

Minnesota State Board of Investment



Volunteer Firefighter Account

Investment Information

July 1, 2016



Volunteer Firefighter Account

State Board of Investment

Members

The State Board of Investment (SBI), in conjunction with SBI staff and the Investment Advisory Council (IAC), 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's membership is specified in the Minnesota Constitution and is composed of the officers listed below. The Board's duties, powers, and investment authority are contained in *Minnesota Statutes*, Chapter 11A.

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

Investment Advisory Council

The Legislature has established an Investment Advisory Council to advise the Board and its staff on investment related matters. The Board appoints ten members experienced in finance and investments. 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.

Jeffery Bailey, Chair	Sr. Director, Financial Benefits & Analysis	Target Corporation
Malcolm W. McDonald, Vice Chair	Director & Corporate Secretary, Retired	Space Center, Inc.
Denise Anderson	Governor's Appointee	Active Employee Representative
Doug Anderson	Executive Director	Public Employees Retirement Association
David Bergstrom	Executive Director	Minnesota State Retirement System
Kerry Brick	Manager, Pension Investments	Cargill, Inc.
Dennis Duerst	Director, Benefit Funds Investment	3M Company
Kim Faust	Vice President and Treasurer	Fairview Health Services
Myron Frans	Commissioner	Minnesota Management & Budget
Laurie Fiori Hacking	Executive Director	Teachers Retirement Association
Susanna Gibbons	Director, Carlson Fixed Income Fund	Carlson School of Management
Morris Goodwin, Jr.	Sr. Vice President and CFO	American Public Media Group
Peggy Ingison	Governor's Appointee	Active Employee Representative
Gary Martin	Chief Investment Officer	Macalester College
Carol Peterfeso	Chief Treasury and Investment Officer	University of St. Thomas
Elaine Voss	Governor's Appointee	Retired Employee Representative
Shawn Wischmeier	Chief Investment Officer	Margaret A. Cargill Philanthropies

Staff

To carry out its mission, SBI retains an executive director, an internal investment staff and external investment managers to execute its policies. Staff is responsible to execute board decisions, recommend strategic planning alternatives to the IAC and Board, monitor and evaluate investment performance to ensure long-term investment objectives are met, and provide investment management for the state agency cash and non-retirement fund accounts.

Mansco Perry III, *Executive Director and Chief Investment Officer*

Charlene Olson, *Executive Assistant*

Senior Leadership Team

LeaAnn M. Stagg, *Asst. Exec Director & Chief Operating Officer*

Paul T. Anderson, *Director, Investment Administration*

Andrew Krech, *Director, Private Markets*

Michael J. Menssen, *Director, Debt Management*

John Mulé, *Manager, Legal and Legislative Policy*

Investment Staff

Patricia Ammann, *Investment Officer, Private Markets*

Nathan Blumenshine, *Investment Analyst, Private Markets*

Cassandra Boll, *Investment Officer, Private Markets*

Tammy Brusehaver, *Investment Officer, Public Equity*

Stephanie Gleeson, *Investment Officer, Public Equity*

Inma Conde Goldman, *Investment Officer, Public Equity*

Investment Staff (continued)

Aaron D. Griga, *Investment Officer, Fixed Income*

Steven P. Kuettel, *Investment Officer, Cash Management*

Jonathan Stacy, *Investment Officer, Private Markets*

Administrative Staff

Shirley Baribeau, *Project Team Leader*

Julie Grill, *Accounting Officer, Intermediate*

Kailee Kemp, *Account Clerk, Senior*

Kathy Leisz, *Information Technology Specialist 2*

Melissa Mader, *Office Admin. Specialist, Intermediate*

Wendy Murphy, *Accounting Officer, Senior*

William J. Nicol, *Accounting Director*

Kelly Nordstrom, *Office Administrative Specialist*

Iryna Shafir, *Accounting Officer, Senior*

Volunteer Firefighter Account

Chief Investment Officer's Letter

July 1, 2016

I am pleased to present this investment brochure which provides information on the assets, performance, and general descriptions of each of the asset groups that make up the Volunteer Firefighter Account managed by the State Board of Investment (SBI). To be invested in the Volunteer Firefighter Account your local fire relief association must join the Statewide Volunteer Firefighter Retirement Plan (SVFRP) which is administered by the Minnesota Public Employees Retirement Plan (PERA).

Assets in the SVFRP totaled over \$54 million and represents the assets of 111 local fire relief associations. This amount is a 68% increase from the previous year of \$32 million in assets. Performance in the SVFRP underperformed its custom benchmark for one year and outperformed for three and five year time periods ending June 30, 2016. The custom benchmark represents the performance for each benchmark weighted by the targeted allocation.

The SVFRP uses a balanced asset mix investment approach to provide long-term returns by investing in a diversified mix of domestic stocks, international stocks, fixed income, and money market securities. **Remember that general economic and market conditions have a dominant influence on the returns available to any investor. There may be periods in which the returns for the SVFRP may be low or even negative.**

The U.S. equity and bond markets posted positive performance while the international equity markets were negative for the fiscal year ending June 30, 2016. The Russell 3000 Index, a proxy for the U.S. equity markets, returned 2.1% and the U.S. bond market, as measured by the Barclays Capital U.S. Aggregate Bond Index, returned 6.0%. International equity markets, as represented by MSCI ACWI ex USA Index (net), lagged domestic markets with a -10.2% return for the year.

At the end of June 30, 2016, the U.S. economy (real GDP) grew at an annualized rate of 1.2% and the U.S. labor markets reached its lowest unemployment rate since August 2007 of 4.7%. At its meeting in June 2016, the U.S. Federal Reserve decided to maintain the target range for the federal funds rate at 0.25% to 0.5%. Fed Chairwoman Janet Yellen stated that slower employment gains, low productivity growth and inflation running below the Fed's 2% annual target were reasons for caution going forward. Ongoing volatility in energy prices continued during the year as crude oil touched a low of \$26 in February and ended the year just above \$48. On June 23, 2016, the United Kingdom voted in favor of exiting the European Union, also referred to as Brexit, which sent the global equity markets plunging. The immediate aftermath left the British Pound falling at levels not seen since the mid-1980's and global government bond yields at records lows, including the 10-year U.S. Treasury which touched a four-year low of 1.4%.

On behalf of the Board Members, members of the Investment Advisory Council and the SBI staff, I would like to express our gratitude to you for your continued support and participation in the Volunteer Firefighter Account presented in this brochure. The Minnesota State Board of Investment seeks to enhance the management and performance of the assets under its control. If you have any questions regarding the Board's investment policies and procedures, please contact the Minnesota State Board of Investment at 60 Empire Drive, Suite 355, St. Paul, MN 55103-3555, (651) 296-3328, or via e-mail at minn.sbi@state.mn.us. We welcome your inquiries.

Respectfully submitted,



Mansco Perry III
Executive Director and Chief Investment Officer
State Board of Investment

Volunteer Firefighter Account

General Information

What Is The Minnesota Supplemental Investment Fund?

The Minnesota Supplemental Investment Fund (SIF) is a multi-purpose investment program that offers a range of investment options to state and other public employee groups. Participants, who are not in the Volunteer Firefighter Account, may allocate their investments among one or more funds that are appropriate for their needs and are within the rules and eligibility established by the participating plans. When a local fire relief joins the Statewide Volunteer Firefighter Retirement Plan (SVFRP), the assets are transferred into the Volunteer Firefighter Account which is composed of SIF options.

What Options Are Available To the Statewide Volunteer Firefighter Retirement Plan?

The Volunteer Firefighter Account is the only investment option available to local firefighter entities participating in the SVFRP. By state law, the Volunteer Firefighter Account is established for the sole purpose of investing the assets of local firefighter entities participating in the SVFRP.

What SIF funds Are In The Volunteer Firefighter Account?

The Volunteer Firefighter Account invests in both active and passively managed portfolios. As of June 30, 2016, the Volunteer Firefighter Account had over \$54 million in assets invested in four SIF Investment options.

Funds In Account ¹	Asset Group	Assets as of 6/30/2016
U.S. Stock Index Fund	Domestic Stocks	\$19,093,777
Broad International Stock Fund	International Stocks	\$7,843,223
Bond Fund	Fixed Income	\$24,900,434
Money Market Fund	Cash	\$2,431,914
Volunteer Firefighter Account		\$54,269,347

¹ All investment options are managed by external investment firms identified below.

What Securities Are Owned By The Fund?

Due to the large number of stocks, bonds and cash equivalents in the Account, the holdings are not listed in this brochure. If you would like a complete list of all securities in the Account, please contact the office of the State Board of Investment. A list will be sent to you, at your request, or you can access the list on our website at www.sbi.state.mn.us.

Which is Responsible For Managing The Assets?

The Minnesota State Board of Investment is responsible for managing the assets of the Volunteer Firefighter Account and determines the investments to be made available to plan participants.

What Is The Board's Relationship To PERA?

In broad terms, the Board acts as an investment manager for PERA while PERA provides a variety of administrative functions with respect to your Plan.

External Portfolio Management

The SBI hires external investment managers to invest the assets for the respective investment options listed below.

U.S. Stock Index Fund

BlackRock Institutional Trust Company, N.A., San Francisco, CA

Broad International Stock Fund

AQR Capital Management, LLC, Greenwich, CT
Acadian Asset Management LLC, Boston, MA
Capital International, Inc., Los Angeles, CA
Columbia Threadneedle Investments, Minneapolis, MN
Fidelity Institutional Asset Management LLC, Boston, MA
J.P. Morgan Investment Management Inc., London, England
Marathon Asset Management LLP, London, England
McKinley Capital Management, LLC, Anchorage, AK
Morgan Stanley Investment Management Inc., New York, NY
State Street Global Advisors, Boston, MA

Bond Fund

Aberdeen Asset Management Inc., Philadelphia, PA
BlackRock Financial Management, Inc., New York, NY
Columbia Threadneedle Investments, Minneapolis, MN
Dodge & Cox, San Francisco, CA
Goldman Sachs Asset Management, New York, NY
Neuberger Berman Fixed Income LLC, Chicago, IL
Pacific Investment Mgmt. Co. LLC, (PIMCO), Newport Beach, CA
Western Asset Management Company, Pasadena, CA

Money Market Fund

State Street Global Advisors, Boston, MA

Volunteer Firefighter Account

Summary

The Volunteer Firefighter Account provides a balanced investment program. The objectives of the Account are to provide high returns from capital appreciation and current yield while reducing the chance for large temporary decreases in value. To achieve these objectives, the Account is invested in a mix of domestic equities, international equities, bonds and cash. As of June 30, 2016, the market value of the Account was over \$54 million.

What Investment Funds And Allocations Are In The Account?

The account uses four of the underlying SIF investment options. The SIF funds are listed below with the respective asset allocation targets for each fund:

U.S. Stock Index Fund	35%
Broad International Stock Fund	15%
Bond Fund	45%
Money Market Fund	5%
Total Volunteer Firefighter Account	100%

The **domestic stock segment** is passively managed with the objective to generate high returns that closely approximate the returns of the U.S. stock market as a whole. The fund invests in over 2,700 domestic stocks and is designed to replicate the returns produced by the Russell 3000.

The **international stock segment** is managed in a variety of styles: active, semi-passive and passive management. The objective of the fund is to earn a high rate of return by investing in stocks outside of the U.S. The Fund's benchmark is the MSCI ACWI ex USA Index (net). The majority of the fund is invested in large, developed international markets such as Japan, the United Kingdom, Canada, France, Germany and Australia, with a portion invested in developing countries, or emerging markets, which include Asia, Latin America, Eastern Europe, the Middle East and Africa.

The **fixed income segment** is actively managed and seeks to earn returns over the Barclay's Aggregate Bond Index. The fund invests in high quality corporate bonds, mortgage securities and U.S. Government issues.

The **cash segment** is invested in a short term fund of high-quality money market instruments. The fund's performance is measured against the 90-Day Treasury Bill.

How Will This Account Perform Over Time?

The Volunteer Firefighter Account is a balanced or diversified investment program in one account. As with any investment program that includes stocks and bonds, the Account will provide returns that vary with changes in the market. Market value growth and dividend income from the domestic and international stock holdings can provide higher returns than bonds and cash investments. The international stock holdings add a measure of diversification to the

domestic stock holdings as various international markets can perform differently. While returns on bonds are often lower than returns on stocks, the bond returns tend to be more stable and can provide some protection against wide swings in stock market returns.

Who Manages The Account?

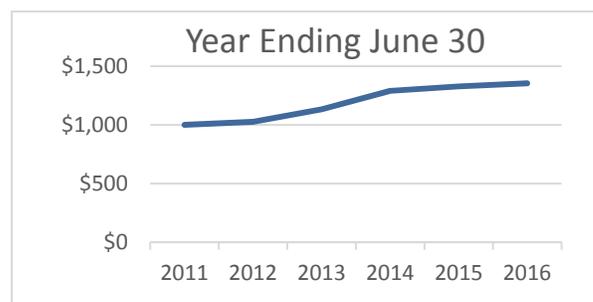
See page 3 for a listing of the investment managers.

How Is The Value Of This Account Determined?

Participating entities own shares in the account, much like you would in a mutual fund. The share value is determined daily and is based on the market value of the entire account. Any dividend or interest income is reinvested in the account at the time it is earned. Investment returns reflect all realized and unrealized gains and losses generated by the account.

What Is The Past Investment Performance Of This Account?

The graph below shows how \$1,000 would have grown over the past five years had it been invested in the Volunteer Firefighter Account.



The table below displays the fund's actual share values and returns for the last five years. The annualized (annual compounded) return during this five year period was 6.2%.

	Fiscal Year Ending June 30	
	Share Value	Rate of Return
2012	\$11.96	2.6%
2013	13.17	10.4
2014	15.01	13.9
2015	15.45	3.0
2016	15.75	1.9

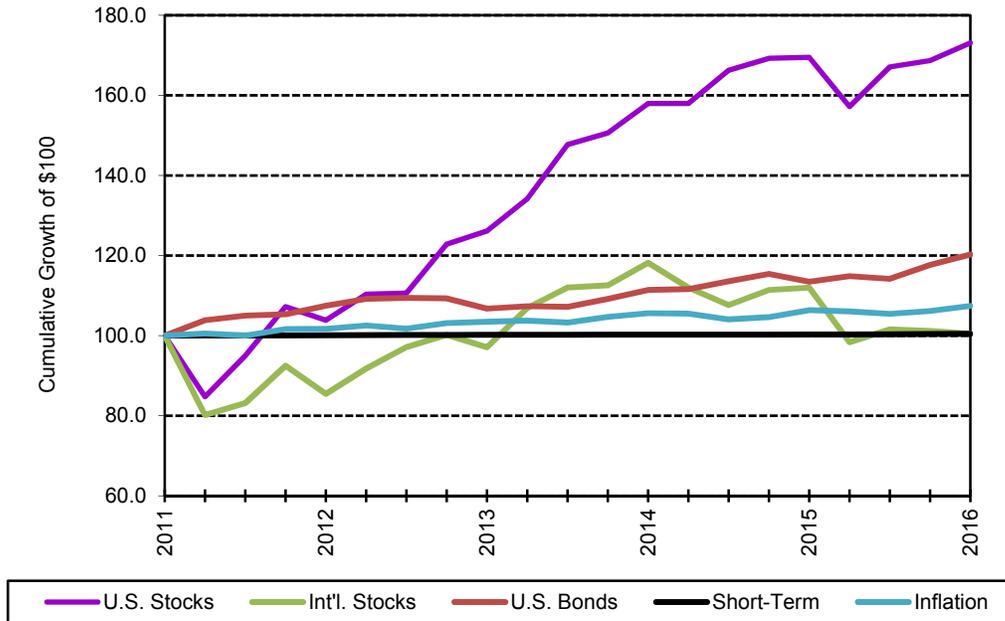
Fees and Expenses

The rate of return for this account is calculated after operating expenses are deducted. Operating expenses include both investment management and administrative fees. For the 12 month period ending March 31, 2016, the annual fund operating expense was 0.09% or approximately \$0.93 per \$1,000 invested.

Volunteer Firefighter Account

Capital Markets Cumulative Growth and Performance

Cumulative Growth of \$100
Last Five Fiscal Years ending June 30



Performance of Capital Markets
Last Five Fiscal Years Ending June 30

	Fiscal Year Ending					Annualized Returns Ending June 30, 2016	
	2016	2015	2014	2013	2012	3 Yrs	5 Yrs
U.S. Stocks							
Russell 3000 Index	2.1%	7.3%	25.2%	21.5%	3.8%	11.1%	11.6%
U.S. Bonds							
Barclays Aggregate Index	6.0%	1.9%	4.4%	-0.7%	7.5%	4.1%	3.8%
International Stocks							
MSCI ACWI ex USA	-10.2%	-5.3%	21.8%	13.6%	-14.6%	1.2%	0.1%
Short-Term Investments							
90-Day Treasury Bill	0.2%	0.0%	0.1%	0.1%	0.0%	0.1%	0.1%
Inflation Rate							
Consumer Price Index-Urban	1.0%	0.1%	2.1%	1.8%	1.7%	1.1%	1.3%

Fiscal Year 2016 in Review

Commentary and Relative Performance

How Have Stocks, Bonds And Other Investments Performed?

The U.S. stock market, as measured by the Russell 3000 index, increased 2.1% for the year ending June 30, 2016. Within the Russell 3000, large capitalization companies outperformed small capitalization companies. The Utilities sector was the best performing sector in the Russell 3000 with a 28.4% return, while the Energy sector was the worst performing sector with a -8.1% return.

The U.S. bond market, as measured by the Barclays Capital U.S. Aggregate Bond Index, returned 6.0% for the fiscal year. Within the bond market, Corporates were the highest performers with a 7.9% return for the year. Commercial Mortgage Backed Securities (CMBS) and U.S. Treasuries each returned 6.2%, Agency Mortgage-Backed Securities (AMBS) had a 4.3% return, Agency bonds a 3.1% return and Asset-Backed Securities (ABS) returned 2.7% for the year.

International equity markets returned -10.2% for the year in U.S. dollar terms, as measured by the Morgan Stanley Capital International All Country World Index excluding the United States net of taxes on dividends (MSCI ACWI ex USA Index net), which represents the developed and emerging international markets outside the U.S. The MSCI World ex USA Index (net), which represents developed international markets had a return of -9.8% for the year. Japan, the United Kingdom, and Canada, which together comprise over 48% of the index returned of -8.9%, -12.1% and -6.3%, respectively. The emerging markets, as measured by the MSCI Emerging Markets Index (net), returned -12.1% for the year in U.S. dollar terms. China, Korea and Taiwan were the largest countries in the index at the end of the fiscal year with a combined weight of 53%. They returned -23.4%, -3.5% and -8.8%, respectively.

How Did The Total Volunteer Firefighter Account Compare For Fiscal Year 2016?

The Voluntary Statewide **Volunteer Firefighter Account** provided a return of 1.9% for the fiscal year, underperforming the composite index by 0.2%. The composite Index, is comprised of approximately 35% U.S. common equities, 15% international equities, 45% bonds, and 5% cash. The actual performance of the account may be impacted by the size and timing of cash flows.

Performance Ending 6/30/16	1 Yr
Volunteer Firefighter Account	1.9%
Composite Index	2.1%

How Did Each Asset Group Within The Volunteer Firefighter Account Perform For Fiscal Year 2016?

The **U.S. Stock Index Fund** was up 2.2% during the year, which outperformed its benchmark, the Russell 3000.

Performance Ending 6/30/16	1 Yr
U.S. Stock Index Fund	2.2%
Russell 3000	2.1%

The **Broad International Stock Fund** provided a return of -9.7% for the fiscal year, outperforming the international composite index by 0.5%. The composite index, is comprised of approximately 77% developed markets and 23% emerging markets. Overall, the developed markets managers and the emerging markets managers outperformed their respective indices.

Performance Ending 6/30/16	1 Yr
Broad International Stock Fund	-9.7%
MSCI ACWI ex USA Index	-10.2%

The **Bond Fund** posted a return of 5.9% for the fiscal year slightly underperforming its benchmark, the Barclays Capital U.S. Aggregate Bond Index.

Performance Ending 6/30/16	1 Yr
Bond Fund	5.9%
Barclays Capital U.S. Aggregate	6.0%

The **Money Market Fund** earned 0.4% for the fiscal year outperforming its benchmark. This gain is similar to the returns for money market accounts offered by mutual funds and banks.

Performance Ending 6/30/16	1 Yr
Money Market Fund	0.4%
3 Month U.S. T-Bill	0.2%

The Minnesota Supplemental Investment Fund
is managed by the Minnesota State Board of Investment



Board Members:

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

Executive Director and Chief Investment Officer:

Mansco Perry III