Minnesota State Board of Investment Volunteer Firefighter Account As of December 31, 2023

HIGHLIGHTS

Objective

The Fund seeks to earn returns from both capital appreciation and income in the form of dividends from stocks and interest from bonds. The portfolio uses a mix of stocks and bonds to maximize the long-term growth of capital, while limiting short-run portfolio return volatility.

Strategy (Benchmark)

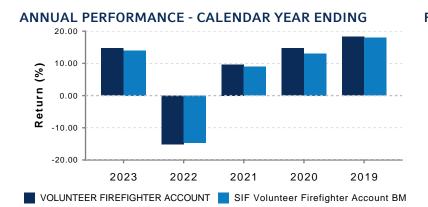
The target allocation is 35% U.S. Equity Index Fund (Russell 3000 Index), 15% Broad International Equity Fund (MSCI ACWI ex U.S. Index (net)), 45% Bond Fund (Bloomberg U.S. Aggregate Bond Index), and 5% Money Market Fund (ICE BofA 3-Month T-Bill Index).

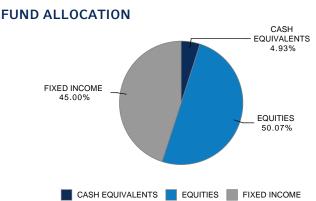
Renchmark

Fund's custom benchmark is an aggregate return of the respective asset group benchmark performance weighted to the target allocation.

Total Fund Expense

The Total Fund Expense Ratio of 0.098 % includes the Investment Management Fee of 0.09% that is deducted out of the investment manager portfolio, and the Administrative Fee of 0.008% that is deducted out of the Fire Relief portfolio.





ANNUALIZED PERFORMANCE AS OF 12/31/23

	VOLUNTEER FIREFIGHTER ACCOUNT	SIF Volunteer Firefighter Account BM	Excess
QTR	8.94	8.83	0.10
YTD	14.68	13.99	0.69
1 Year	14.68	13.99	0.69
3 Year	2.17	1.97	0.20
5 Year	7.66	7.18	0.48
10 Year	6.03	5.68	0.35

U.S. EQUITY SECTOR ALLOCATION (% of Net Assets)

	Dec-23	
	Fund	Benchmark
BASIC MATERIALS	2.57	2.56
FINANCIALS	14.06	14.06
HEALTH CARE	15.52	15.53
INDUSTRIALS	16.94	16.92
OIL & GAS	5.27	5.29
TECHNOLOGY	39.62	39.64
TELECOMMUNICATIONS	2.73	2.73
UTILITIES	3.28	3.27

FIXED INCOME SECTOR ALLOCATION (% of Net Assets)

	Dec-23	
	Fund	Benchmark
MORTGAGE PASS-THROUGH	30.11	
CORPORATE	29.43	
US TREASURY	12.01	
СМО	9.69	
ASSET BACKED	8.58	
YANKEE	6.78	
AGENCY	1.76	
MUNICIPAL	0.72	
FOREIGN	0.69	
SWAPS	0.17	

INTERNATIONAL EQUITY SECTOR ALLOCATION (% of Net Assets)

	Dec-23	
	Fund	Benchmark
BASIC MATERIALS	7.64	8.76
CONSUMER GOODS	0.00	
CONSUMER SERVICES	0.00	
FINANCIALS	32.24	27.10
FUTURES	-0.00	
HEALTH CARE	11.46	12.14
INDUSTRIALS	18.05	18.09
OIL & GAS	7.21	7.79
TECHNOLOGY	15.13	16.38
TELECOMMUNICATIONS	4.90	5.63

Minnesota State Board of Investment

GLOSSARY - Risk Definitions

Alpha

Alpha, also known as excess return, is the portfolio's return less the benchmark return. If a portfolio's rate of return is higher than the benchmark return, the portfolio is considered to have a "positive alpha".

Reta

Beta measures a fund's sensitivity to market movements. A fund with a beta of 1, indicates that the fund's price has moved with the market. A beta greater than (less than) 1, indicates the fund's price will be more (less) volatile relative to the market.

Information Ratio

The information ratio (IR) is a measure of the portfolio's risk adjusted return. This ratio considers the portfolios return to its benchmark return. The higher the information ratio, the higher the positive alpha the portfolio has generated given a certain amount of risk. The information ratio is determined by taking the portfolio's excess return over the standard deviation of the excess return.

Standard Deviation

Standard deviation is a measure of the portfolio's volatility in rate of return. A volatile portfolio will have a high standard deviation, while a more stable portfolio will have a lower standard deviation.

Tracking Error

Tracking error, also known as active risk, is a measure of how closely the portfolio performs to its benchmark. It is determined by taking the standard deviation of the excess return.