801	810,548
	221,886	94,564	629,293
	126,538	53,928	358,876
	115,436	49,197	327,389
	130,250	55,510	369,403
	46,079	19,638	130,685
	91,451	38,975	259,365
	74,569	31,780	211,486
	5,339,969	2,275,793	15,144,726
	100,914	43,008	286,204
	76,277	32,508	216,330
	76,805	32,733	217,828
	109,221	46,548	309,762
	88,172	37,577	250,065
	48,674	20,744	138,045
	384,559	163,892	1,090,650
	446,374	190,236	1,265,965
	239,554	102,093	679,400
	72,832	31,040	206,560
	499,900	213,048	1,417,771
	176,919	75,399	501,760
	81,921	34,913	232,337
	61,686	26,289	174,948
	$ 26,597,026	$ 11,335,149	$ 75,432,030
$ 8,408,747,462	$ 28,771,502,381	$ 14,084,273,068	$ 67,666,072,846

Unaudited

State Board of Investment
Non Retirement Funds Participation Schedule
As of June 30, 2017
Amounts In (000)'s

	Non Retirement Cash Pool	Internal Bond Pool	Internal Equity Pool	Total Non Retirement Pools
Permanent School	$ 25,140	$ 618,514	$ 672,924	$ 1,316,578
Environmental Trust	$ 19,870	$ 283,705	$ 724,795	$ 1,028,370
Other Trusts:				
Assigned Risk			$ 65,944	$ 65,944
Closed Landfill		$ 24,048	57,146	81,194
Duluth Community Investment Trust	$ 11	5,870	15,854	21,735
Emergency Med SVC	77	552	962	1,591
Ethel Currey		574	951	1,525
Iron Range Resources		53,577	78,462	132,039
Life Time Fish &Wild Life	466	6,873	16,645	23,984
Metro Landfill Contingency Action		2,411	6,573	8,984
Natural Resources Conservation		307	804	1,111
Saint Louis County Environmental		7,973	10,181	18,154
Water & Soil Conservation Easement		102	268	370
Winona State		1,983	3,476	5,459
	$554	$104,270	$257,266	$ 362,090
PERA OPEB:				
Anoka County (Irrevocable)			$ 59,599	$ 59,599
Carver County		$ 1,163	4,642	5,805
City of Eagan			15,071	15,071
City of Virginia			1,258	1,258
Crosby-Ironton ISD#182	$ 83	2	3,420	3,505
Duluth		14,494	38,115	52,609
Fillmore Central Schools #2198	347			347
Foley ISD#51		955	1,119	2,074
Hastings ISD#200	1,964			1,964
Kingsland ISD#2137			231	231
Mendota Hgts Eg WSP#197	111	7,616		7,727
Metro Mosquito Control District		305	2,700	3,005
Metropolitan Council	27	24,607	224,413	249,047
Mounds View ISD#621	6,169	6,707	9,951	22,827
Mt. Iron-Buhl District #712		2,021		2,021
Ogilvie ISD#333	282			282
Ramsey County	6,800	15,433	45,359	67,592
Roseville District#623		10,606		10,606
Scott County		10,468	5,669	16,137
Staples Motley #2170	27	500	247	774
Washington County		11,056	40,928	51,984
Yellow Medicine ISD#2190	701			701
	$ 16,511	$ 105,933	$ 452,722	$ 575,166
Total Pool Participation	$ 62,075	$ 1,112,422	$ 2,107,707	$ 3,282,204

Unaudited

External Stock and Bond Managers' Fees

Total Payments for Fiscal Year 2017

Domestic Equity Active Managers		
ArrowMark Colorado Holdings, LLC	$	809,246
Barrow, Hanley, Mewhinney & Strauss, LLC		946,713
Earnest Partners, LLC		650,594
Goldman Sachs Asset Management, L.P.		2,095,585
Hood River Capital Management, LLC		1,009,162
Hotchkis and Wiley Capital Management, LLC		2,263,358
INTECH Investment Management LLC		408,455
Jacobs Levy Equity Management, Inc.		197,636
LSV Asset Management		1,784,356
Martingale Asset Management, L.P.		1,673,597
McKinley Capital Management, LLC		1,518,868
Next Century Growth Investors LLC		-207,111
Peregrine Capital Management		2,071,250
Rice Hall James & Associates, LLC		858,550
Sands Capital Management, LLC		838,374
Systematic Financial Management, L.P.		51,758
Wellington Management Company LLP		887,231
Winslow Capital Management, LLC		726,031
Zevenbergen Capital Investments LLC		1,569,883
Domestic Equity Semi-Passive Managers		
BlackRock Institutional Trust Company, N.A.		1,512,063
INTECH Investment Management LLC		1,289,743
J.P. Morgan Investment Management Inc.		2,084,776
Mellon Capital Management Corp.		1,537,902
Domestic Equity Passive Manager		
BlackRock Institutional Trust Company, N.A. (Passive R3000)		723,214
BlackRock Institutional Trust Company, N.A. (Passive R1000)		279,036
Fixed Income Active Managers		
Aberdeen Asset Management, Inc.		636,982
Columbia Threadneedle Investments		1,136,280
Dodge & Cox		1,721,135
Pacific Investment Management Company LLC (PIMCO)		3,288,140
Western Asset Management Company		1,487,370
Fixed Income Semi-Passive Managers		
BlackRock Financial Management, Inc.		1,121,075
Goldman Sachs Asset Management		1,709,761
Neuberger Berman Investment Advisers LLC		722,059

External Stock and Bond Managers' Fees

Total Payments for Fiscal Year 2017

International Active Developed Markets Managers		
Acadian Asset Management LLC	$	1,654,692
Columbia Threadneedle Investments		1,175,877
Fidelity Institutional Asset Management LLC		1,713,765
J.P. Morgan Investment Management Inc.		1,210,980
Marathon Asset Management LLP		2,561,802
McKinley Capital Management, LLC		1,258,000
International Semi Passive Developed Markets Managers		
AQR Capital Management, LLC		1,659,754
Fidelity Institutional Asset Management LLC		1,010,745
State Street Global Advisors		634,463
International Passive Developed Markets Manager		
State Street Global Advisors		609,932
International Active Emerging Markets Managers		
Capital International, Inc.		1,384,675
Earnest Partners LLC		521,504
Macquarie Investment Management Advisers		460,873
Martin Currie Inc.		455,171
Morgan Stanley Investment Management Inc.		5,032,534
Neuberger Berman Investment Advisers LLC		629,577
Pzena Investment Management, LLC		620,318
The Rock Creek Group, LLC		745,506
International Passive Emerging Markets Manager		
State Street Global Advisors		404,943
Supplemental Fixed Interest Account		
Galliard Capital Management, Inc.		3,901,598
Assigned Risk Plan		
State Street Global Advisors		9,519
RBC Global Asset Management (U.S.) Inc.		251,664

Trading Data

Commissions and Trading Volume
By Broker for Fiscal Year 2017

	Stock $ Volume	Stock $ Commission	Bond $ Volume	Bond $ Commission	Short Term $ Volume
ABEL NOSER CORPORATION	$ 3,523,657	$ 255	$ -	$ -	$ -
ABG SECURITIES AS (STOCKHOLM)	$ 12,781,741	$ 18,183	$ -	$ -	$ -
ACADEMY SECURITIES INC	$ 3,717,768	$ 944	$ -	$ -	$ -
ALLEN & COMPANY LLC	$ 32,011,822	$ 9,769	$ -	$ -	$ -
AMBIT CAPITAL PRIVATE LIMITED	$ 3,836,991	$ 5,495	$ -	$ -	$ -
AMHERST PIERPONT SECURITIES LLC	$ -	$ -	$ 246,123,739	$ -	$ -
APEX CLEARING CORPORATION	$ -	$ -	$ 4,601,196	$ -	$ -
AQUA SECURITIES	$ 2,510,420	$ 2,726	$ -	$ -	$ -
ARQAAM CAPITAL SOUTH AFRICA (PTY)	$ 348,783	$ 694	$ -	$ -	$ -
AUERBACH GRAYSON AND CO. INC.	$ 792,039	$ 836	$ -	$ -	$ -
AUTONOMOUS RESEARCH US LP	$ 4,533,612	$ 1,692	$ -	$ -	$ -
AVONDALE PARTNERS LLC	$ 10,825,555	$ 11,963	$ -	$ -	$ -
AXIS CAPITAL LIMITED	$ 846,927	$ 1,699	$ -	$ -	$ -
B. RILEY & CO., LLC	$ 9,292,609	$ 16,655	$ -	$ -	$ -
BANCO BILBAO VIZCAYA ARGENTARI	$ -	$ -	$ 2,010,733	$ -	$ -
BANCO ITAU SA	$ 2,008,512	$ 4,008	$ -	$ -	$ -
BANCO PACTUAL S.A.	$ 6,741,363	$ 13,464	$ -	$ -	$ -
BANCO SANTANDER CENTRAL HISPANO	$ 9,059,338	$ 21,460	$ 4,276,680	$ -	$ -
BANK J.VONTOBEL UND CO. AG	$ 14,759,140	$ 22,127	$ -	$ -	$ -
BANK OF AMERICA SECURITIES	$ -	$ -	$ 3,377,915	$ -	$ 17,000,000
BANK OF MONTREAL	$ -	$ -	$ 318,503,899	$ -	$ 45,000,000
BANK OF NEW YORK	$ -	$ -	$ 77,952,901	$ -	$ 33,000,000
BANK OF NOVA SCOTIA	$ 6,496,846	$ 14,187	$ 14,942,578	$ -	$ 9,000,000
BARCLAYS	$ 746,493,504	$ 645,096	$ 4,549,836,863	$ -	$ 58,079,751,124
BARRINGTON RESEARCH ASSOCIATES	$ 2,092,909	$ 2,267	$ -	$ -	$ -
BATLIVALA+KARANI SECS INDIA PVT. LTD	$ 9,786,125	$ 9,329	$ -	$ -	$ -
BB&T SECURITIES, LLC	$ -	$ -	$ 20,924,101	$ -	$ -
BBVA SECURITIES INC	$ -	$ -	$ 1,975	$ -	$ -
BELL POTTER SECURITIES LIMITED	$ 335,476	$ 302	$ -	$ -	$ -
BELTONE SECURITIES BROKERAGE	$ 974,030	$ 2,671	$ -	$ -	$ -
BERENBERG	$ 4,910,689	$ 2,366	$ -	$ -	$ -
BETZOLD BERG & NUSSBAUM INC.	$ -	$ -	$ 23,942,960	$ -	$ -
BGC FINANCIAL, LP	$ -	$ -	$ -	$ -	$ 5,000,000
BLAYLOCK ROBERT VAN LLC	$ 267,998	$ 530	$ -	$ -	$ -
BLOOMBERG	$ 51,300,007	$ 38,198	$ -	$ -	$ -
BMO CAPITAL MARKETS	$ 244,337,586	$ 65,582	$ 185,441,721	$ -	$ 85,581,871
BNP PARIBAS	$ 90,099,618	$ 74,061	$ 690,401,500	$ -	$ 44,948,400,128
BNY CAPITAL MARKETS, INC.	$ -	$ -	$ 348,117	$ -	$ -
BNY CLEARING SERVICES LLC (BNY)	$ -	$ -	$ -	$ -	$ 5,740,605
BNY CONVERGEX LJR	$ 10,261,257	$ 14,798	$ -	$ -	$ -
BNY MELLON/NOMURA INT'L PLC REPO	$ -	$ -	$ 678,673	$ -	$ -
BNY/SUNTRUST CAPITAL MARKETS	$ -	$ -	$ 18,796,376	$ -	$ -
BNYM/PIERPONT SEC	$ -	$ -	$ -	$ -	$ 3,742,669
BNYMELLON/NATIXIS FIXED INCOME	$ -	$ -	$ 5,098,840	$ -	$ -
BONY MELLON/SOC GEN	$ -	$ -	$ 161,575,466	$ -	$ -
BONY/TORONTO DOMINION SECURITIES INC	$ -	$ -	$ 556,759,346	$ -	$ 50,181,486
BREAN CAPITAL LLC	$ 11,013,447	$ 19,919	$ -	$ -	$ -
BROADCORT CAPITAL CORP	$ 16,018,694	$ 6,097	$ -	$ -	$ -
BROWN BROTHERS HARRIMAN + CO	$ -	$ -	$ 10,297,179	$ -	$ -
BTG PACTUAL CASA DE BOLSA	$ 616,124	$ 1,544	$ -	$ -	$ -
BTIG, LLC	$ 27,255,879	$ 42,712	$ -	$ -	$ -
BUCKINGHAM RESEARCH GROUP INC	$ 3,542,443	$ 4,565	$ -	$ -	$ -
BURKE ANDQUICK PARTNERS LLC	$ 155,308	$ 239	$ -	$ -	$ -
CABRERA CAPITAL MARKETS LLC	$ 16,778,082	$ 27,709	$ -	$ -	$ -
CACEIS BANK DEUTSCHLAND GMBH	$ 420,245	$ 252	$ -	$ -	$ -
CALYON SECURITIES (USA) INC.	$ -	$ -	$ 7,274,454	$ -	$ -
CANACCORD GENUITY CORP.	$ 16,209,273	$ 18,182	$ -	$ -	$ -
CANADIAN IMPERIAL BANK OF COMMERCE	$ 4,663,005	$ 1,947	$ -	$ -	$ -
CANTOR CLEARING SERVICES	$ 6,926,997	$ 2,784	$ -	$ -	$ -

Commissions and Trading Volume
By Broker for Fiscal Year 2017

	Stock $ Volume	Stock $ Commission	Bond $ Volume	Bond $ Commission	Short Term $ Volume
CANTOR FITZGERALD + CO	$ 69,199,763	$ 37,604	$ 1,168,860,296	$ -	$ 162,479,549
CAPITAL INSTITUTIONAL SVCS INC EQUITIES	$ 517,653,830	$ 403,479	$ -	$ -	$ -
CARNEGIE A S	$ 9,299,194	$ 13,033	$ -	$ -	$ -
CHEEVERS & CO. INC.	$ 34,863,161	$ 46,541	$ -	$ -	$ -
CHINA INTERNATIONAL CAPITAL CO	$ 1,127,038	$ 1,601	$ -	$ -	$ -
CIBC WORLD MARKETS CORP	$ 37,038,499	$ 5,886	$ -	$ -	$ 12,000,000
CIMB SECURITIES	$ 6,324,515	$ 14,871	$ -	$ -	$ -
CITATION GROUP	$ 2,749,418	$ 872	$ -	$ -	$ -
CITIBANK	$ 12,029,910	$ 34,365	$ 121,672,033	$ -	$ -
CITIGROUP	$ 6,998,843,399	$ 1,320,235	$ 5,074,926,680	$ -	$ 57,547,784,810
CL SECURITIES TAIWAN COMPANY LIMITED	$ 97,400,929	$ 90,509	$ -	$ -	$ -
CLSA	$ 105,093,495	$ 70,801	$ -	$ -	$ -
COMMERZBANK AG	$ -	$ -	$ 2,013,443	$ -	$ -
COMPANHIA BRASILEIRA DE LIQUIDACAO E CUS	$ 69,578,167	$ 55,642	$ -	$ -	$ -
CONVERGEX	$ 747,586,267	$ 587,173	$ -	$ -	$ -
CORMARK SECURITIES INC	$ 103,195	$ 86	$ -	$ -	$ -
CORNERSTONE MACRO LLC	$ 13,664,599	$ 10,766	$ -	$ -	$ -
COWEN AND COMPANY, LLC	$ 260,099,666	$ 102,089	$ -	$ -	$ -
CRAIG - HALLUM	$ 37,166,854	$ 63,315	$ -	$ -	$ -
CREDIT AGRICOLE SECURITIES (USA) INC	$ -	$ -	$ 132,333,265	$ -	$ -
CREDIT LYONNAIS SECURITIES	$ 51,813,923	$ 81,972	$ -	$ -	$ -
CREDIT SUISSE	$ 1,599,241,736	$ 536,003	$ 6,680,928,675	$ 593	$ 33,575,979,048
CS FIRST BOSTON (HONG KONG) LIMITED	$ 58,332,700	$ 81,128	$ -	$ -	$ -
CSFB AUSTRALIA EQUITIES LTD	$ 8,335,187	$ 11,623	$ -	$ -	$ -
CSFB RESEARCH (MALAYSIA) SDN BHD	$ 400,636	$ 999	$ -	$ -	$ -
CUTTONE &CO.	$ 1,206,043	$ 454	$ -	$ -	$ -
DAEWOO SECURITIES CO LTD	$ 2,178,267	$ 4,348	$ -	$ -	$ -
DAIWA	$ 93,677,885	$ 61,888	$ 47,177,602	$ -	$ -
DANSKE BANK A.S.	$ 923,757	$ 554	$ -	$ -	$ -
DAVIDSON D.A. + COMPANY INC.	$ 23,753,733	$ 47,663	$ 2,414,183	$ -	$ -
DAVY STOCKBROKERS	$ 11,374,689	$ 11,329	$ -	$ -	$ -
DBTC AMERICA/PNC BANK, N.A.-SECS.CO	$ -	$ -	$ 3,051,797	$ -	$ -
DEUTSCHE BANK	$ 936,886,428	$ 332,345	$ 1,301,840,553	$ -	$ 48,189,774
DEUTSCHE EQ IN PRVT LIM DB	$ 2,883,272	$ 4,230	$ -	$ -	$ -
DEUTSCHE MORGAN GRENFELL INC.	$ 3,969,571	$ 6,256	$ -	$ -	$ 19,208,357,000
DEUTSCHE SECURITIES ASIA LIMITED	$ 45,431,951	$ 72,016	$ -	$ -	$ -
DHANKI SECURITIES PVT LTD.	$ 416,456	$ 836	$ -	$ -	$ -
DNB NOR MARKETS CUSTODY DNB NORBANK ASA	$ 1,877,874	$ 1,407	$ -	$ -	$ -
DOLAT CAPITAL MARKETS LTD	$ 3,474,009	$ 6,927	$ -	$ -	$ -
DOUGHERTY & COMPANY LLC	$ 33,842,444	$ 29,706	$ -	$ -	$ -
DREXEL HAMILTON LLC	$ 8,711,269	$ 1,948	$ -	$ -	$ -
DSP MERRILL LYNCH LTD	$ 5,421,290	$ 6,545	$ -	$ -	$ -
DUNCAN WILLIAMS INC	$ -	$ -	$ 5,107,688	$ -	$ -
EDELWEISS SECURITIES PVT. LTD	$ 1,458,860	$ 2,806	$ -	$ -	$ -
EXANE S.A.	$ 46,378,736	$ 55,483	$ -	$ -	$ -
FBR CAPITAL MARKETS & CO.	$ 10,101,692	$ 12,293	$ -	$ -	$ -
FEDERAL RESERVE BANK OF BOSTON	$ -	$ -	$ 32,545,654	$ -	$ -
FIDELITY	$ 189,864,932	$ 47,842	$ -	$ -	$ -
FINANCIAL BROKERAGE GROUP (FBG)	$ 4,427,909	$ 13,281	$ -	$ -	$ -
FIRST ANALYSIS SECURITIES CORP	$ 2,411,275	$ 3,137	$ -	$ -	$ -
FIRST ENERGY CAPITAL	$ 267,411	$ 440	$ -	$ -	$ -
FIRST TENNESSEE BANK	$ -	$ -	$ 18,005,500	$ -	$ -
FIS BROKERAGE & SECURITIES SERVICES LLC	$ 38,512,327	$ 6,845	$ -	$ -	$ -
FLOW CORRETORA DE MERCADORIAS LTDA.	$ 439,639	$ 877	$ -	$ -	$ -
FORTIS SECURITIES LLC	$ -	$ -	$ 343,978	$ -	$ -
FRANK RUSSELL SEC/BROADCORT CAP CLEARING	$ 2,432,426	$ 4,654	$ -	$ -	$ -
FTN FINANCIAL SECURITIES	$ -	$ -	$ 36,801,379	$ -	$ -
GK GOH OMETRACO PT	$ 51,927	$ 42	$ -	$ -	$ -
GMP SECURITIES LTD.	$ 302,666	$ 839	$ -	$ -	$ -

Trading Data

Commissions and Trading Volume
By Broker for Fiscal Year 2017

	Stock $ Volume	Stock $ Commission	Bond $ Volume	Bond $ Commission	Short Term $ Volume
GOLDMAN SACHS	$ 911,511,866	$ 577,063	$ 3,636,776,023	$ 532,702	$ 159,254,922
GOODBODY STOCKBROKERS	$ 963,583	$ 1,019	$ -	$ -	$ -
GORDON HASKETT CAPITAL CORP	$ 2,526,932	$ 7,204	$ -	$ -	$ -
GREEN STREET ADVISORS	$ 22,479	$ 33	$ -	$ -	$ -
GUGGENHEIM CAPITAL MARKETS LLC	$ 1,888,893	$ 4,982	$ 2,937,251	$ -	$ 8,694,567
GUZMAN AND COMPANY	$ 76,203,414	$ 32,472	$ -	$ -	$ -
HAUCK UNDAUFHAEUSER PRIVATBANKIERS KGAA	$ 782,567	$ 1,176	$ -	$ -	$ -
HIBERNIA SOUTHCOAST CAPITAL INC	$ 136,938	$ 164	$ -	$ -	$ -
HILLTOP SECURITIES INC	$ -	$ -	$ 33,395,516	$ -	$ -
HOARE GOVETT SUM SECS LTD SGNP	$ 208,916	$ -	$ -	$ -	$ -
HONGKONG AND SHANGHAI BANKING CORP	$ 29,551,014	$ 15,208	$ -	$ -	$ -
HSBC	$ 52,757,410	$ 90,493	$ 69,535,394	$ -	$ 40,135,356,000
ICAP DO BRASIL DTVM LTDA	$ 111,323	$ 111	$ -	$ -	$ -
ICBC FINCL SVCS, EQUITY CLEARANCE	$ 12,836,150	$ 4,164	$ -	$ -	$ -
ICBCFS LLC	$ -	$ -	$ -	$ -	$ 91,983,749
ICICI BROKERAGE SERVICES	$ 705,888	$ 1,416	$ -	$ -	$ -
IMPERIAL CAPITAL LLC	$ 1,170,729	$ 1,260	$ -	$ -	$ -
INDIA INFOLINE LTD	$ 31,568,177	$ 50,598	$ -	$ -	$ -
INDUSTRIAL AND COMMERCIAL BANK	$ 696,979	$ 1,238	$ -	$ -	$ -
ING BANK NV	$ -	$ -	$ 1,564,080	$ -	$ -
ING BARINGS CORP	$ -	$ -	$ 819,008	$ -	$ -
INSTINET	$ 989,753,136	$ 429,556	$ -	$ -	$ -
INTL FCSTONE FINANCIAL INC.	$ 14,109,357	$ 27,937	$ -	$ -	$ -
INVESTEC	$ 4,915,741	$ 4,967	$ -	$ -	$ -
INVESTMENT TECHNOLOGY GROUP INC.	$ 912,294,252	$ 322,604	$ -	$ -	$ -
IPS BROKERAGE INC	$ 33,108,062	$ 88,411	$ -	$ -	$ -
ISI GROUP INC	$ 47,452,703	$ 30,474	$ -	$ -	$ -
ITG	$ 894,487,927	$ 106,516	$ -	$ -	$ -
J.P. MORGAN	$ 1,038,935,317	$ 608,832	$ 7,068,473,117	$ -	$ 19,259,641,675
JANNEY MONTGOMERY, SCOTT INC	$ 3,094,503	$ 4,315	$ 1,621,642	$ -	$ -
JEFFERIES	$ 683,730,158	$ 241,980	$ 695,481,578	$ -	$ 47,386,375
JMP SECURITIES	$ 14,820,452	$ 19,764	$ -	$ -	$ -
JOH BERENBERG GOSSLER AND CO	$ 13,451,801	$ 15,878	$ -	$ -	$ -
JONESTRADING INSTITUTIONAL SERVICES LLC	$ 22,589,496	$ 23,152	$ -	$ -	$ -
KCG AMERICAS LLC	$ 481,212,919	$ 100,739	$ -	$ -	$ -
KEEFE BRUYETTE + WOODS INC	$ 30,624,171	$ 30,896	$ -	$ -	$ -
KEMPEN + CO N.V.	$ 164,228	$ 98	$ -	$ -	$ -
KEPLER	$ 11,826,465	$ 10,092	$ -	$ -	$ -
KEYBANC CAPITAL MARKETS INC	$ 60,479,370	$ 71,625	$ 8,516,026	$ -	$ -
KEYBANK NATIONAL ASSOCIATION	$ 192,064	$ 1,352	$ -	$ -	$ -
KGS ALPHA CAPITAL MARKETS, LLC	$ -	$ -	$ 9,030,036	$ -	$ -
KIM ENG SEC	$ 2,392,826	$ 5,970	$ -	$ -	$ -
KING, CL,& ASSOCIATES, INC	$ 24,868,526	$ 23,968	$ -	$ -	$ -
KNIGHT EQUITY MARKETS L.P.	$ 1,004,683,668	$ 385,456	$ -	$ -	$ -
KOREA INVESTMENT AND SECURITIES CO., LTD	$ 1,721,557	$ 3,432	$ -	$ -	$ -
KOTAK SECURITIES LTD	$ 4,188,305	$ 8,388	$ -	$ -	$ -
LADENBURG THALMAN + CO	$ 1,166,297	$ 1,359	$ -	$ -	$ -
LARRAIN VIAL	$ 8,528,109	$ 12,780	$ -	$ -	$ -
LEERINK PARTNERS LLC	$ 4,331,932	$ 3,625	$ -	$ -	$ -
LIQUIDNET	$ 766,976,244	$ 388,806	$ -	$ -	$ -
LONGBOW SECURITIES LLC	$ 12,150,448	$ 17,541	$ -	$ -	$ -
LOOP CAPITAL MARKETS INC	$ 56,637,776	$ 44,650	$ 902,729	$ -	$ 70,593,156
LUMINEX TRADING AND ANALYTICS LLC	$ 11,740,026	$ 667	$ -	$ -	$ -
MACQUARIE	$ 310,874,481	$ 303,123	$ -	$ -	$ -
MAINFIRST BANK DE	$ 589,719	$ 448	$ -	$ -	$ -
MARKETAXESS CORP	$ -	$ -	$ 515,243	$ -	$ -
MAXIM GROUP	$ 2,976,339	$ 2,208	$ -	$ -	$ -
MERRILL LYNCH	$ 2,653,106,582	$ 1,081,691	$ 9,529,710,852	$ -	$ 56,244,347,784
MESIROW FINANCIAL INC	$ -	$ -	$ 12,173,974	$ -	$ -

Trading Data

Commissions and Trading Volume
By Broker for Fiscal Year 2017

	Stock $ Volume	Stock $ Commission	Bond $ Volume	Bond $ Commission	Short Term $ Volume
MILLENNIUM ADVISORS LLC	$ -	$ -	$ 54,345	$ -	$ -
MIRAE ASSET DAEWOO CO., LTD.	$ 7,369,433	$ 17,182	$ -	$ -	$ -
MITSUBISHI	$ 16,122,088	$ 14,694	$ 145,386,714	$ -	$ -
MIZUHO	$ 42,064,378	$ 43,745	$ 161,792,356	$ -	$ 199,616,352
MKM PARTNERS LLC	$ 5,633,100	$ 5,755	$ -	$ -	$ -
MND PARTNERS	$ 2,657,737	$ 2,710	$ -	$ -	$ -
MORGAN STANLEY	$ 1,035,377,935	$ 431,478	$ 6,381,139,285	$ 330	$ 51,794,368
MOTILAL OSWAL SECURITIES LIMITED	$ 2,005,287	$ 4,007	$ -	$ -	$ -
NATIONAL FINANCIAL SERVICES CORP	$ 160,000,648	$ 25,290	$ 90,907,224	$ -	$ -
NATIXIS SECURITIES	$ 3,035,686	$ 2,267	$ -	$ -	$ -
NBC CLEARING SERVICES INCORPORATED	$ 1,726,855	$ 1,025	$ -	$ -	$ -
NEEDHAM AND COMPANY LLC	$ 19,505,353	$ 26,313	$ -	$ -	$ -
NESBITT BURNS	$ 14,421,015	$ 10,659	$ 17,203,286	$ -	$ -
NH INVESTMENT AND SECURITIES CO.,LTD.	$ 1,492,584	$ 2,990	$ -	$ -	$ -
NOBLE INTERNATIONAL INVESTMENTS INC.	$ 407,316	$ 1,063	$ -	$ -	$ -
NOMURA FINANCIAL ADVISORY	$ 28,363,193	$ 43,887	$ 2,044,914,962	$ -	$ 259,908,365
NORDEA BANK	$ 1,060,320	$ 729	$ -	$ -	$ -
NORTHERN TRUST COMPANY	$ -	$ -	$ 16,903,129	$ -	$ -
NORTHLAND SECURITIES INC.	$ 7,435,646	$ 8,920	$ -	$ -	$ -
NUMIS SECURITIES INC.	$ 2,179,242	$ 3,174	$ -	$ -	$ -
O NEIL, WILLIAM	$ 4,297,676	$ 8,760	$ -	$ -	$ -
ODDO ET CIE	$ 2,169,029	$ 1,301	$ -	$ -	$ -
OPPENHEIMER	$ 37,299,437	$ 58,082	$ 2,621,592	$ -	$ -
ORD MINNETT LIMITED	$ 96,903	$ 87	$ -	$ -	$ -
PAREL	$ 12,948,793	$ 18,673	$ -	$ -	$ -
PAVILION GLOBAL MARKETS LTD	$ 2,295,420	$ 933	$ -	$ -	$ -
PEEL HUNT LLP	$ 668,518	$ 420	$ -	$ -	$ -
PENSERRA SECURITIES	$ 132,585,912	$ 49,792	$ -	$ -	$ -
PERSHING	$ 116,189,628	$ 109,654	$ 1,565,355,135	$ 291,526	$ 1,141,666,763
PETERS AND CO LIMITED	$ 89,967	$ 308	$ -	$ -	$ -
PICKERING ENERGY PARTNERS, INC	$ 301,217	$ 165	$ -	$ -	$ -
PIERPONT SECURITIES LLC	$ -	$ -	$ 11,139,096	$ -	$ -
PIPER JAFFRAY & HOPWOOD	$ 109,643,661	$ 102,735	$ 25,497,497	$ -	$ -
PNC SECURITIES CORP	$ -	$ -	$ 5,797,170	$ -	$ -
R W PRESSPRICH + CO INC	$ -	$ -	$ 3,096,832	$ -	$ -
R.B.C. DOMINION SECURITIES CORPORATION	$ 1,497,905	$ 111	$ -	$ -	$ -
RAYMOND JAMES AND ASSOCIATES INC	$ 65,111,963	$ 70,449	$ 8,471,197	$ -	$ -
RBC CAPITAL MARKETS	$ 407,002,071	$ 109,436	$ 1,257,523,655	$ -	$ 22,500,000
RBC DOMINION SECURITIES INC.	$ 34,966,624	$ 24,197	$ -	$ -	$ -
RBS SECURITIES INC.	$ -	$ -	$ 66,820,536	$ -	$ -
REDBURN PARTNERS LLP	$ 7,287,505	$ 9,394	$ -	$ -	$ -
RELIGARE CAPITAL MARKETS LTD	$ 1,013,358	$ 1,970	$ -	$ -	$ -
RENAISSANCE CAPITAL LTD	$ 23,570,535	$ 108,549	$ -	$ -	$ -
RENCAP SECURITIES INC	$ 4,645,696	$ 7,633	$ -	$ -	$ -
ROBERT VAN SECURTIES	$ -	$ -	$ 3,319,048	$ -	$ -
ROBERT W. BAIRD CO.INCORPORATE	$ 116,658,421	$ 162,680	$ 125,881,173	$ -	$ -
ROSENBLATT SECURITIES LLC	$ 353,042,351	$ 140,592	$ -	$ -	$ -
ROTH CAPITAL PARTNERS LLC	$ 4,198,781	$ 9,908	$ -	$ -	$ -
ROYAL BANK OF CANADA EUROPE LTD	$ 2,499,966	$ 3,622	$ -	$ -	$ -
ROYAL BANK OF SCOTLAND PLC	$ -	$ -	$ -	$ -	$ 52,514,403,000
S.S KANTILAL ISHWARLAL SECURITIES	$ 1,426,659	$ 2,219	$ -	$ -	$ -
SAMSUNG SECURITIES CO LTD	$ 1,332,231	$ 1,389	$ -	$ -	$ -
SANDLER ONEILL + PART LP	$ 17,575,328	$ 13,294	$ -	$ -	$ -
SANFORD C BERNSTEIN CO LLC	$ 523,867,644	$ 199,572	$ -	$ -	$ -
SCOTIA CAPITAL	$ 16,682,029	$ 10,197	$ 103,923,141	$ -	$ -
SEAPORT GROUP SECURITIES, LLC	$ 1,984,740	$ 3,022	$ 50,375	$ -	$ -
SG AMERICAS SECURITIES LLC	$ 133,598,808	$ 316,049	$ 187,320,918	$ -	$ 9,335,198
SG SECURITIES HK	$ 4,302,368	$ 2,507	$ -	$ -	$ -
SIDOTI + COMPANY LLC	$ 16,387,493	$ 22,628	$ -	$ -	$ -

Commissions and Trading Volume
By Broker for Fiscal Year 2017

	Stock $ Volume	Stock $ Commission	Bond $ Volume	Bond $ Commission	Short Term $ Volume
SJ LEVINSON & SONS LLC	$ 122,315,037	$ 37,968	$ -	$ -	$ -
SKANDINAVISKA ENSKILDA BANKEN	$ 1,163,802	$ 746	$ -	$ -	$ -
SMBC NIKKO	$ 17,529,585	$ 11,128	$ 2,380,759	$ -	$ -
SOCIETE GENERALE LONDON BRANCH	$ 86,940,616	$ 64,870	$ -	$ -	$ -
STANDARD BANK LONDON LIMITED	$ 8,920,818	$ 17,866	$ -	$ -	$ -
STATE STREET	$ 5,794,227,573	$ 1,627,187	$ 20,602,135	$ -	$ 1,867,072,276
STEPHENS, INC.	$ 42,322,124	$ 50,980	$ 6,544,072	$ -	$ -
STIFEL NICOLAUS + CO INC	$ 161,118,929	$ 163,002	$ 53,051,601	$ -	$ -
STRATEGAS SECURITIES LLC	$ 5,914,930	$ 2,457	$ -	$ -	$ -
STUART FRANKEL	$ 3,440,096	$ 1,290	$ -	$ -	$ -
SUMRIDGE PARTNERS LLC	$ -	$ -	$ 585,921	$ -	$ -
SUNTRUST CAPITAL MARKETS, INC.	$ 35,773,968	$ 43,661	$ -	$ -	$ -
SUNTRUST ROBINSON HUMPHREY, INC.	$ -	$ -	$ 25,878,545	$ -	$ -
SVENSKA HANDELSBANKEN	$ 601,596	$ 754	$ -	$ -	$ -
TD WATERHOUSE INVESTOR SERVICES INC	$ 1,376,393	$ 331	$ -	$ -	$ -
TELSEY ADVISORY GROUP LLC	$ 3,007,707	$ 4,055	$ -	$ -	$ -
THE BANK OF NOVA SCOTIA, NEW YORK AGENCY	$ -	$ -	$ 44,049,490	$ -	$ -
THE BANK OF NY/DBAG LONDON GLOBAL	$ -	$ -	$ 2,400,490	$ -	$ -
THE HONGKONG AND SHANGHAI BANK	$ 5,581,010	$ 11,210	$ -	$ -	$ -
TOKYO MITSUBISHI INTERNATIONAL	$ 310,001	$ 155	$ -	$ -	$ -
TORONTO DOMINION BANK	$ 9,970,939	$ 4,265	$ -	$ -	$ -
UBS	$ 3,017,171,083	$ 1,139,295	$ 298,707,262	$ -	$ 299,989,389
UNION TRUST CO. OF MARYLAND	$ -	$ -	$ -	$ -	$ 11,000,000
US BANCORP INVESTMENTS INC	$ -	$ -	$ 86,093,652	$ -	$ 5,008,350
VANDHAM SECURITIES CORP	$ 419,045	$ 371	$ -	$ -	$ -
WALL STREET ACCESS	$ 2,216,386	$ 455	$ -	$ -	$ -
WEDBUSH MORGAN SECURITIES INC	$ 11,101,815	$ 17,919	$ -	$ -	$ -
WEEDEN + CO.	$ 378,656,473	$ 132,225	$ -	$ -	$ -
WELLS FARGO BANK	$ 257,546,861	$ 71,151	$ 1,880,407,410	$ -	$ 443,667,414
WESTERN INTERNATIONAL SECURITIES	$ 21,845,871	$ 68,667	$ -	$ -	$ -
WILLIAM BLAIR	$ 60,160,663	$ 70,278	$ 13,318	$ -	$ -
WILLIAMS CAP	$ 3,579,822	$ 2,815	$ -	$ -	$ -
WOLFE TRAHAN SECURITIES	$ 727,427	$ 392	$ -	$ -	$ -
WOOD AND COMPANY	$ 4,164,152	$ 9,041	$ -	$ -	$ -
WUNDERLICH SECURITIES INC	$ 2,073,190	$ 2,184	$ -	$ -	$ -
YAMNER & CO INC (CLS THRU 443)	$ 4,319,864	$ 1,079	$ -	$ -	$ -
GRAND TOTAL	$ 38,419,583,090	$ 16,420,805	$ 57,248,475,727	$ 825,150	$ 386,680,407,766

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