

Core Investment Option Performance October 31, 2022

Questions? Call 1-800-657-5757, ext 3 or visit www.msrs.state.mn.us

∠π≺ ∕ε∟²	INVESTMENT OPTIONS	AVERAGE ANNUAL TOTAL RETURNS AS OF OCTOBER 31, 2022 ¹							CALENDAR YEAR RETURNS					FEES	
VOLATILITY RISK LEVEL ²		YTD	1 Year	3 Years	5 Years	10 Years	Since Incept	Incept Date	2021	2020	2019	2018	2017	Gross Fund Exp ³	Admin Fee⁴
	US Small Cap Equity														
	T. Rowe Price Small Cap Stock Fund⁵	-20.12%	-21.19%	7.18%	9.09%	12.15%	9.93%	03-31-00	16.77%	25.00%	33.96%	-3.07%	15.45%	0.66%	0.10%
	Russell 2000 Benchmark Index ⁶	-16.86%	-18.54%	7.05%	5.56%	9.93%			14.82%	19.96%	25.52%	-11.01%	14.65%		
HIGH	International Equity												·		
	Fidelity Diversified International Com Pool⁵	-29.49%	-28.87%	0.46%	1.38%	NA ⁷	3.03%	12-13-13	13.09%	19.79%	29.75%	-15.18%	26.72%	0.58%	0.10%
	MSCI EAFE Benchmark Index ⁶	-23.03%	-22.84%	-1.08%	0.11%	4.32%			11.48%	8.02%	22.29%	-15.24%	26.65%		
	Vanguard Total International Stock Index Fund⁵	-24.24%	-24.63%	-1.14%	-0.38%	3.64%	3.32%	11-30-10	8.68%	11.30%	21.56%	-14.38%	27.57%	0.07%	0.10%
	International Spliced Benchmark Index ⁶	-24.34%	-24.65%	-1.14%	-0.30%	3.67%			8.84%	11.24%	21.80%	-14.61%	27.41%		
 世 ㅜ	US Mid Cap Equity														
Moderate To High	Vanguard Mid Cap Index Fund⁵	-19.06%	-18.02%	8.02%	8.11%	11.51%	10.64%	12-15-10	24.53%	18.27%	31.06%	-9.21%	19.28%	0.03%	0.10%
	Mid Cap Spliced Benchmark Index ⁶	-19.07%	-18.03%	8.00%	8.11%	11.52%			24.52%	18.24%	31.09%	-9.22%	19.30%		
2	US Large Cap Equity														
	Vanguard Total Stock Market Index Fund⁵	-18.74%	-16.88%	9.70%	9.81%	NA ⁷	9.86%	4-28-15	25.74%	21.02%	30.82%	-5.15%	21.19%	0.02%	0.10%
	CRSP U.S. Total Stock Market Benchmark Index ⁶	-18.73%	-16.88%	9.69%	9.81%	12.43%			25.72%	20.99%	30.84%	-5.17%	21.19%		
ш	Vanguard Institutional Index Fund⁵	-17.72%	-14.63%	10.21%	10.43%	12.78%	7.90%	07-07-97	28.69%	18.41%	31.48%	-4.41%	21.82%	0.02%	0.10%
MODERATE	S&P 500 Benchmark Index ⁶	-17.70%	-14.61%	10.22%	10.44%	12.79%			28.71%	18.40%	31.49%	-4.38%	21.83%		
	Vanguard Dividend Growth Fund	-7.57%	-2.93%	10.79%	12.28%	12.72%	9.02%	05-15-92	24.84%	12.06%	30.95%	0.18%	19.33%	0.27%	0.10%
2	US Dividend Spliced Benchmark Index ⁶	-12.18%	-7.77%	9.58%	11.09%	12.00%			23.71%	15.62%	29.75%	-1.98%	22.29%		
	Balanced				1	1						1	1		
	Vanguard Balanced Index Fund⁵	-17.37%	-16.22%	4.52%	5.93%	7.85%	6.25%	12-01-00	14.20%	16.41%	21.79%	-2.82%	13.86%	0.06%	0.10%
	Balanced Composite Benchmark Index ⁶	-17.05%	-15.84%	4.96%	6.22%	8.06%			14.28%	17.34%	21.87%	-2.80%	13.93%		
LOW TO MODERATE	Bond														
	Dodge & Cox Income Fund⁵	-14.12%	-14.24%	-2.20%	0.44%	1.72%	5.86%	01-03-89	-0.91%	9.45%	9.73%	-0.33%	4.36%	0.42%	0.10%
	Vanguard Total Bond Market Index Fund⁵	-15.74%	-15.79%	-3.77%	-0.53%	0.72%	1.85%	09-18-95	-1.65%	7.74%	8.74%	-0.01%	3.58%	0.03%	0.10%
	Barclays Capital Aggregate Bond Benchmark Index ⁶	-15.72%	-15.68%	-3.77%	-0.54%	0.74%			-1.54 %	7.51%	8.72%	0.01%	3.54%		
NON	Stable Value		1									1			
	Stable Value Fund⁵	1.64%	1.96%	2.18%	2.31%	2.17%		11-01-94	1.92%	2.51%	2.72%	2.38%	2.09%	0.20%	0.10%
	Money Market		1	1	ı 1					1	1				
	Money Market Fund	1.14%	1.16%	0.76%	1.33%	0.86%		07-01-87	0.14%	0.67%	2.42%	2.08%	1.05%	0.00%	0.10%
	Please Note: You could lose money by investin guarantee it will do so. An investment in the fund	g in a mone I is not insu	ey market f red or guai	und. Althou anteed by t	gh the fund the Federal	seeks to pr Deposit Ins	eserve the urance Col	value of you	ir investme any other g	nt at \$1 pe overnment	r share, it c t agency. Ti	annot he fund's			

guarantee it will do so. An investment in the fund is not insured or guaranteed by the Federal Deposit insurance Corporation or any other government agency. The fund s sponsor has no legal obligation to provide financial support to the fund and you should not expect that the sponsor will provide financial support to the fund at any time.



MN Target Retirement Funds Performance October 31, 2022

ב2"	MN TARGET RETIREMENT FUNDS ⁸	AVERAGE ANNUAL TOTAL RETURNS AS OF OCTOBER 31, 2022 ¹							CALENDAR YEAR RETURNS					FEES	
VOLATILITY RISK LEVEL ²		YTD	1 Year	3 Years	5 Years	10 Years	Since Incept	Incept Date	2021	2020	2019	2018	2017	Gross Fund Exp ³	Admin Fee ⁴
HOIH	MN Target Retirement 2065 Fund	-21.94%	-21.51%	N/A ⁷	N/A ⁷	N/A ⁷	12.82%	04-02-20	14.59%	N/A ⁷	N/A ⁷	N/A ⁷	N/A ⁷	0.07%	0.10%
	2065 Benchmark Index ⁶	-21.98%	-21.55%	N/A ⁷	N/A ⁷	N/A ⁷			14.56%	N/A ⁷	N/A ⁷	N/A ⁷	N/A ⁷		
	MN Target Retirement 2060 Fund	-21.94%	-21.50%	4.08%	4.86%	7.73%	7.63%	08-01-11	-11 14.59% 19	19.85%	24.98%	-8.58%	21.26%	0.07%	0.10%
	2060 Benchmark Index ⁶	-21.98%	-21.55%	4.09%	4.86%	7.75%			14.56%	19.95%	25.00%	-8.58%	21.25%		0.10%
	MN Target Retirement 2055 Fund	-21.94%	-21.50%	4.09%	4.86%	7.73%	7.62%	08-01-11	14.58%	19.87%	24.98%	-8.58%	21.26%	0.07%	0.10%
	2055 Benchmark Index ⁶	-21.98%	-21.55%	4.09%	4.86%	7.75%			14.56%	19.95%	25.00%	-8.58%	21.25%	0.07%	0.1078
MODERATE	MN Target Retirement 2050 Fund	-21.64%	-21.15%	3.93%	4.77%	7.68%	7.58%	08-01-11	14.13%	19.47%	24.74%	-8.46%	21.26%	0.07%	0.10%
	2050 Benchmark Index ⁶	-21.68%	-21.19%	3.91%	4.76%	7.70%			14.11%	19.46%	24.76%	-8.47%	21.25%	0.0770	0.1078
	MN Target Retirement 2045 Fund	-21.27%	-20.71%	3.60%	4.59%	7.50%	7.41%	08-01-11	13.34%	18.96%	23.86%	-7.91%	20.39%	0.07%	0.10%
	2045 Benchmark Index ⁶	-21.31%	-20.75%	3.59%	4.58%	7.51%			13.34%	18.94%	23.88%	-7.91%	20.38%		0.10%
IODE	MN Target Retirement 2040 Fund	-20.72%	-20.10%	3.28%	4.39%	7.15%	7.21%	08-01-11	12.38%	18.42%	22.89%	-7.35%	19.38%	0.07%	0.10%
2	2040 Benchmark Index ⁶	-20.75%	-20.13%	3.25%	4.38%	7.17%			12.38%	18.36%	22.90%	-7.34%	19.38%		0.1078
	MN Target Retirement 2035 Fund	-19.66%	-18.98%	3.09%	4.25%	6.80%	7.04%	08-01-11	11.53%	17.53%	21.72%	-6.71%	17.98%	0.07%	0.10%
	2035 Benchmark Index ⁶	-19.70%	-19.01%	3.06%	4.24%	6.81%			11.53%	17.48%	21.73%	-6.70%	18.00%		
	MN Target Retirement 2030 Fund	-17.12%	-16.40%	3.08%	4.15%	6.38%	6.74%	08-01-11	10.95%	15.05%	19.86%	-5.89%	16.27%	0.07%	0.10%
ROW	2030 Benchmark Index ⁶	-17.16%	-16.43%	3.04%	4.13%	6.39%			10.95%	14.97%	19.86%	-5.88%	16.27%		
	MN Target Retirement 2025 Fund	-14.13%	-13.52%	2.51%	3.61%	5.50%	5.99%	08-01-11	9.77%	11.13%	16.83%	-4.52%	13.12%	0.07%	0.10%
	2025 Benchmark Index ⁶	-14.16%	-13.53%	2.48%	3.59%	5.51%			9.78%	11.07%	16.83%	-4.52%	13.12%	0.07 %	0.1070
	MN Target Retirement Income Fund	-12.82%	-12.29%	1.79%	2.89%	3.54%	3.87%	08-01-11	8.03%	9.73%	13.23%	-2.79%	8.32%	0.07%	0.10%
	Income Benchmark Index ⁶	-12.84%	-12.30%	1.75%	2.88%	3.58%			8.05%	9.60%	13.24%	-2.79%	8.36%	0.07%	

Performance data quoted represents past performance and is not a guarantee or prediction of future results. Current performance may be lower or higher than performance data shown. The investment return and principal value of an investment will fluctuate so that, when redeemed, shares may be worth more or less than their original cost. Carefully consider the investment option's objectives, risks, fees and expenses. Call 1-800-657-5757 or visit www.msrs.state.mn.us for a prospectus, summary prospectus or disclosure document, as available.

Securities offered through GWFS Equities, Inc. Member FINRA/SIPC and a subsidiary of Great-West Life & Annuity Insurance Company.

INVESTMENT OPTION FOOTNOTES

Although data is gathered from reliable sources, the completeness or accuracy of the data shown cannot be guaranteed. All information is most current as it is provided by the data source. Where data obtained from Morningstar©, 2019 Morningstar, Inc. All rights reserved. The data:(1) is proprietary to Morningstar and/or its content providers; (2) may not be copied or distributed; and (3) is not warranted to be accurate, complete or timely. Neither Morningstar nor its content providers are responsible for any damages or losses arising from any use of this information.

- 1. Average annual returns assume reinvestment of all dividends (ordinary income and capital gains) and reflect the deduction of all Fund operating expenses, not including Plan administrative fees. If Plan administrative fees were reflected, returns would be less favorable.
- 2. Volatility/risk level is intended to provide an idea of how volatile ("risky") the investment options in the Plan may be relative to one another. The risk level assigned to each category of investment with the Plan is based on long-term trends in the volatility of returns for the categories. Though each individual fund may be more or less volatile than the average of its group, the Risk level should serve as a prudent guide to the level of long-term market risk involved with each fund. Foreign investments involve special risks, including currency fluctuations, taxation differences and political developments. Equity securities of small and mid-sized companies may be more volatile than securities than securities of larger, more established companies. Asset allocation and balanced investment options and models are subject to the risks of the underlying funds, which can be a mix of stocks/stock funds and bond/bond funds. A bond fund's yield, share price and total return change daily and are based on changes in interest rates, market conditions, economic and political news, and the quality and maturity of its investments. In general, bond prices fall when interest rates rise and vice versa. Stable Value funds are not federally guaranteed and may lose value.
- 3. The gross fund expenses are deducted by the investment company prior to the calculation of the net asset value (NAV). The Gross Expense Ratios shown do not reflect any temporary fee or expense waivers that may be in effect for a fund. The performance of a fund with a temporary fee or expense waiver would have been higher if these waivers had been reflected.
- 4. The administrative fee is deducted and prorated among investment options in your account at a rate of 0.0083333% per month or 0.10% annually. This fee is deducted the middle of each month and is calculated on the average daily account balance for the prior 30 day period. The fee is only charged on the first \$125,000 in an individual's account. The administrative fee does not apply to contributions made to the SIF investment options prior to July 1, 1992.

. Trading restrictions. Some random inpose trade restrictions to prevent short-term trading.								
Investment Option	Trading Restrictions/Fees							
T Rowe Price Small Cap Stock Fund	A participant who transfers money out of a T. Rowe Price fund is not permitted to transfer money back into the same fund for a period of 30 calendar days.							
All Vanguard Funds	A participant who transfers money out of a Vanguard fund is not permitted to transfer money back into the same fund for a period of 30 calendar days.							
Fidelity Diversified International	A participant who transfers money out of this fund within 30 days of a purchase - two times in a rolling 90 day period or four times in a rolling 12 month period - will be blocked from making additional purchases for 85 days.							
Stable Value Fund	Participants may not transfer balances directly from the Stable Value Fund to the Money Market Fund. They may transfer the Stable Value Fund balance to any other fund option for 90 days before moving the balance to the Money Market Fund.							
Dodge & Cox Income Fund	The fund considers it a violation of the excessive trading policy if: you sell or exchange shares within a short period of time after the shares were purchased, you enter into a series of transactions that is indicative of an excessive trading pattern, or the fund reasonably believes you have engaged in such practices.							

5. Trading restrictions. Some funds impose trade restrictions to prevent short-term trading

6. Benchmarks. The performance of predetermined set of securities, used for comparison purposes. The benchmarks presented are based on published indexes. An index is not professionally managed, does not have a defined investment objective, and does not incur fees or expenses. Therefore, performance of an index fund will generally be less than its benchmark index. You cannot invest directly in an index.

Benchmark Indexes	Descriptions
Russell 2000 Index	Measures the performance of the small-cap segment of the U.S. equity universe. The Russell 2000 Index is a subset of the Russell 3000® Index representing approximately 10% of the total market capitalization of that index.
MSCI EAFE Index	An equity index which captures large and mid cap representation across developed markets countries around the world, excluding the U.S. and Canada. With 909 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.
International Spliced Index	Consists of the Total International Composite Index through August 31, 2006; the MSCI EAFE + Emerging Markets Index through December 15, 2010; the MSCI ACWI ex USA IMI Index through June 2, 2013; and the FTSE Global All Cap ex US Index thereafter. Returns for the MSCI indexes are adjusted for withholding taxes.
Mid Cap Spliced Index	Represents the performance of the S&P MidCap 400 [®] Index through May 16, 2003; the MSCI US Mid Cap 450 Index through January 30, 2013; and the CRSP US Mid Cap Index thereafter. S&P MidCap 400 [®] Index is a registered trademark of Standard & Poor's Financial Services LLC.
CRSP U.S. Total Stock Market Index	The index includes 4,000 constituents across mega, large, small and micro capitalizations, representing nearly 100% of the U.S. investable equity market, comprise the CRSP US Total Market Index.
U.S. Dividend Spliced Index	Russell 1000 Index through January 31, 2010; NASDAQ US Dividend Achievers Select Index (formerly known as the Dividend Achievers Select Index) through September 19, 2021, S&P U.S. Dividend Growers Index thereafter. Prior to December 6, 2002, the comparative benchmark was known as the Utilities Composite Index. The index weightings were: 40% S&P Utilities Index, 40% S&P Telephone Index and 20% Lehman Brothers Utility Bond Index through April 30, 1999; 63.75% S&P Utilities Index, 21.25% S&P Telephone Index and 15% Lehman Brothers Utility Bond Index through March 31, 2000; 75% S&P Utilities Index and 25% S&P Telephone Index through December 31, 2001; and 75% S&P Utilities Index and 25% S&P Integrated Telecommunication Services Index through December 6, 2002.
S&P 500 [®] Index	An unmanaged index considered indicative of the domestic Large-Cap equity market. S&P 500 [®] is a registered trademark of Standard & Poor's Financial Services LLC.
Balanced Composite Index	Made up of two unmanaged benchmarks, weighted 60% Dow Jones U.S. Total Stock Market Index (formerly known as the Dow Jones Wilshire 5000 Index) and 40% Lehman Brothers U.S. Aggregate Bond Index through May 31, 2005; 60% MSCI US Broad Market Index and 40% Barclays U.S. Aggregate Bond Index through December 31, 2009; 60% MSCI US Broad Market Index and 40% Barclays U.S. Aggregate Float Adjusted Index through January 14, 2013; and 60% CRSP US Total Market Index and 40% Barclays U.S. Aggregate Float Adjusted Index thereafter.
Barclays Capital Aggregate Bond Index	An index formerly known as the Lehman Brothers Aggregate Bond Index is composed of securities from the Barclays Capital Government/Corporate Bond Index, Mortgage-Backed Securities Index, and Asset-Backed Securities Index, including securities that are of investment-grade quality or better and have at least one year to maturity. The Barclays Capital Aggregate Bond Index is an intermediate-term index.

7. N/A If performance shown for a particular period is N/A, the Fund has an inception date less than the time period specified.

8. Generally, the asset allocation of each target date fund will gradually become more conservative as the fund nears the target retirement date. The date in a target date fund's name is the approximate date when investors plan to start withdrawing their money (which is assumed to be at age 65). The principal value of the fund(s) is not guaranteed at any time, including at the time of the target date and/or withdrawal.