

# Performance Monitoring Report

Third Quarter

# 2024



Vanguard Soap, LLC 401k Plan

An Index Fund Advisors, Inc. Quarterly Fiduciary Report on the Performance of Peer Groups and Their Comprised Funds.

## Summary

#	Fund Name	Peer Group	PCTL	Score	Expense Ratio	PB Ratio	Turnover Ratio	Sharpe Ratio (3 yr)	Sharpe Ratio (5 yr)	Sharpe Ratio (10 yr)
1	DFA Emerging Markets Small Cap (DEMSX)	Diversified Emerging Mkts	91.58%	71.30	0.59%	1.31	12%	0.07	0.45	0.32
2	DFA Emerging Markets (DFEMX)	Diversified Emerging Mkts	95.85%	80.70	0.35%	1.61	10%	0.02	0.32	0.25
3	DFA Emerging Markets Value (DFEVX)	Diversified Emerging Mkts	93.08%	73.20	0.44%	0.92	12%	0.22	0.40	0.27
4	DFA Global Real Estate Securities I (DFGEX)	Global Real Estate	4,200.00%	64.20	0.22%	1.80	N/A	0.00	0.14	0.33
5	DFA International Small Company (DFISX)	Foreign Small/Mid Blend	88.17%	71.20	0.39%	1.27	13%	0.03	0.38	0.35
6	DFA International Value (DFIVX)	Foreign Large Value	96.69%	82.00	0.28%	1.04	15%	0.40	0.45	0.30
7	DFA U.S. Large Cap Value (DFLVX)	Large Value	94.70%	77.00	0.22%	2.17	10%	0.37	0.49	0.49
8	DFA U.S. Micro Cap (DFSCX)	Small Blend	84.89%	70.00	0.41%	1.86	22%	0.24	0.50	0.48
9	DFA U.S. Small Cap Value (DFSVX)	Small Value	97.76%	79.20	0.31%	1.23	25%	0.38	0.56	0.44
10	DFA International Small Cap Value (DISVX)	Foreign Small/Mid Value	90.91%	78.70	0.43%	0.85	13%	0.29	0.44	0.34
11	BlackRock LifePath® Index Retire K (LIRKX)	Target-Date Retirement	76.26%	71.30	0.09%	1.71	71%	-0.11	0.31	0.47

Source: Morningstar Direct and ifa.com

\*Note: N/A values indicate insufficient data

## Summary

#	Fund Name	Peer Group	PCTL	Score	Expense Ratio	Credit Rating	Avg. Credit Duration	Standard Deviation (3 yr)	Standard Deviation (5 yr)	Standard Deviation (10 yr)
1	DFA Short-Term Government (DFFGX)	Short-Term Bond	88.38%	85.00	0.17%	AA	0.04 yrs.	2.02%	1.65%	1.50%
2	DFA Five Year Global Fixed Income (DFGBX)	Global Bond-USD Hedged	93.08%	85.50	0.21%	AA	0.08 yrs.	2.72%	2.20%	2.01%
3	DFA Two Year Global Fixed Income (DFGFX)	Global Bond-USD Hedged	96.15%	92.00	0.17%	AA	0.08 yrs.	1.59%	1.26%	0.97%
4	DFA One Yr Fixed Income (DFIHX)	Short-Term Bond	96.94%	92.00	0.13%	AA	0.06 yrs.	1.18%	0.97%	0.75%

Source: Morningstar Direct and ifa.com

# Performance Monitoring System

---

## Disclosure

This is not to be construed as an offer, solicitation, recommendation, or endorsement of any particular security, product or service. There is no guarantee investment strategies will be successful. Investing involves risks, including possible loss of principal. Consider the investment objectives, risks, charges and expenses of the mutual funds carefully before investing. Prospectuses are available at <https://www.ifa.com/disclosures/index-data/>, at the issuer's website, and sec.gov.

## Introduction

The investment advisor has implemented a set of monitoring guidelines to ensure that all funds meet IFA's standard of a sound investment. The guidelines include a fiduciary monitoring scoring system to analyze every fund. There are nine equity scoring categories and five fixed income scoring categories as shown in Table 1.

## Monitoring vs Selection

IFA monitors the ongoing prudence of the funds in its portfolios. IFA uses framework of Modern Portfolio Theory rather than the monitoring guidelines to select the Funds. Almost all live mutual fund returns data are insufficient to provide meaningful information about expectations of the future investment performance. Nevertheless, all selections at the time of inclusion are prudent according to the monitoring guidelines and are monitored on an ongoing basis to ensure they remain prudent.

## Scoring System

Using the factors listed in Table 1, each fund is assigned a percentile rank between 0 (Worst) to 100 (Best) by summing the individual scores for the fourteen factors. If a fund is missing a scored factor, then the populated factors are reweighted. If the fund scores greater than the 66th percentile it is considered satisfactory. If a fund falls below the 66th percentile it will be placed under review and may be removed.

Note on funds of funds: If the fund scores greater than the 66th percentile it is considered satisfactory. If a fund falls below the 66th percentile it will be placed under review and may be removed.

Below is the scoring system for each of the fourteen factors. Funds are scored based on how they perform relative to their peers.

IFA assigns points for each factor according to which decile the fund falls relative to its peers. Every factor is scored one of these three ways: Lowest to highest, highest to lowest, and middle out. For Example: Prospectus Net Expense ratio is ranked from lowest to highest because to us, a cheaper fund is preferable. Scores are shown in Table 1.

In this system, factors that can be directly controlled such as net expense ratio, turnover, and total number of holdings are given more weight compared to factors that are less directly controlled such as Sharpe ratios. This strategy is consistent with developing a prudent process for portfolio management.

## Table 1: Prudent Monitoring Factors and Their Weights

### Equity Scoring Table

Factor	Weight	Deciles									
		1	2	3	4	5	6	7	8	9	10
Prospectus Net Expense Ratio	15.00%	10	20	30	40	50	60	70	80	90	100
P/B Ratio	15.00%	100	90	80	70	60	50	40	30	20	10
Turnover Ratio	15.00%	10	20	30	40	50	60	70	80	90	100
Average Market Cap	15.00%	20	40	60	80	100	80	60	40	20	10
# of Holdings	15.00%	10	20	30	40	50	60	70	80	90	100
% of Assets in Top 10 Holdings	15.00%	10	20	30	40	50	60	70	80	90	100
Sharpe Ratio 10 Years	5.00%	10	20	30	40	50	60	70	80	90	100
Sharpe Ratio 5 Years	3.00%	10	20	30	40	50	60	70	80	90	100
Sharpe Ratio 3 Years	2.00%	10	20	30	40	50	60	70	80	90	100

### Fixed Income Scoring Table

Factor	Weight	Deciles									
		1	2	3	4	5	6	7	8	9	10
Avg. Effective Duration	20.00%	60	70	80	90	100	100	90	80	70	60
Prospectus Net Expense Ratio	40.00%	10	20	30	40	50	60	70	80	90	100
3 Year Annualized St. Dev.	5.00%	10	20	30	40	50	60	70	80	90	100
5 Year Annualized St. Dev.	10.00%	10	20	30	40	50	60	70	80	90	100
10 Year Annualized St. Dev.	25.00%	10	20	30	40	50	60	70	80	90	100

### Summary

This monitoring evaluation will be conducted on a quarterly basis to ensure the funds in your plan conform to IFA's fiduciary standards according to this scoring system. Those funds that achieve a satisfactory score are considered viable and will be kept.

## Glossary of Terms

---

**Sharpe Ratio:** A risk-adjusted measure developed by Nobel Laureate William Sharpe. It is calculated by using standard deviation and excess return to determine reward per unit of risk. The higher the Sharpe Ratio, the better the fund's historical risk-adjusted performance. The Sharpe ratio is calculated for the past 36-month period by dividing a fund's annualized excess returns by the standard deviation of a fund's annualized excess return

**Prospectus Net Expense Ratio:** The percentage of fund assets, net of reimbursements, used to pay for operating expenses and management fees, including 12b-1 fees, administrative fees, and all other asset-based costs incurred by the fund, except brokerage costs. Fund expenses are reflected in the fund's NAV. Sales charges are not included in the expense ratio.

**P/B Ratio:** The weighted average of the price/book ratios of all the stocks in a portfolio. The P/B ratio of a company is calculated by dividing the market price of its stock by the company's per-share book value. Stocks with negative book values are excluded from this calculation. In theory, a high P/B ratio indicates that the price of the stock exceeds the actual worth of the company's assets, while a low P/B ratio indicates that the stock is a bargain. All P/B ratios greater than 75 are capped at 75 for the calculation.

**Turnover Ratio:** measures the portfolio manager's trading activity by taking the lesser of purchases or sales (excluding all securities with maturities of less than one year) and dividing by average monthly net assets. A turnover ratio of 100% or more does not necessarily suggest that all securities in the portfolio have been traded. In practical terms, the resulting percentage loosely represents the percentage of the portfolio's holdings that have changed over the past year.

**Average Market Cap:** Morningstar defines the overall "size" of a stock fund's portfolio as the geometric mean of the market capitalization for all of the stocks it owns. It's calculated by multiplying the stock's portfolio weight by the natural log of the market cap. The results for each stock are summed and divided by sum of the portfolio weights, and then the exponential of the resulting number is taken.

**# of Holdings:** The net number of holdings in the portfolio.

**% Asset in Top 10 Holdings:** The aggregate assets, expressed as a percentage, of the fund's top 10 portfolio holdings. This figure is meant to be a measure of portfolio risk. Specifically, the higher the percentage, the more concentrated the fund is in a few companies or issues, and the more the fund is susceptible to the market fluctuations in these few holdings. Cash and cash equivalents are generally not included in this calculation. (An exception is made for money market portfolios.)

**Average Effective Duration:** A measure of a fund's interest-rate sensitivity--the longer a fund's duration, the more sensitive the fund is to shifts in interest rates. Duration is determined by a formula that includes coupon rates and bond maturities. Small coupons tend to increase duration, while shorter maturities and higher coupons shorten duration. The relationship between funds with different durations is straightforward: A fund with a duration of 10 years is twice as volatile as a fund with a five-year duration.

**Standard Deviation:** A measure of the variation or dispersion of a set of data points. Standard deviations are often used to quantify the historical return volatility of a security or portfolio.

# Table of Contents

Portfolio Details Summary	2
TDF Characteristics	3
Prospectus Net Expense Ratio	10
Annualized Performance	11
Performance Over Time	15
Risk vs Return	16
Rolling Statistics	17
3 Year Risk / Return Analysis	19
3 Year Relative Risk / Return vs. Benchmark	20
MPT Statistics	21
Max Drawdown	23
Asset Allocation	24
Holdings-Based Equity Glide Path	28
Returns-Based Equity Exposure Glide Path	29
Equity Allocation Breakdown	30
Fixed Income Allocation Breakdown	33
Investment of \$10,000 & Monthly Contribution of \$300	36
Investment of \$2,000,000 & Monthly Withdrawal of \$2,000	37
Important Information	38

# Portfolio Details

	<b>BlackRock LifePath Index</b>	<b>Dimensional Tgt Date Ret Inc Series</b>	<b>Fidelity Freedom Index Series</b>	<b>Schwab Target Index Series</b>	<b>Vanguard Target Retirement Series</b>
<b>Share Class / Type</b>	K / MF	Instl / MF	Prem / MF	Other / MF	Inv / MF
<b>Vintages Offered (Incl. Income)</b>	2025 - 2065	2010 - 2065	2010 - 2070	2010 - 2065	2020 - 2070
<b>Total # Offered</b>	10	13	14	12	12
<b>Active/Passive<sup>o</sup></b>	Passive	Active	Passive	Passive	Passive
<b>Open/Proprietary<sup>1</sup></b>	Proprietary	Proprietary	Proprietary	Proprietary	Proprietary
<b>Glide Path Type (To / Through)</b>	To	Through	Through	Through	Through
<b>Landing Point</b>	At Retirement	15 Years After Retirement	15 Years After Retirement	20 Years After Retirement	10 Years After Retirement
<b>Equity Exposure (holdings-based)<sup>2</sup></b>	95.80% (2065) 37.67% (Income) 58.13% (Spread)	93.82% (2060) 20.00% (Income) 73.82% (Spread)	88.32% (2065) 18.04% (Income) 70.28% (Spread)	96.56% (2065) 35.72% (2010) 60.84% (Spread)	86.68% (2055) 26.68% (Income) 60.00% (Spread)
<b>Equity Exposure (returns-based)<sup>3</sup></b>	93.75% (2065) 36.87% (Income) 56.88% (Spread)	93.96% (2055) 19.01% (Income) 74.95% (Spread)	89.33% (2065) 17.39% (Income) 71.94% (Spread)	89.84% (2065) 33.74% (2010) 56.10% (Spread)	89.44% (2055) 28.27% (Income) 61.17% (Spread)
<b>Non-Traditional Exposure Rank (returns-based)<sup>4</sup></b>	2nd Quartile	1st Quartile	2nd Quartile	3rd Quartile	2nd Quartile
<b>Average Prosp. Net Exp. Ratio</b>	0.09	0.20	0.08	0.08	0.08
<b>Longest Manager Tenure (Years)</b>	6.34	8.84	14.92	8.02	11.53
<b>Average Manager Tenure (Years)</b>	6.19	8.52	13.67	7.64	11.13
<b>Largest Net Assets (\$ Millions)</b>	\$12,892.00 (2030)	\$202.00 (2040)	\$22,871.00 (2040)	\$1,208.00 (2030)	\$102,222.00 (2035)
<b>Average Net Assets Across Vintages (\$ Millions)</b>	\$7,869.20	\$114.23	\$12,051.38	\$616.58	\$63,183.73
<b>Largest # Underlying Funds</b>	12	10	10	10	7

All information contained here is based on products selected in this report and not necessarily all available products offered.

<sup>o</sup>Active/Passive categorization is based on Morningstar's Top 10 Holdings: <25% passive exposure is Active; >=25% & <75% passive exposure is Blend; >=75% average passive exposure is Passive.

<sup>1</sup>Open/Proprietary classification is based on Morningstar's Top 10 Holdings. If 1 or more of the top 10 holdings is managed by a firm other than the Target Date manager, the result is Open classification.

<sup>2</sup>Equity Exposure (holdings-based) includes holdings from U.S. Equity and Non-U.S. Equity.

<sup>3</sup>Factors used in determining total equity exposure are indices representing U.S. Large Cap Equity, U.S. Mid Cap Equity, U.S. Small Cap Equity, Developed Foreign Equity, and Emerging Market Equity.

<sup>4</sup>Factors used in determining non-traditional exposure are indices representing Emg. Market Equity, Dev. Foreign Equity, Emg. Market Debt, Dev. Foreign Debt, High Yield Bonds, Commodities, REITs, and TIPS.

Created with Target-Date Radar & MPI Stylus<sup>®</sup> 2024. Markov Processes International Inc. All Rights Reserved. Monthly performance data and certain fund characteristics provided by Morningstar, Inc. All other performance data, peer rankings which includes both Mutual Funds and CITs, Target Date Fund attributes and results are calculated and provided by MPI as of 8/30/24. For additional details including holdings as-of-date information, see Important Information Section. Returns based glide path and asset allocation information is calculated using MPIs proprietary DSA<sup>®</sup> model with indices representing broad asset classes. Performance shown represents past performance. Past performance is no guarantee of future results. Current month-end performance data can be found at [advisor.morningstar.com/familyinfo.asp](http://advisor.morningstar.com/familyinfo.asp). **2**

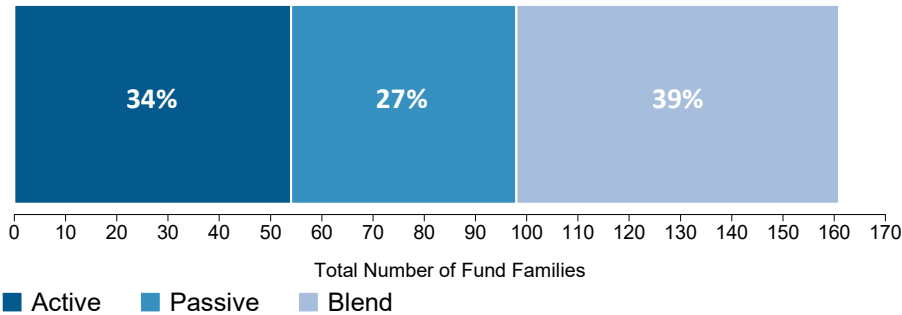
For Institutional Plan Sponsor and Intermediary Use Only



# Active vs Passive

Active, Passive or Blend categorization refers to whether the target date fund manager implements the glidepath with actively managed underlying funds (Active), passively managed underlying funds (Passive) or a combination of actively managed and passively managed underlying funds (Blend).

TDF UNIVERSE BREAKDOWN: ACTIVE vs. PASSIVE

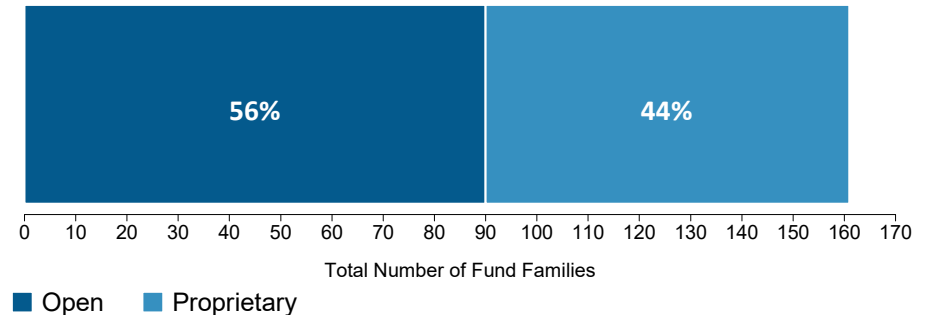


Active vs. Passive vs. Blend	
BlackRock LifePath Index	Passive
Dimensional Tgt Date Ret Inc Series	Active
Fidelity Freedom Index Series	Passive
Schwab Target Index Series	Passive
Vanguard Target Retirement Series	Passive

# Open vs Proprietary

Open or Proprietary categorization describes whether the assets that the target date funds invest in are managed by the same organization that manages the target date fund itself (Proprietary) or if at least some assets are managed by un-affiliated organizations (Open).

TDF UNIVERSE BREAKDOWN: OPEN vs. PROPRIETARY



Open vs. Proprietary	
BlackRock LifePath Index	Proprietary
Dimensional Tgt Date Ret Inc Series	Proprietary
Fidelity Freedom Index Series	Proprietary
Schwab Target Index Series	Proprietary
Vanguard Target Retirement Series	Proprietary

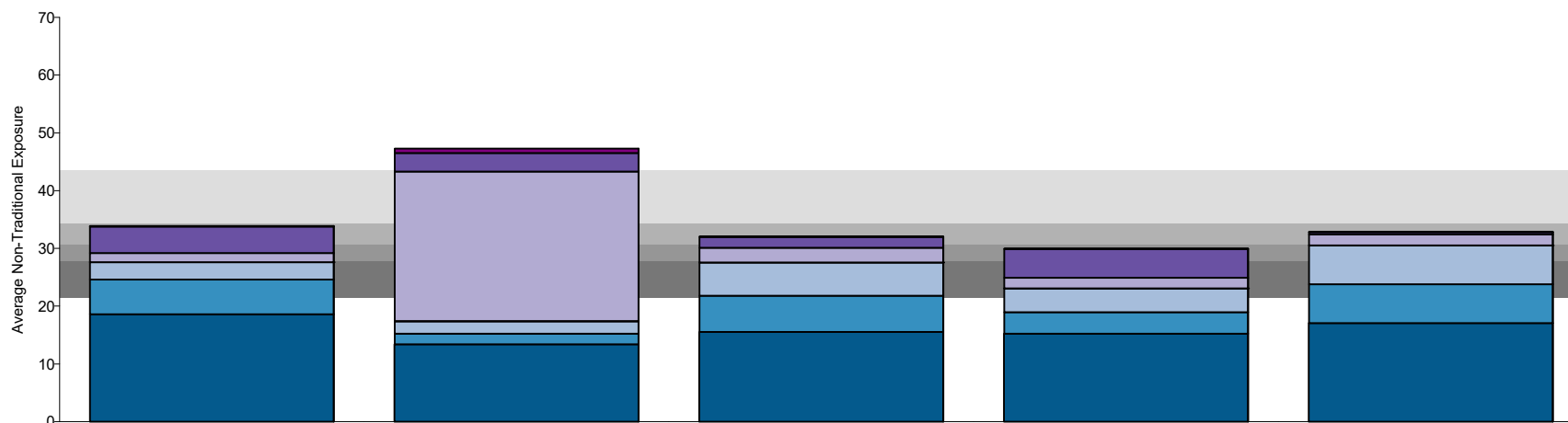
This proprietary universe consists of 111 target date families. The categorizations of Active/Passive/Blend and Open/Proprietary are based on the following thresholds: Active/Passive categorization is based on Morningstar's Top 10 Holdings: <25% passive exposure is Active; >=25% & <75% passive exposure is Blend; >=75% average passive exposure is Passive. Open/Proprietary classification is based on Morningstar's Top 10 Holdings. If 1 or more of the top 10 holdings is managed by a firm other than the Target Date manager, the result is Open classification.

Created with Target-Date Radar & MPI Stylus<sup>®</sup> 2024. Markov Processes International Inc. All Rights Reserved. Monthly performance data and certain fund characteristics provided by Morningstar, Inc. All other performance data, peer rankings which includes both Mutual Funds and CITs, Target Date Fund attributes and results are calculated and provided by MPI as of 8/30/24. For additional details including holdings as-of-date information, see Important Information Section. Returns based glide path and asset allocation information is calculated using MPI's proprietary DSA<sup>®</sup> model with indices representing broad asset classes. Performance shown represents past performance. Past performance is no guarantee of future results. Current month-end performance data can be found at [advisor.morningstar.com/familyinfo.asp](http://advisor.morningstar.com/familyinfo.asp). **3**

# Non-Traditional Asset Class Breakdown

Non-traditional asset class exposure determines the degree to which the fund is exposed to non-traditional assets. Non-traditional assets are composed of indices representing developed foreign equity, emerging market equity, developed foreign debt, emerging market debt, TIPS, high yield bonds, REITs, and commodities. These are returns-based style exposures to these indices and not based on actual fund holdings.

## AVERAGE NON-TRADITIONAL ASSETS EXPOSURE



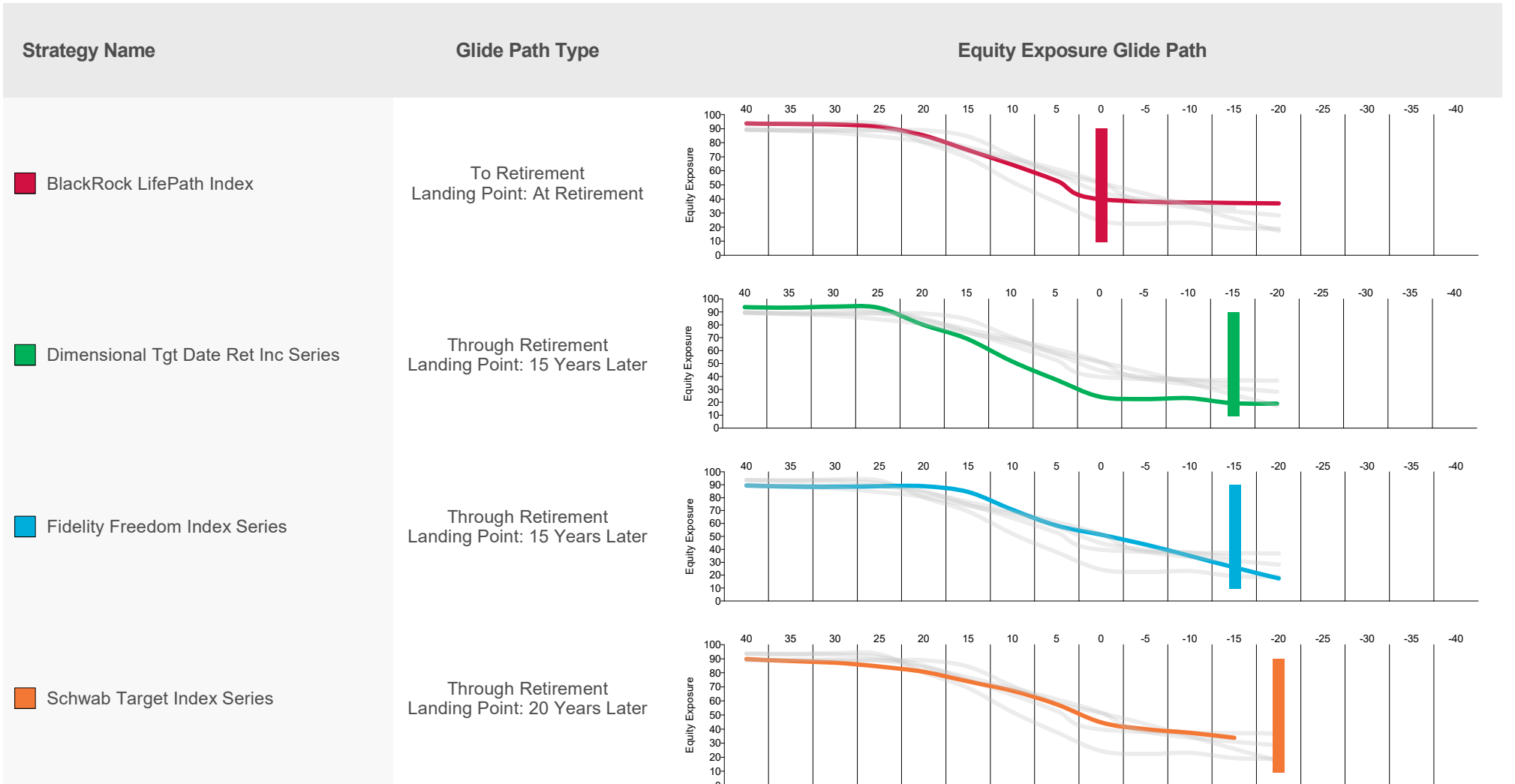
	BlackRock LifePath Index	Dimensional Tgt Date Ret Inc Series	Fidelity Freedom Index Series	Schwab Target Index Series	Vanguard Target Retirement Series
Developed Foreign Equity	18.62	13.42	15.55	15.21	17.07
Emerging Markets Equity	6.00	1.83	6.23	3.72	6.72
Developed Foreign Debt	2.97	2.14	5.79	4.15	6.71
Emerging Markets Debt	0.00	0.01	0.00	0.01	0.00
TIPS	1.58	25.89	2.53	1.80	1.88
High Yield	0.00	0.00	0.00	0.00	0.00
REITs	4.59	3.23	1.88	5.03	0.41
Commodities	0.11	0.78	0.09	0.06	0.05
<b>Non-Trad. Exposure Total</b>	<b>33.87</b>	<b>47.30</b>	<b>32.08</b>	<b>29.99</b>	<b>32.84</b>
<b>Non-Trad. Exposure Rank</b>	<b>2nd Quartile</b>	<b>1st Quartile</b>	<b>2nd Quartile</b>	<b>3rd Quartile</b>	<b>2nd Quartile</b>

Created with Target-Date Radar & MPI Stylus® 2024. Markov Processes International Inc. All Rights Reserved. Monthly performance data and certain fund characteristics provided by Morningstar, Inc. All other performance data, peer rankings which includes both Mutual Funds and CITs, Target Date Fund attributes and results are calculated and provided by MPI as of 8/30/24. For additional details including holdings as-of-date information, see Important Information Section. Returns based glide path and asset allocation information is calculated using MPI's proprietary DSA® model with indices representing broad asset classes. Performance shown represents past performance. Past performance is no guarantee of future results. Current month-end performance data can be found at [advisor.morningstar.com/familyinfo.asp](http://advisor.morningstar.com/familyinfo.asp). 4

For Institutional Plan Sponsor and Intermediary Use Only

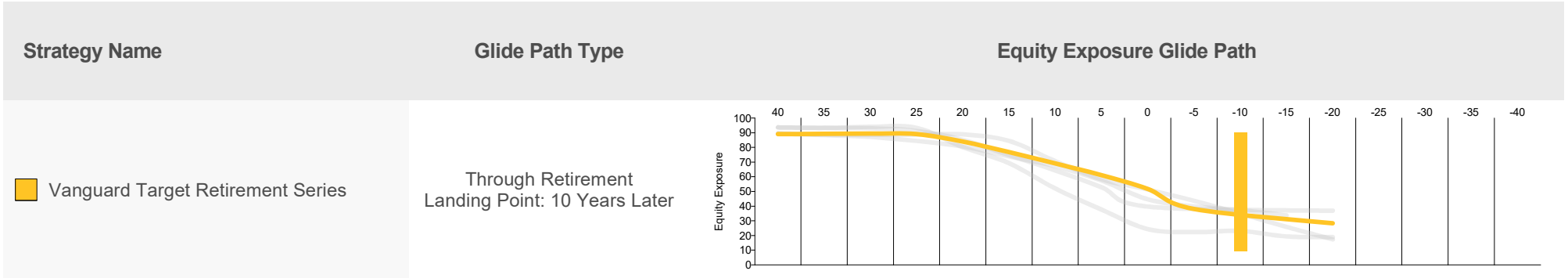
# Landing Point Breakdown

Landing point determines where in a retiree's lifetime the lowest equity allocation occurs. In some cases, this can be before retirement (defined as age 65) or up to retirement ("To Funds") and the retiree's account moves to the Target Date suite's Income fund at that point. In other cases, the landing point might be well beyond or through retirement ("Through Funds") and the equity allocation continues to get lower until the specified "Landing Point".



# Landing Point Breakdown

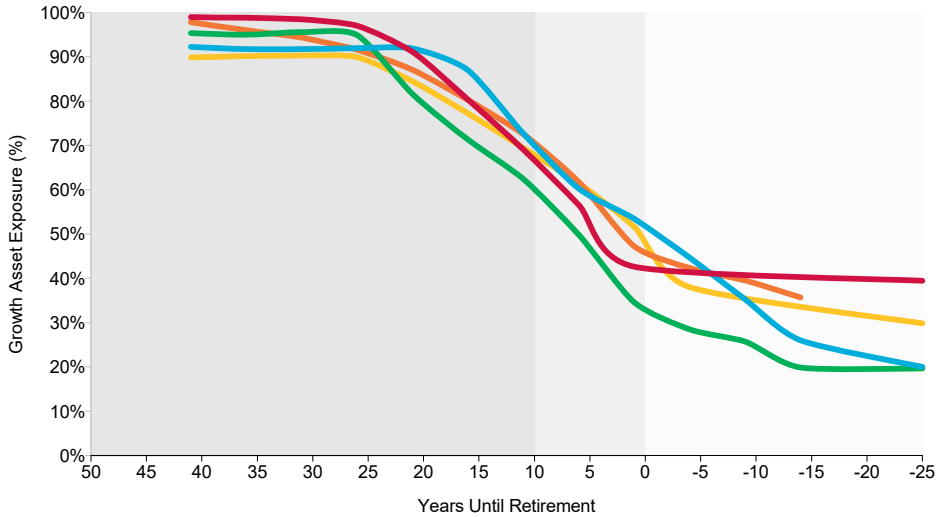
Landing point determines where in a retiree's lifetime the lowest equity allocation occurs. In some cases, this can be before retirement (defined as age 65) or up to retirement ("To Funds") and the retiree's account moves to the Target Date suite's Income fund at that point. In other cases, the landing point might be well beyond or through retirement ("Through Funds") and the equity allocation continues to get lower until the specified "Landing Point".



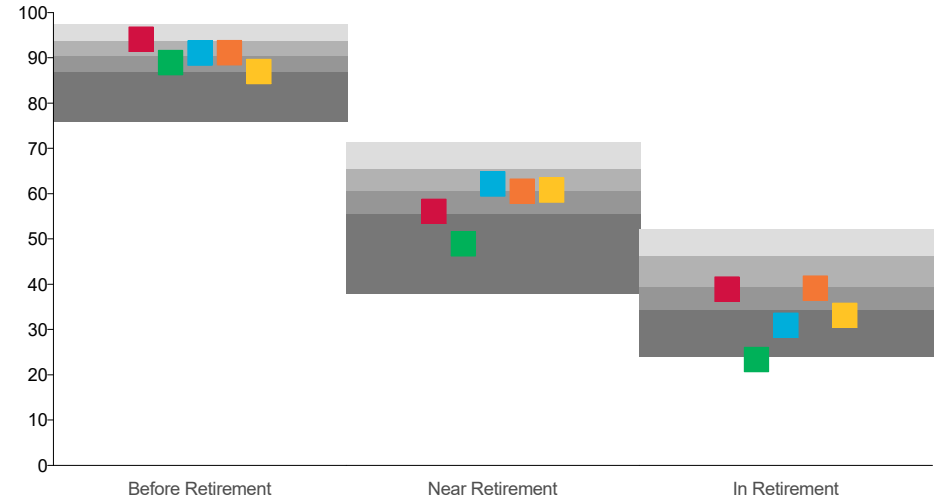
# Growth Asset Breakdown

Growth assets are assets that mitigate Longevity risk, which is the risk of outliving your money. The purpose of these assets, as its name implies, is to grow wealth. The asset classes that compose growth assets are made up of US Equity (Large, Mid, and Small), Non-US Equity (Emerging and Developed), High Yield Fixed Income, Emerging Market Debt, Commodities, and REITs. There are three distinct stages where we look at the percentage of growth assets that should be in a TDF for the participant; Before-retirement (<55), Near-retirement (55-65), and In-Retirement (>65).

**GROWTH ASSETS GLIDE PATH**



**AVERAGE GROWTH ASSETS PER RETIREMENT REGION**

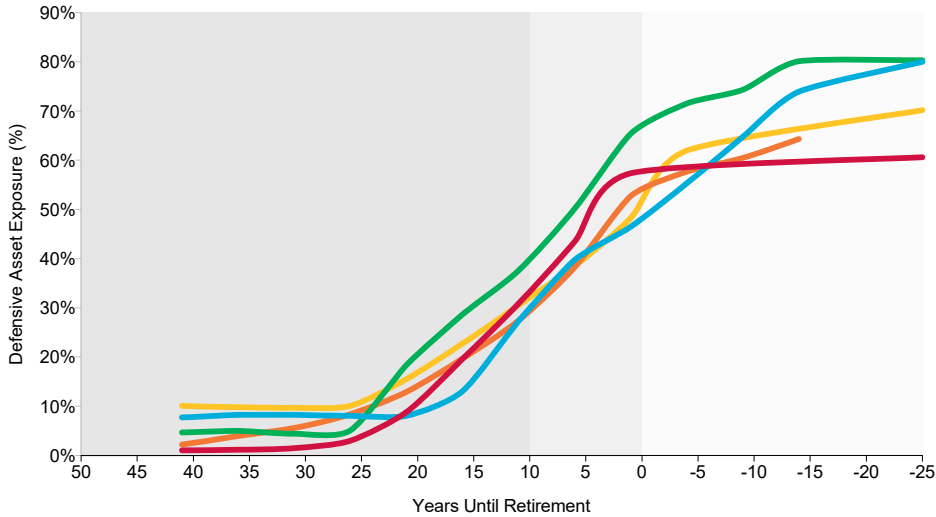


	Before Retirement Zone	Near Retirement Zone	In Retirement Zone
<span style="color: red;">■</span> BlackRock LifePath Index	1st Quartile	3rd Quartile	3rd Quartile
<span style="color: green;">■</span> Dimensional Tgt Date Ret Inc Series	3rd Quartile	4th Quartile	4th Quartile
<span style="color: cyan;">■</span> Fidelity Freedom Index Series	2nd Quartile	2nd Quartile	4th Quartile
<span style="color: orange;">■</span> Schwab Target Index Series	2nd Quartile	3rd Quartile	3rd Quartile
<span style="color: yellow;">■</span> Vanguard Target Retirement Series	4th Quartile	3rd Quartile	4th Quartile

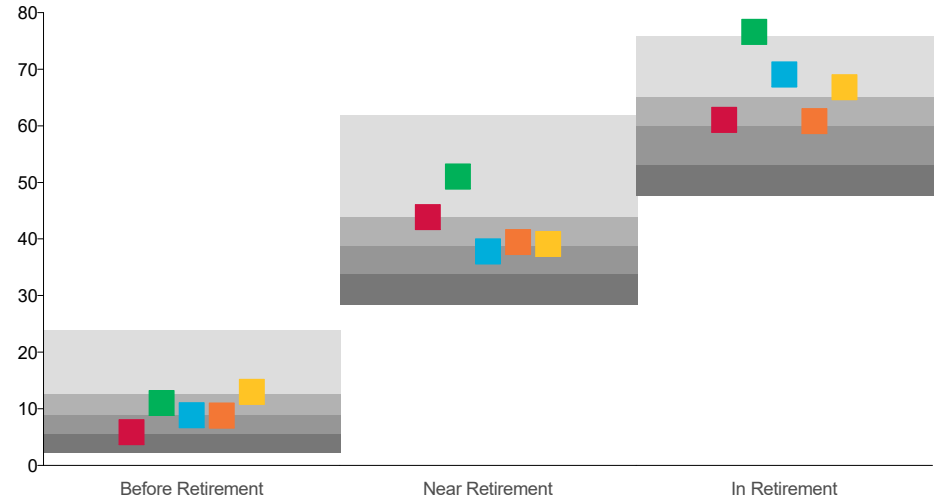
# Defensive Asset Breakdown

Defensive assets are assets that mitigate Volatility risk, which is the risk of losing value due to market volatility. The purpose of these assets is to provide some insulation from poor market conditions and preserve the value of the portfolio. The asset classes that compose defensive assets are made up of Cash Equivalents, Developed Foreign Debt, Core US Fixed Income, Short-Term Corporate, TIPS, and Short-Term TIPS. There are three distinct stages where we look at the percentage of volatility assets that should be in a TDF for the participant; Before-retirement (<55), Near-retirement (55-65), and In-Retirement (>65).

DEFENSIVE ASSETS GLIDE PATH



AVERAGE DEFENSIVE ASSETS PER RETIREMENT REGION

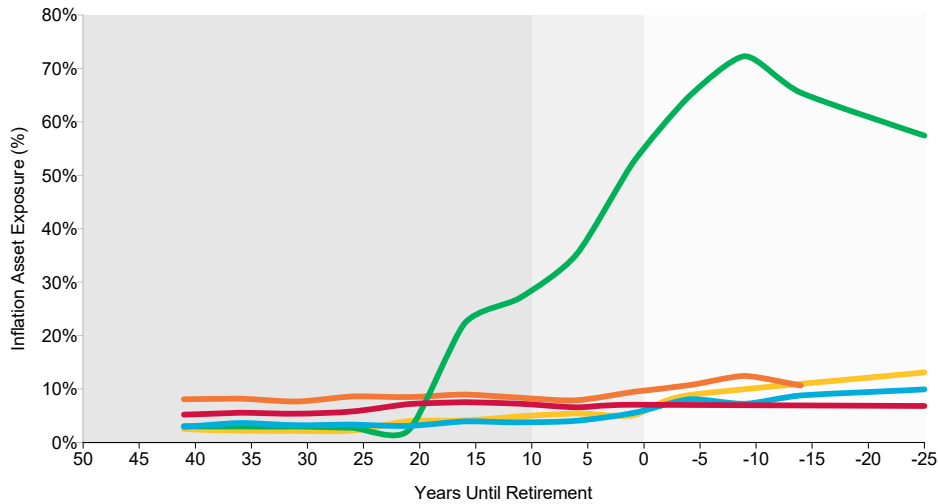


	Before Retirement Zone	Near Retirement Zone	In Retirement Zone
<span style="color: red;">■</span> BlackRock LifePath Index	3rd Quartile	2nd Quartile	2nd Quartile
<span style="color: green;">■</span> Dimensional Tgt Date Ret Inc Series	2nd Quartile	1st Quartile	1st Quartile
<span style="color: blue;">■</span> Fidelity Freedom Index Series	3rd Quartile	3rd Quartile	1st Quartile
<span style="color: orange;">■</span> Schwab Target Index Series	3rd Quartile	2nd Quartile	2nd Quartile
<span style="color: yellow;">■</span> Vanguard Target Retirement Series	1st Quartile	2nd Quartile	1st Quartile

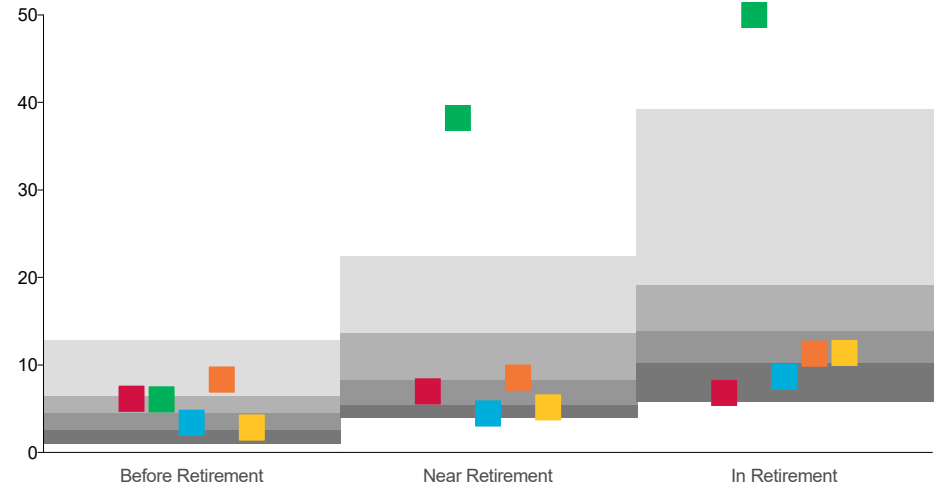
# Inflation Asset Breakdown

Inflation assets are assets that mitigate Inflation risk, which is the risk of losing purchasing power. The purpose of these assets is to preserve the purchasing power of wealth that you have accumulated. The asset classes that compose inflation assets are made up of TIPS, Short Term TIPS, Commodities, and REITs. There are three distinct stages where we look at the percentage of inflation assets that should be in a TDF for a participant; Before-retirement(<55), Near-retirement (55-65), and In-Retirement (>65).

**INFLATION ASSETS GLIDE PATH**



**AVERAGE INFLATION ASSETS PER RETIREMENT REGION**

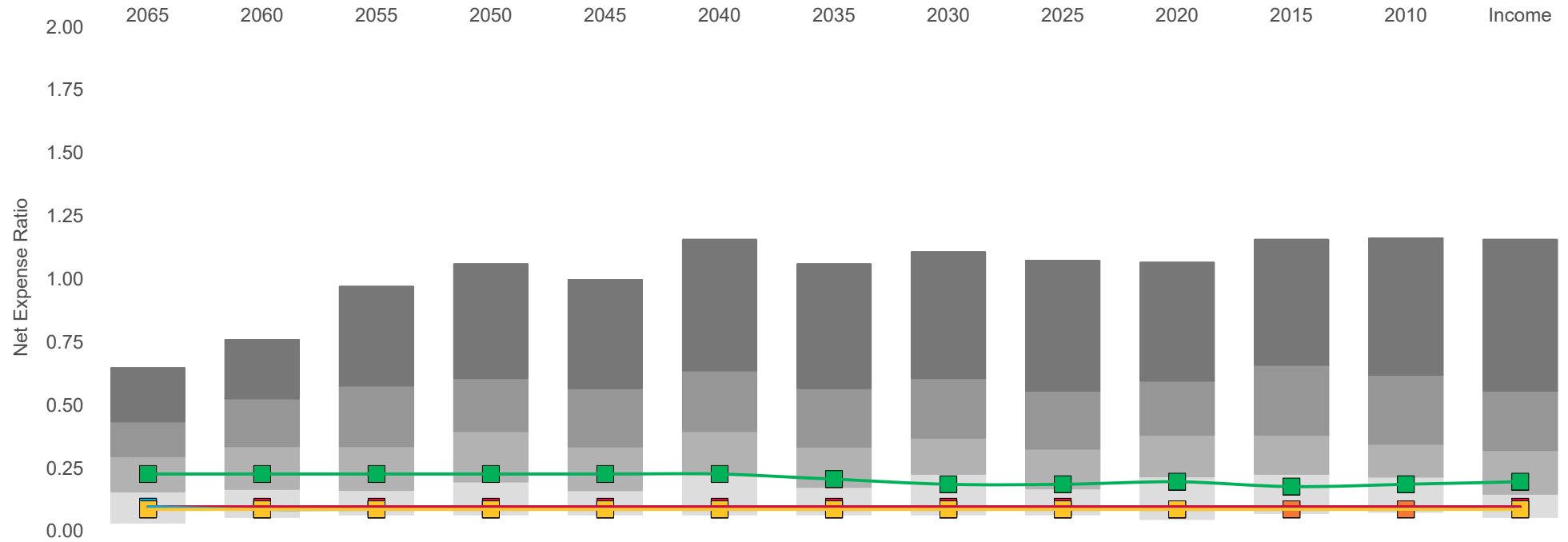


	Before Retirement Zone	Near Retirement Zone	In Retirement Zone
<span style="color: red;">■</span> BlackRock LifePath Index	2nd Quartile	3rd Quartile	4th Quartile
<span style="color: green;">■</span> Dimensional Tgt Date Ret Inc Series	2nd Quartile	1st Quartile	1st Quartile
<span style="color: blue;">■</span> Fidelity Freedom Index Series	3rd Quartile	4th Quartile	4th Quartile
<span style="color: orange;">■</span> Schwab Target Index Series	1st Quartile	2nd Quartile	3rd Quartile
<span style="color: yellow;">■</span> Vanguard Target Retirement Series	3rd Quartile	4th Quartile	3rd Quartile

# Prospectus Net Expense Ratio

As of Jun 30, 2024\*

## PROSPECTUS NET EXPENSE RATIO



Strategy Name	Share Class	2065	2060	2055	2050	2045	2040	2035	2030	2025	2020	2015	2010	Income
BlackRock LifePath Index	K	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Dimensional Tgt Date Ret Inc Series	Instl	0.22	0.22	0.22	0.22	0.22	0.22	0.20	0.18	0.18	0.19	0.17	0.18	0.19
Fidelity Freedom Index Series	Prem	0.09	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Schwab Target Index Series	Other	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Vanguard Target Retirement Series	Inv	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Morningstar Target Date Cat Avg		0.30	0.35	0.40	0.44	0.40	0.47	0.41	0.45	0.40	0.45	0.48	0.47	0.40

Prospectus Net Expense Ratio is based on the most recent prospectus from which Morningstar pulled their data. Please refer to each fund's current prospectus for the most recent information. Morningstar Category peer universe is based off of the oldest share class. Share classes being analyzed are selected by client.

Created with Target-Date Radar & MPI Stylus® 2024. Markov Processes International Inc. All Rights Reserved. Monthly performance data and certain fund characteristics provided by Morningstar, Inc. All other performance data, peer rankings which includes both Mutual Funds and CITs, Target Date Fund attributes and results are calculated and provided by MPI as of 8/30/24. For additional details including holdings as-of-date information, see Important Information Section. Returns based glide path and asset allocation information is calculated using MPI's proprietary DSA® model with indices representing broad asset classes. Performance shown represents past performance. Past performance is no guarantee of future results. Current month-end performance data can be found at [advisor.morningstar.com/familyinfo.asp](http://advisor.morningstar.com/familyinfo.asp). **10**

For Institutional Plan Sponsor and Intermediary Use Only



# Performance as of the Most Recent Quarter End

As of Jun 30, 2024

<b>BlackRock LifePath Index</b>	<b>2065</b>	<b>2060</b>	<b>2055</b>	<b>2050</b>	<b>2045</b>	<b>2040</b>	<b>2035</b>	<b>2030</b>	<b>2025</b>					<b>Income</b>
1 Year	17.99	18.05	17.96	17.49	16.22	14.47	12.67	10.83	8.81					8.41
3 Years	4.74	4.72	4.70	4.51	3.96	3.14	2.26	1.34	0.33					0.04
5 Years	--	10.22	10.22	10.07	9.49	8.54	7.45	6.27	5.02					4.29
10 Years	--	--	8.65	8.57	8.26	7.65	6.93	6.13	5.28					4.46
Since Inception	10.37	11.36	9.14	8.99	8.66	8.13	7.47	6.76	5.98					5.02
Inception Date	10/30/19	2/29/16	5/31/11	5/31/11	5/31/11	5/31/11	5/31/11	5/31/11	5/31/11	5/31/11				5/31/11

<b>Dimensional Tgt Date Ret Inc Seri</b>	<b>2065</b>	<b>2060</b>	<b>2055</b>	<b>2050</b>	<b>2045</b>	<b>2040</b>	<b>2035</b>	<b>2030</b>	<b>2025</b>	<b>2020</b>	<b>2015</b>	<b>2010</b>	<b>Income</b>
1 Year	19.18	19.29	19.31	19.23	17.23	12.91	8.63	5.72	4.39	5.18	6.42	6.71	7.10
3 Years	6.73	6.71	6.69	6.72	5.96	3.35	0.02	-1.79	-2.26	-1.20	0.08	0.96	1.50
5 Years	--	11.35	11.38	11.34	10.53	8.18	6.31	5.03	4.08	4.04	4.42	4.48	4.01
10 Years	--	--	--	--	--	--	--	--	--	--	--	--	--
Since Inception	10.43	10.31	10.32	10.32	9.83	8.20	6.87	6.03	5.26	4.86	4.77	4.68	3.97
Inception Date	1/2/20	11/2/15	11/2/15	11/2/15	11/2/15	11/2/15	11/2/15	11/2/15	11/2/15	11/2/15	11/2/15	11/2/15	11/2/15

<b>Fidelity Freedom Index Series</b>	<b>2065</b>	<b>2060</b>	<b>2055</b>	<b>2050</b>	<b>2045</b>	<b>2040</b>	<b>2035</b>	<b>2030</b>	<b>2025</b>	<b>2020</b>	<b>2015</b>	<b>2010</b>	<b>Income</b>
1 Year	16.17	16.20	16.17	16.20	16.22	15.41	13.25	11.32	10.16	9.22	8.12	7.04	6.14
3 Years	3.75	3.76	3.77	3.77	3.76	3.42	2.40	1.48	0.91	0.52	0.29	0.06	-0.08
5 Years	9.42	9.42	9.43	9.43	9.42	9.21	7.99	6.58	5.72	5.06	4.34	3.59	2.58
10 Years	--	--	8.23	8.25	8.24	8.14	7.52	6.55	5.77	5.27	4.74	4.09	2.97
Since Inception	9.41	8.60	8.59	8.60	8.60	8.48	7.79	6.75	5.95	5.44	4.88	4.21	3.11
Inception Date	6/28/19	8/5/14	6/1/11	10/2/09	10/2/09	10/2/09	10/2/09	10/2/09	10/2/09	10/2/09	10/2/09	10/2/09	10/2/09

<b>Schwab Target Index Series</b>	<b>2065</b>	<b>2060</b>	<b>2055</b>	<b>2050</b>	<b>2045</b>	<b>2040</b>	<b>2035</b>	<b>2030</b>	<b>2025</b>	<b>2020</b>	<b>2015</b>	<b>2010</b>	
1 Year	17.18	16.95	16.70	16.44	15.80	14.95	13.86	12.39	10.39	9.60	9.23	8.66	
3 Years	4.53	4.46	4.37	4.24	4.03	3.71	3.26	2.66	1.80	1.52	1.33	1.05	
5 Years	--	9.91	9.74	9.53	9.21	8.66	8.01	7.18	6.02	5.07	4.82	4.45	
10 Years	--	--	--	--	--	--	--	--	--	--	--	--	
Since Inception	6.87	10.03	9.91	9.71	9.44	8.97	8.37	7.64	6.63	5.64	5.12	4.84	
Inception Date	2/25/21	8/25/16	8/25/16	8/25/16	8/25/16	8/25/16	8/25/16	8/25/16	8/25/16	8/25/16	8/25/16	8/25/16	

Created with Target-Date Radar & MPI Stylus® 2024. Markov Processes International Inc. All Rights Reserved. Monthly performance data and certain fund characteristics provided by Morningstar, Inc. All other performance data, peer rankings which includes both Mutual Funds and CITs, Target Date Fund attributes and results are calculated and provided by MPI as of 8/30/24. For additional details including holdings as-of-date information, see Important Information Section. Returns based glide path and asset allocation information is calculated using MPIs proprietary DSA® model with indices representing broad asset classes. Performance shown represents past performance. Past performance is no guarantee of future results. Current month-end performance data can be found at [advisor.morningstar.com/familyinfo.asp](http://advisor.morningstar.com/familyinfo.asp). **11**

For Institutional Plan Sponsor and Intermediary Use Only

# Performance as of the Most Recent Quarter End

As of Jun 30, 2024

Vanguard Target Retirement Serie	2065	2060	2055	2050	2045	2040	2035	2030	2025	2020	Income
1 Year	16.63	16.60	16.61	16.63	15.81	14.74	13.52	12.39	11.02	9.24	7.96
3 Years	4.19	4.16	4.15	4.15	3.78	3.23	2.65	2.07	1.51	0.94	0.46
5 Years	9.66	9.68	9.67	9.68	9.40	8.59	7.77	6.95	6.12	5.15	3.72
10 Years	--	8.23	8.24	8.26	8.12	7.65	7.12	6.58	6.03	5.35	3.95
Since Inception	9.16	9.88	10.09	7.82	8.20	7.46	7.48	6.72	6.62	5.97	4.90
Inception Date	7/12/17	1/19/12	8/18/10	6/7/06	10/27/03	6/7/06	10/27/03	6/7/06	10/27/03	6/7/06	10/27/03

Created with Target-Date Radar & MPI Stylus<sup>®</sup> 2024. Markov Processes International Inc. All Rights Reserved. Monthly performance data and certain fund characteristics provided by Morningstar, Inc. All other performance data, peer rankings which includes both Mutual Funds and CITs, Target Date Fund attributes and results are calculated and provided by MPI as of 8/30/24. For additional details including holdings as-of-date information, see Important Information Section. Returns based glide path and asset allocation information is calculated using MPIs proprietary DSA<sup>®</sup> model with indices representing broad asset classes. Performance shown represents past performance. Past performance is no guarantee of future results. Current month-end performance data can be found at [advisor.morningstar.com/familyinfo.asp](http://advisor.morningstar.com/familyinfo.asp). **12**

For Institutional Plan Sponsor and Intermediary Use Only

# Performance as of the Most Recent Month End

As of Aug 31, 2024

<b>BlackRock LifePath Index</b>	<b>2065</b>	<b>2060</b>	<b>2055</b>	<b>2050</b>	<b>2045</b>	<b>2040</b>	<b>2035</b>	<b>2030</b>	<b>2025</b>					<b>Income</b>
1 Year	22.78	22.78	22.73	22.25	21.12	19.33	17.56	15.62	13.55					13.11
3 Years	5.29	5.28	5.29	5.08	4.56	3.74	2.91	2.01	1.00					0.77
5 Years	--	11.62	11.62	11.45	10.85	9.77	8.56	7.22	5.81					4.92
10 Years	--	--	9.03	8.94	8.63	8.01	7.29	6.46	5.60					4.79
Since Inception	11.04	11.73	9.40	9.25	8.93	8.39	7.73	7.01	6.23					5.27
Inception Date	10/30/19	2/29/16	5/31/11	5/31/11	5/31/11	5/31/11	5/31/11	5/31/11	5/31/11	5/31/11				5/31/11

<b>Dimensional Tgt Date Ret Inc Seri</b>	<b>2065</b>	<b>2060</b>	<b>2055</b>	<b>2050</b>	<b>2045</b>	<b>2040</b>	<b>2035</b>	<b>2030</b>	<b>2025</b>	<b>2020</b>	<b>2015</b>	<b>2010</b>	<b>Income</b>
1 Year	22.90	22.93	22.96	22.78	20.31	17.57	14.88	12.43	10.26	10.08	10.33	9.43	9.35
3 Years	7.07	7.04	7.04	7.03	6.21	3.75	0.39	-1.51	-2.15	-1.14	0.06	0.91	1.61
5 Years	--	12.75	12.79	12.75	11.83	9.42	7.12	5.39	4.20	4.12	4.63	4.77	4.33
10 Years	--	--	--	--	--	--	--	--	--	--	--	--	--
Since Inception	11.01	10.62	10.62	10.61	10.09	8.52	7.25	6.42	5.60	5.17	5.05	4.90	4.17
Inception Date	1/2/20	11/2/15	11/2/15	11/2/15	11/2/15	11/2/15	11/2/15	11/2/15	11/2/15	11/2/15	11/2/15	11/2/15	11/2/15

<b>Fidelity Freedom Index Series</b>	<b>2065</b>	<b>2060</b>	<b>2055</b>	<b>2050</b>	<b>2045</b>	<b>2040</b>	<b>2035</b>	<b>2030</b>	<b>2025</b>	<b>2020</b>	<b>2015</b>	<b>2010</b>	<b>Income</b>
1 Year	21.10	21.11	21.09	21.12	21.15	20.32	18.03	16.20	15.06	13.84	12.36	10.95	9.73
3 Years	4.36	4.36	4.37	4.36	4.37	4.01	2.98	2.14	1.59	1.17	0.91	0.67	0.56
5 Years	10.63	10.63	10.62	10.63	10.63	10.41	9.08	7.49	6.54	5.78	4.96	4.09	2.92
10 Years	--	8.59	8.58	8.60	8.59	8.49	7.85	6.87	6.09	5.58	5.02	4.36	3.24
Since Inception	10.02	8.95	8.95	8.95	8.95	8.83	8.13	7.10	6.30	5.79	5.20	4.51	3.42
Inception Date	6/28/19	8/5/14	6/1/11	10/2/09	10/2/09	10/2/09	10/2/09	10/2/09	10/2/09	10/2/09	10/2/09	10/2/09	10/2/09

<b>Schwab Target Index Series</b>	<b>2065</b>	<b>2060</b>	<b>2055</b>	<b>2050</b>	<b>2045</b>	<b>2040</b>	<b>2035</b>	<b>2030</b>	<b>2025</b>	<b>2020</b>	<b>2015</b>	<b>2010</b>	<b>Income</b>
1 Year	22.48	22.24	21.98	21.65	20.97	20.01	18.76	17.17	14.94	14.17	13.65	12.98	
3 Years	5.24	5.16	5.05	4.92	4.70	4.37	3.90	3.29	2.41	2.19	1.98	1.70	
5 Years	--	11.35	11.13	10.88	10.52	9.86	9.10	8.16	6.84	5.77	5.45	5.04	
10 Years	--	--	--	--	--	--	--	--	--	--	--	--	
Since Inception	8.05	10.49	10.36	10.16	9.89	9.42	8.80	8.06	7.03	6.05	5.53	5.25	
Inception Date	2/25/21	8/25/16	8/25/16	8/25/16	8/25/16	8/25/16	8/25/16	8/25/16	8/25/16	8/25/16	8/25/16	8/25/16	

Created with Target-Date Radar & MPI Stylus® 2024. Markov Processes International Inc. All Rights Reserved. Monthly performance data and certain fund characteristics provided by Morningstar, Inc. All other performance data, peer rankings which includes both Mutual Funds and CITs, Target Date Fund attributes and results are calculated and provided by MPI as of 8/30/24. For additional details including holdings as-of-date information, see Important Information Section. Returns based glide path and asset allocation information is calculated using MPI's proprietary DSA® model with indices representing broad asset classes. Performance shown represents past performance. Past performance is no guarantee of future results. Current month-end performance data can be found at [advisor.morningstar.com/familyinfo.asp](http://advisor.morningstar.com/familyinfo.asp). **13**

For Institutional Plan Sponsor and Intermediary Use Only

# Performance as of the Most Recent Month End

As of Aug 31, 2024

Vanguard Target Retirement Serie	2065	2060	2055	2050	2045	2040	2035	2030	2025	2020	Income
1 Year	21.16	21.16	21.14	21.12	20.24	19.14	17.98	16.74	15.25	13.06	11.63
3 Years	4.76	4.74	4.73	4.72	4.33	3.81	3.26	2.69	2.12	1.51	1.07
5 Years	10.97	10.98	10.97	10.98	10.68	9.76	8.84	7.91	6.95	5.84	4.19
10 Years	--	8.57	8.57	8.59	8.44	7.97	7.44	6.89	6.31	5.60	4.20
Since Inception	9.60	10.12	10.30	8.00	8.35	7.63	7.63	6.90	6.77	6.12	5.03
Inception Date	7/12/17	1/19/12	8/18/10	6/7/06	10/27/03	6/7/06	10/27/03	6/7/06	10/27/03	6/7/06	10/27/03

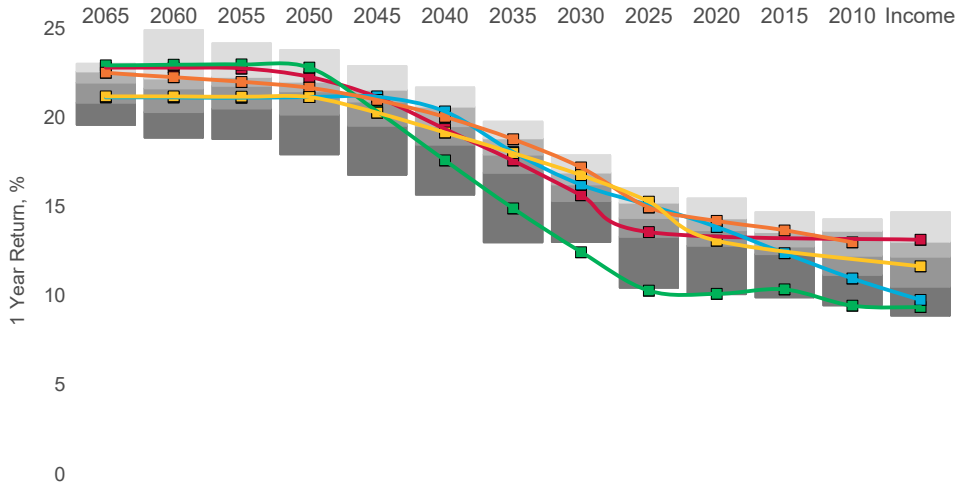
Created with Target-Date Radar & MPI Stylus<sup>®</sup> 2024. Markov Processes International Inc. All Rights Reserved. Monthly performance data and certain fund characteristics provided by Morningstar, Inc. All other performance data, peer rankings which includes both Mutual Funds and CITs, Target Date Fund attributes and results are calculated and provided by MPI as of 8/30/24. For additional details including holdings as-of-date information, see Important Information Section. Returns based glide path and asset allocation information is calculated using MPIs proprietary DSA<sup>®</sup> model with indices representing broad asset classes. Performance shown represents past performance. Past performance is no guarantee of future results. Current month-end performance data can be found at [advisor.morningstar.com/familyinfo.asp](http://advisor.morningstar.com/familyinfo.asp). **14**

For Institutional Plan Sponsor and Intermediary Use Only

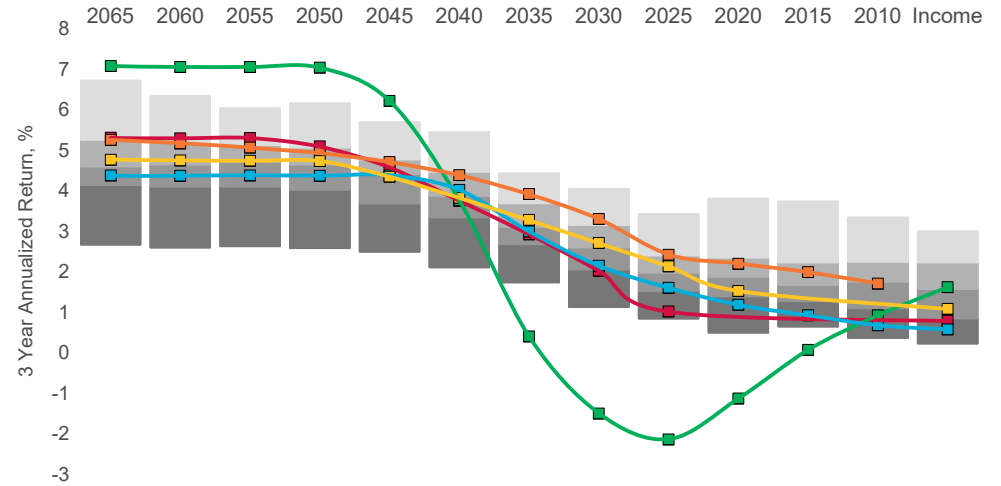
# Performance Over Time

As of Aug 31, 2024

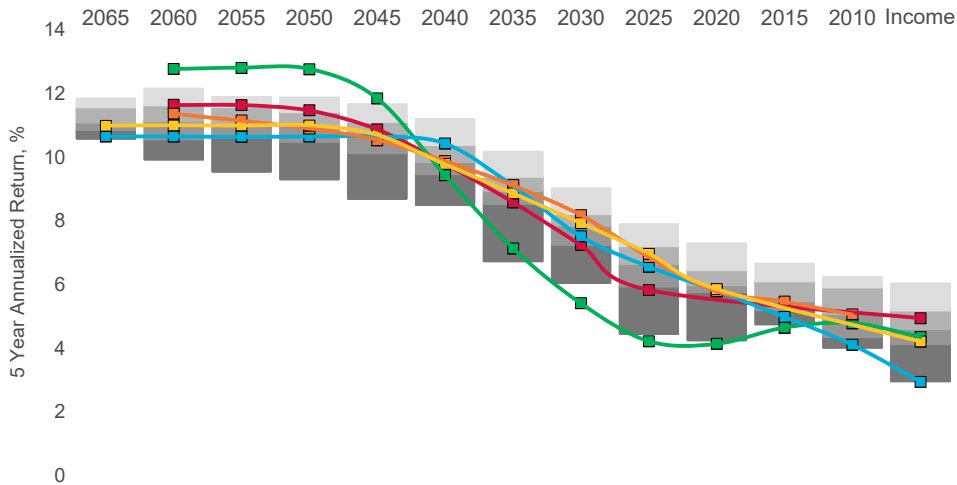
1-YEAR PERFORMANCE VS. MORNINGSSTAR TARGET DATE CATEGORY UNIVERSE



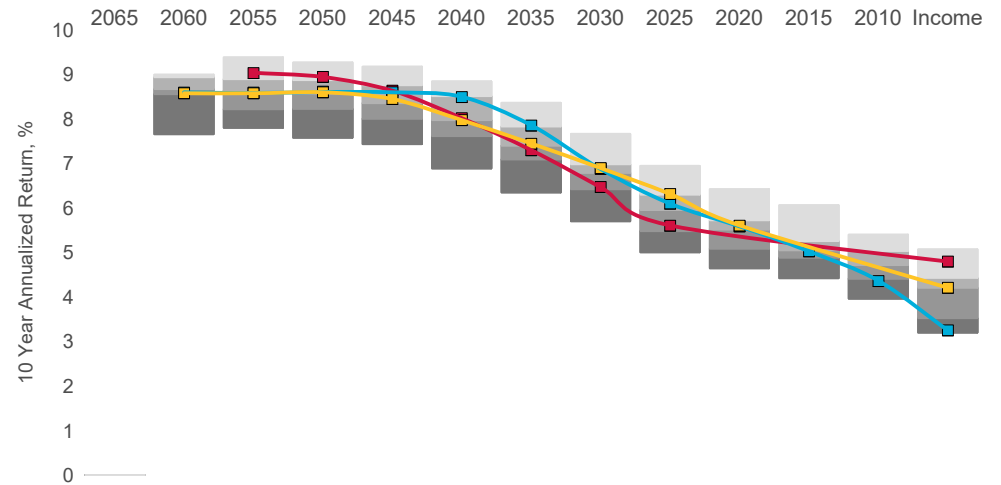
3-YEAR PERFORMANCE VS. MORNINGSSTAR TARGET DATE CATEGORY UNIVERSE



5-YEAR PERFORMANCE VS. MORNINGSSTAR TARGET DATE CATEGORY UNIVERSE



10-YEAR PERFORMANCE VS. MORNINGSSTAR TARGET DATE CATEGORY UNIVERSE



■ BlackRock LifePath Index     
 ■ Dimensional Tgt Date Ret Inc Series     
 ■ Fidelity Freedom Index Series     
 ■ Schwab Target Index Series  
■ Vanguard Target Retirement Series

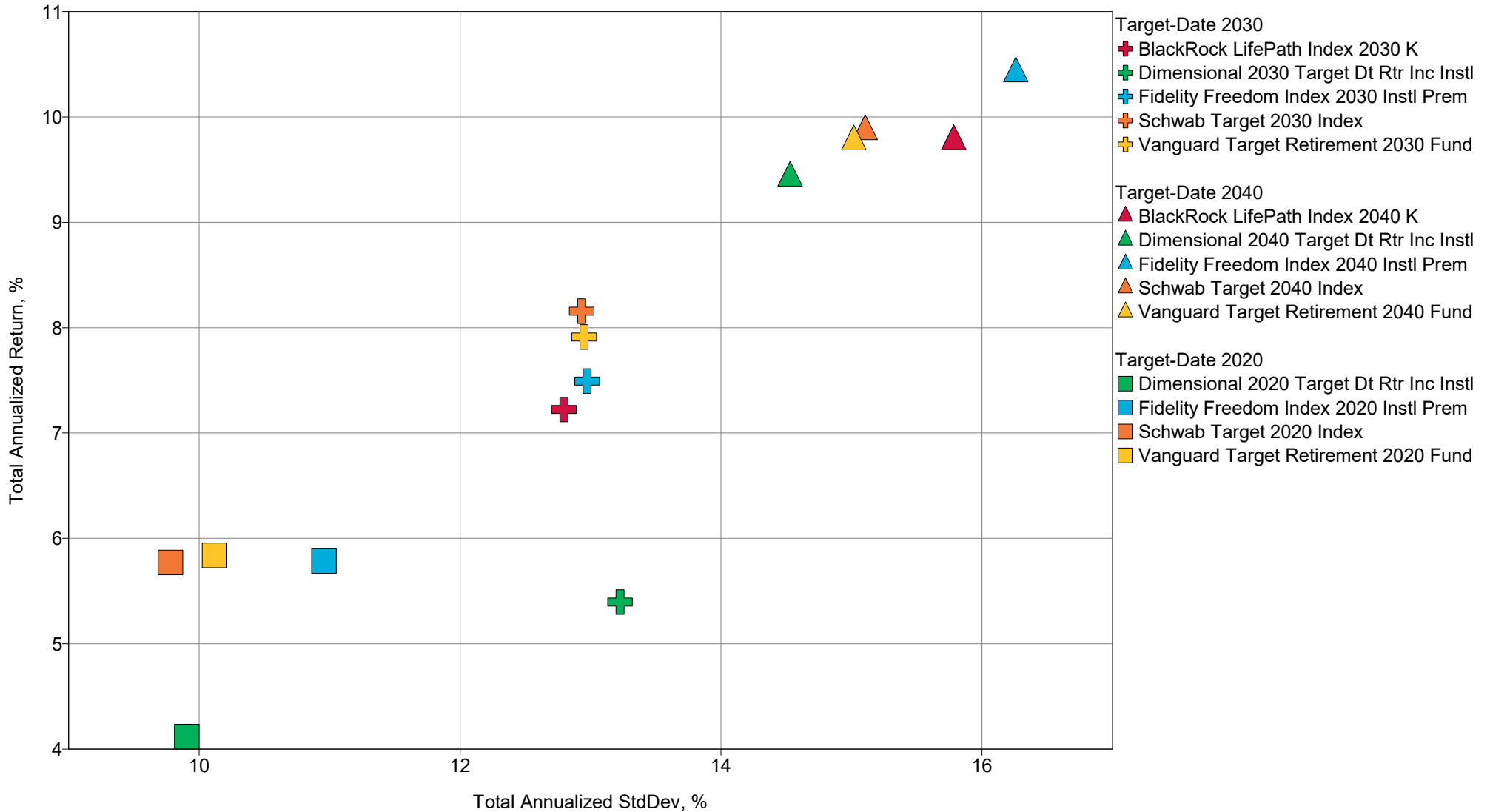
Morningstar Category peer universe is based off of the oldest share class.

Created with Target-Date Radar & MPI Stylus® 2024. Markov Processes International Inc. All Rights Reserved. Monthly performance data and certain fund characteristics provided by Morningstar, Inc. All other performance data, peer rankings which includes both Mutual Funds and CITs, Target Date Fund attributes and results are calculated and provided by MPI as of 8/30/24. For additional details including holdings as-of-date information, see Important Information Section. Returns based glide path and asset allocation information is calculated using MPI's proprietary DSA® model with indices representing broad asset classes. Performance shown represents past performance. Past performance is no guarantee of future results. Current month-end performance data can be found at [advisor.morningstar.com/familyinfo.asp](http://advisor.morningstar.com/familyinfo.asp). **15**

For Institutional Plan Sponsor and Intermediary Use Only

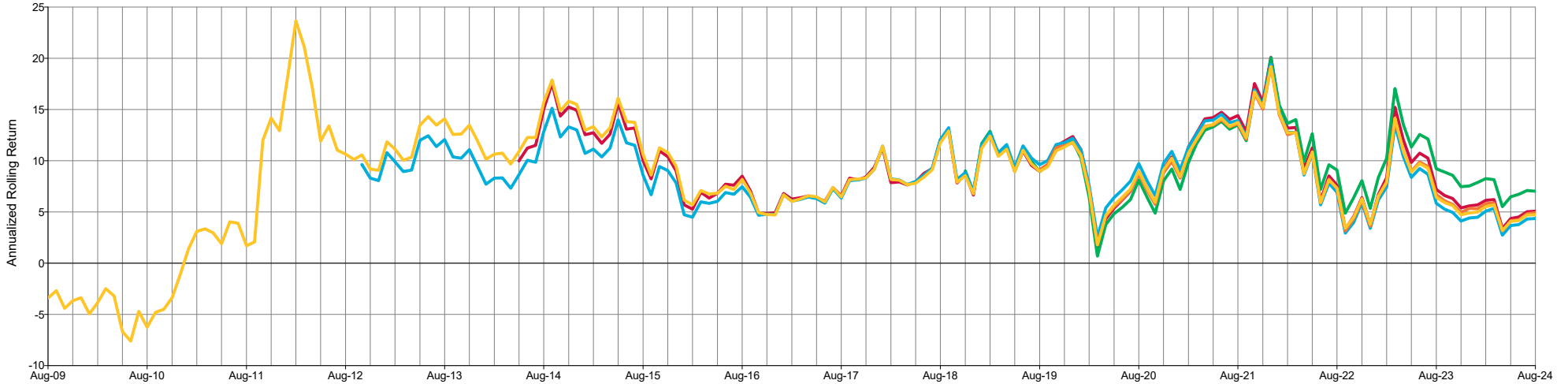
# Risk / Return

## 5 YEAR RISK / RETURN

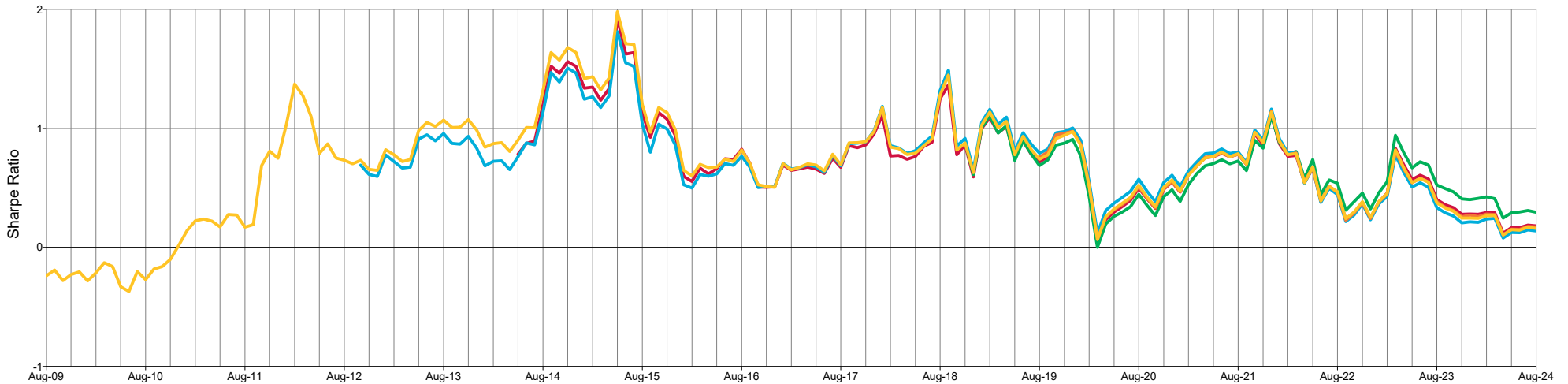


# Rolling Period Returns & Risk Adjusted

## 3 YEAR ROLLING ANNUALIZED RETURNS



## 3 YEAR ROLLING SHARPE RATIO



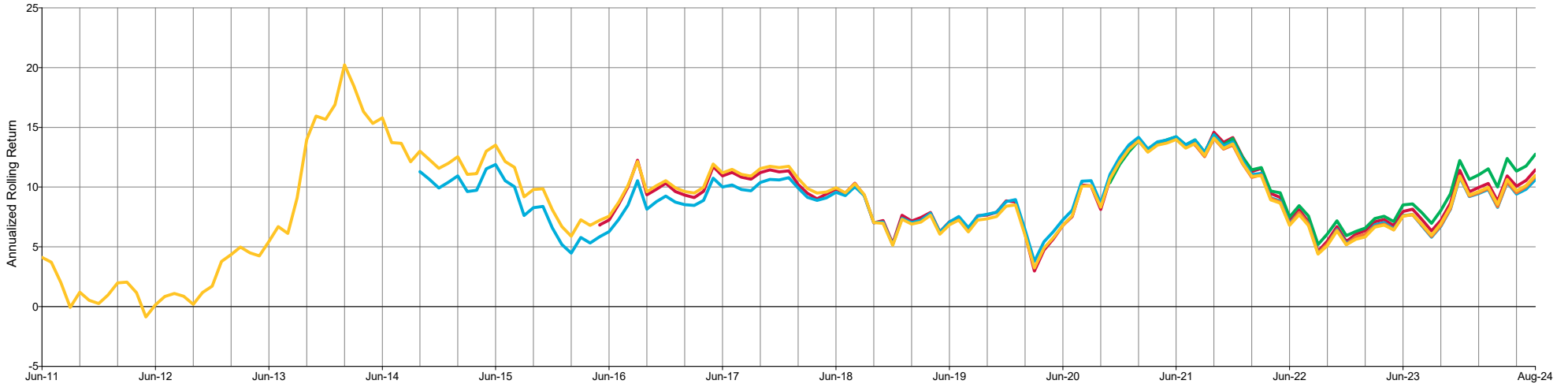
- BlackRock LifePath Index 2050
- Dimensional Tgt Date Ret Inc Series 2050
- Fidelity Freedom Index Series 2050
- Schwab Target Index Series 2050
- Vanguard Target Retirement Series 2050

Created with Target-Date Radar & MPI Stylus® 2024. Markov Processes International Inc. All Rights Reserved. Monthly performance data and certain fund characteristics provided by Morningstar, Inc. All other performance data, peer rankings which includes both Mutual Funds and CITs, Target Date Fund attributes and results are calculated and provided by MPI as of 8/30/24. For additional details including holdings as-of-date information, see Important Information Section. Returns based glide path and asset allocation information is calculated using MPI's proprietary DSA® model with indices representing broad asset classes. Performance shown represents past performance. Past performance is no guarantee of future results. Current month-end performance data can be found at [advisor.morningstar.com/familyinfo.asp](http://advisor.morningstar.com/familyinfo.asp). **17**

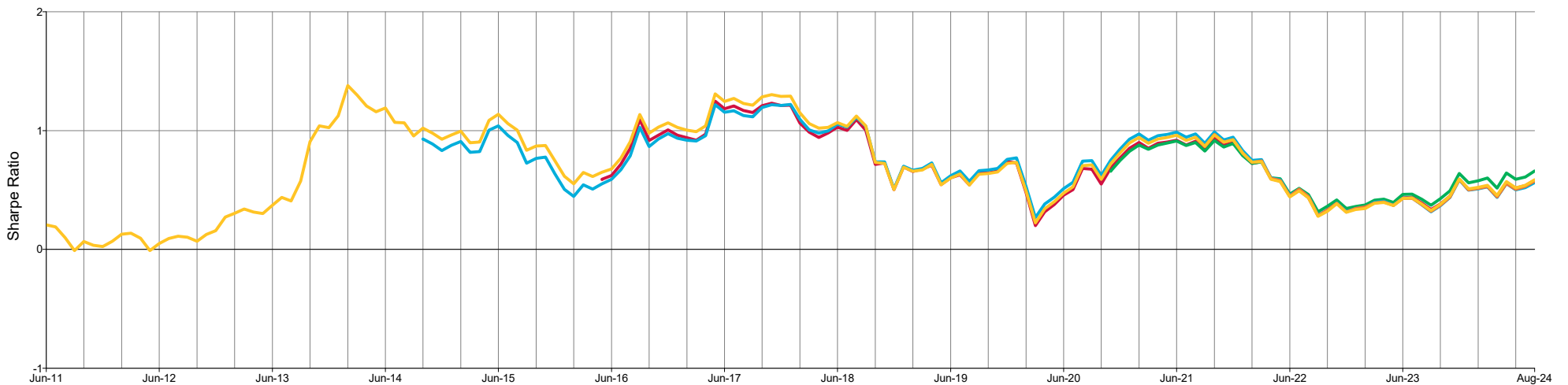
For Institutional Plan Sponsor and Intermediary Use Only

# Rolling Period Returns & Risk Adjusted

## 5 YEAR ROLLING ANNUALIZED RETURNS



## 5 YEAR ROLLING SHARPE RATIO



- BlackRock LifePath Index 2050
- Dimensional Tgt Date Ret Inc Series 2050
- Fidelity Freedom Index Series 2050
- Schwab Target Index Series 2050
- Vanguard Target Retirement Series 2050

Created with Target-Date Radar & MPI Stylus<sup>®</sup> 2024. Markov Processes International Inc. All Rights Reserved. Monthly performance data and certain fund characteristics provided by Morningstar, Inc. All other performance data, peer rankings which includes both Mutual Funds and CITs, Target Date Fund attributes and results are calculated and provided by MPI as of 8/30/24. For additional details including holdings as-of-date information, see Important Information Section. Returns based glide path and asset allocation information is calculated using MPI's proprietary DSA<sup>®</sup> model with indices representing broad asset classes. Performance shown represents past performance. Past performance is no guarantee of future results. Current month-end performance data can be found at [advisor.morningstar.com/familyinfo.asp](http://advisor.morningstar.com/familyinfo.asp). **18**

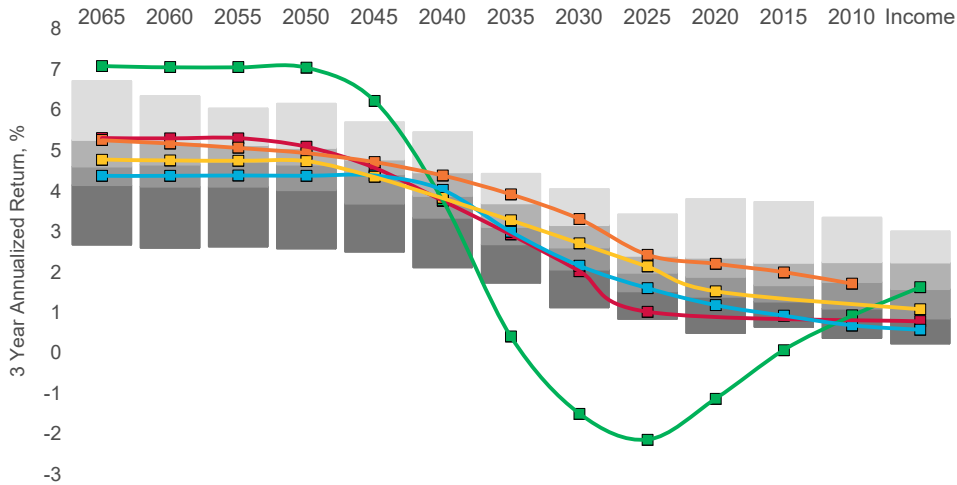
For Institutional Plan Sponsor and Intermediary Use Only



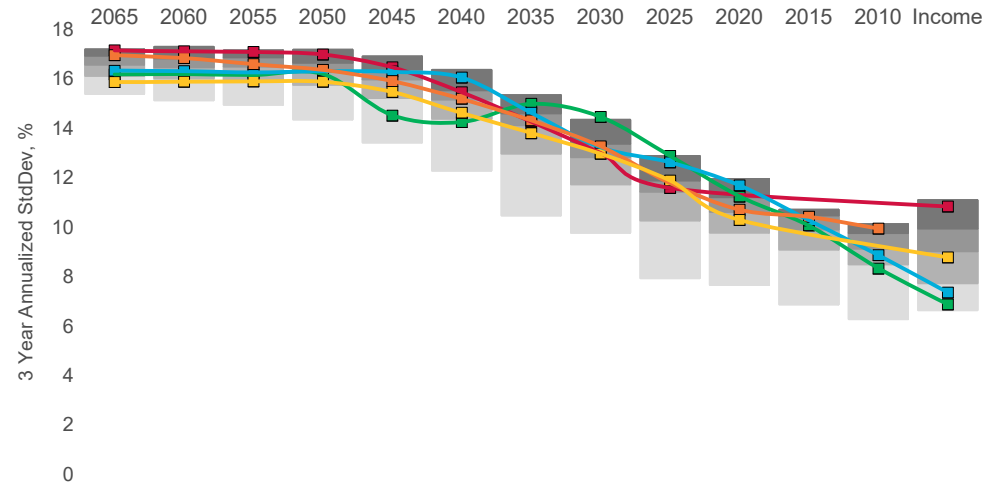
# 3-Year Risk / Return Analysis

As of Aug 31, 2024

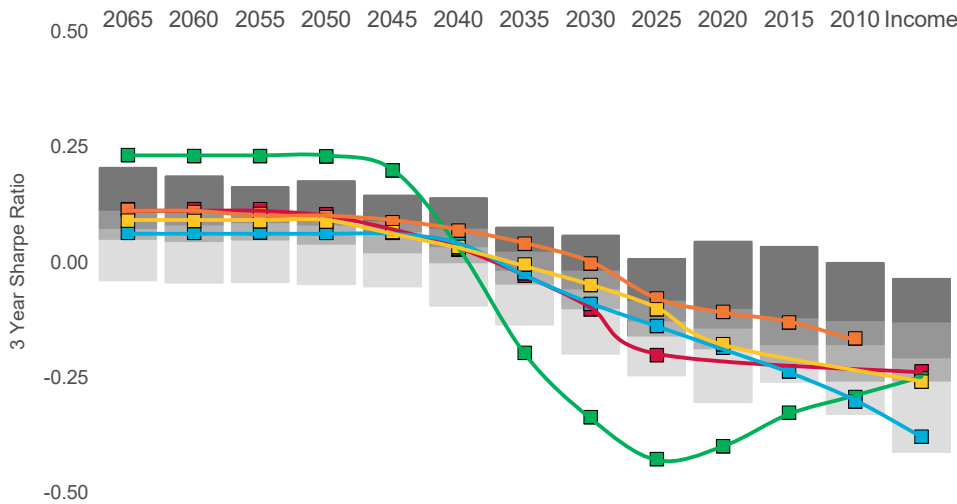
3YR RETURN VS. MORNINGSTAR TARGET DATE CATEGORY UNIVERSE



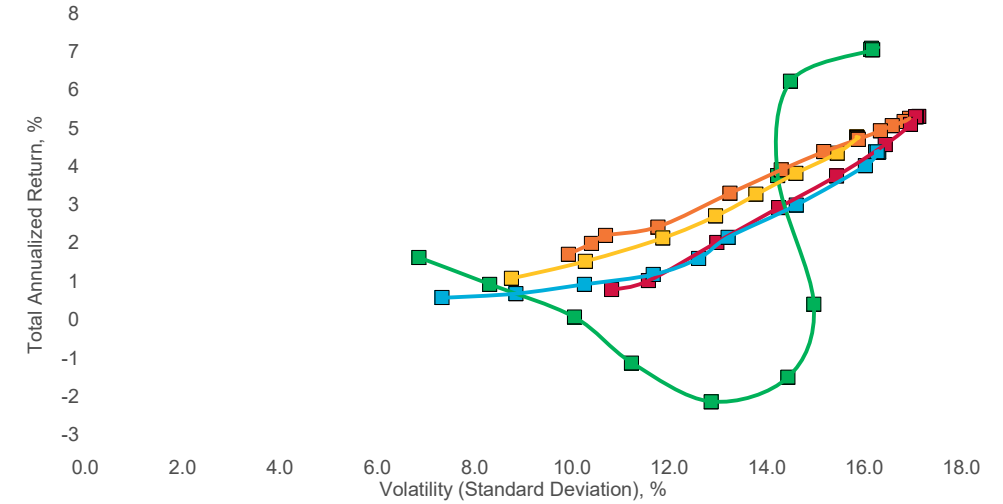
3YR RISK VS. MORNINGSTAR TARGET DATE CATEGORY UNIVERSE



3YR SHARPE RATIO VS. MORNINGSTAR TARGET DATE CATEGORY UNIVERSE



3YR RISK VS. RETURN



■ BlackRock LifePath Index     
 ■ Dimensional Tgt Date Ret Inc Series     
 ■ Fidelity Freedom Index Series     
 ■ Schwab Target Index Series  
■ Vanguard Target Retirement Series

Morningstar Category peer universe is based off of the oldest share class.

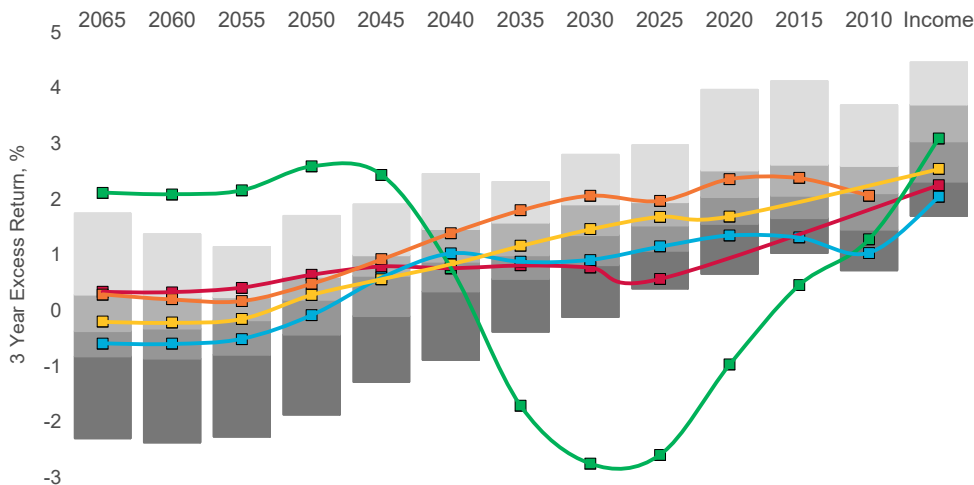
Created with Target-Date Radar & MPI Stylus® 2024. Markov Processes International Inc. All Rights Reserved. Monthly performance data and certain fund characteristics provided by Morningstar, Inc. All other performance data, peer rankings which includes both Mutual Funds and CITs, Target Date Fund attributes and results are calculated and provided by MPI as of 8/30/24. For additional details including holdings as-of-date information, see Important Information Section. Returns based glide path and asset allocation information is calculated using MPIs proprietary DSA® model with indices representing broad asset classes. Performance shown represents past performance. Past performance is no guarantee of future results. Current month-end performance data can be found at [advisor.morningstar.com/familyinfo.asp](http://advisor.morningstar.com/familyinfo.asp). **19**

For Institutional Plan Sponsor and Intermediary Use Only

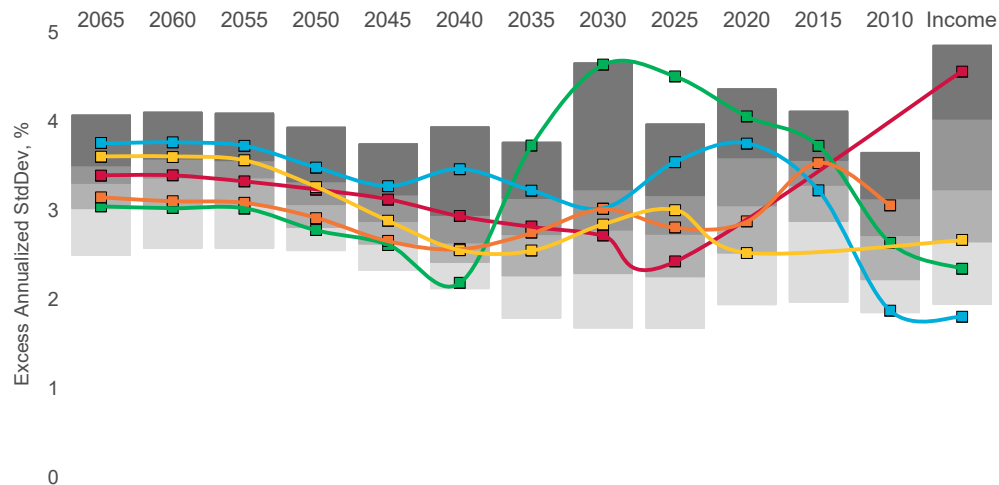
# 3-Year Relative Risk / Return Analysis

As of Aug 31, 2024

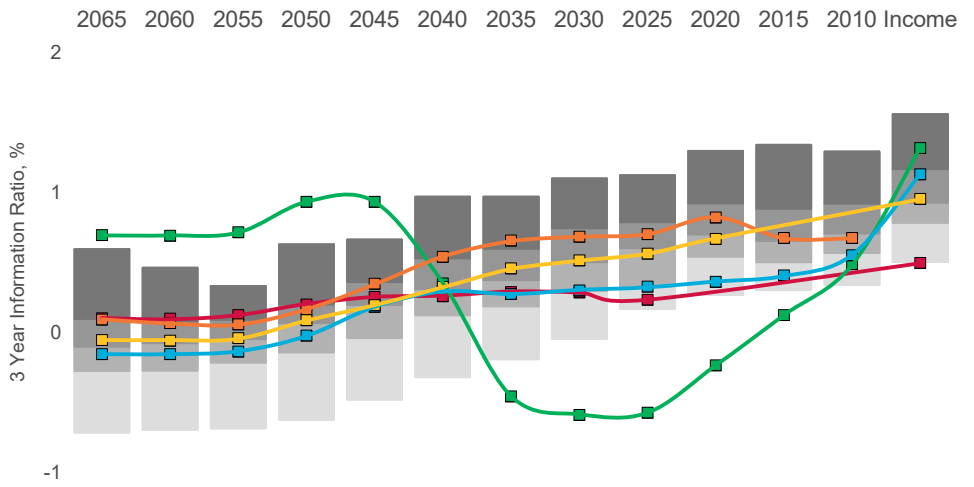
3YR EXCESS RETURN VS. MORNINGSTAR TARGET DATE CATEGORY UNIVERSE



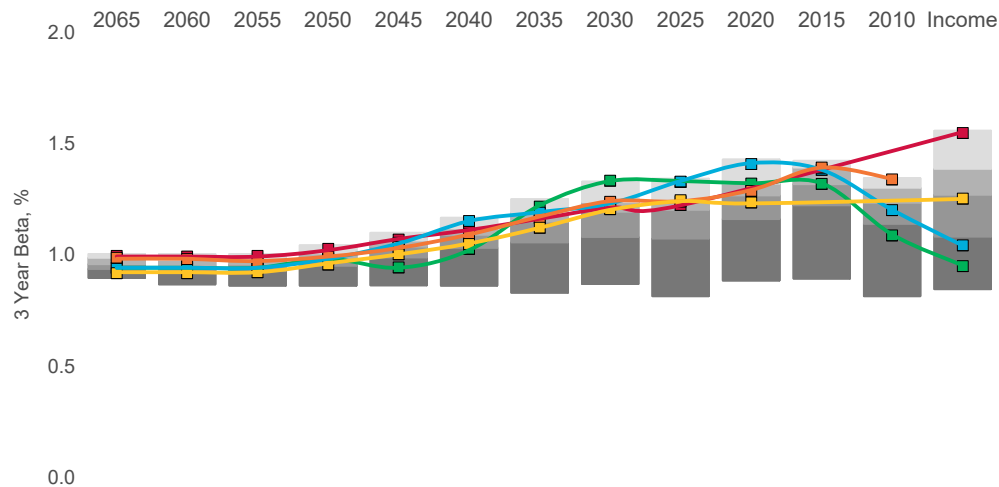
3YR TRACKING ERROR VS. MORNINGSTAR TARGET DATE CATEGORY UNIVERSE



3YR INFORMATION RATIO VS. MORNINGSTAR TARGET DATE CATEGORY UNIVERSE



3YR BETA VS. MORNINGSTAR TARGET DATE CATEGORY UNIVERSE



■ BlackRock LifePath Index     
 ■ Dimensional Tgt Date Ret Inc Series     
 ■ Fidelity Freedom Index Series     
 ■ Schwab Target Index Series  
■ Vanguard Target Retirement Series

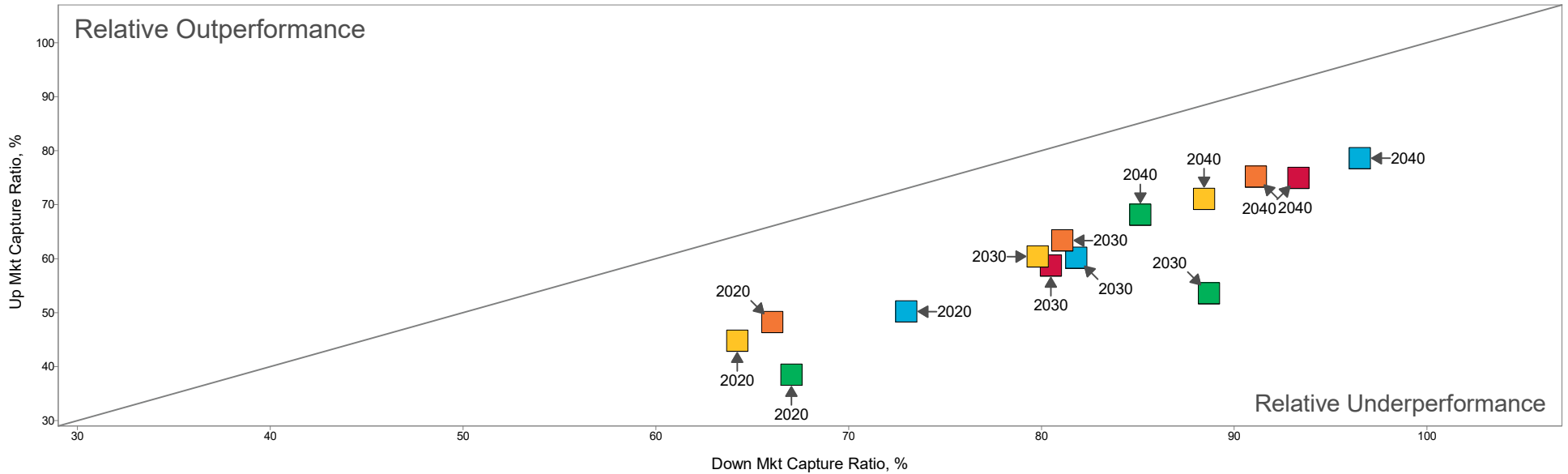
Benchmark series used is Dow Jones Target Date Indices. Specific benchmarks can be found in the disclosure section. Morningstar Category peer universe is based off of the oldest share class.

Created with Target-Date Radar & MPI Stylus® 2024. Markov Processes International Inc. All Rights Reserved. Monthly performance data and certain fund characteristics provided by Morningstar, Inc. All other performance data, peer rankings which includes both Mutual Funds and CITs, Target Date Fund attributes and results are calculated and provided by MPI as of 8/30/24. For additional details including holdings as-of-date information, see Important Information Section. Returns based glide path and asset allocation information is calculated using MPI's proprietary DSA® model with indices representing broad asset classes. Performance shown represents past performance. Past performance is no guarantee of future results. Current month-end performance data can be found at [advisor.morningstar.com/familyinfo.asp](http://advisor.morningstar.com/familyinfo.asp). **20**

For Institutional Plan Sponsor and Intermediary Use Only

# MPT Statistics vs S&P 500 Index

## 3-YEAR UP/DOWN-MARKET CAPTURE RATIO



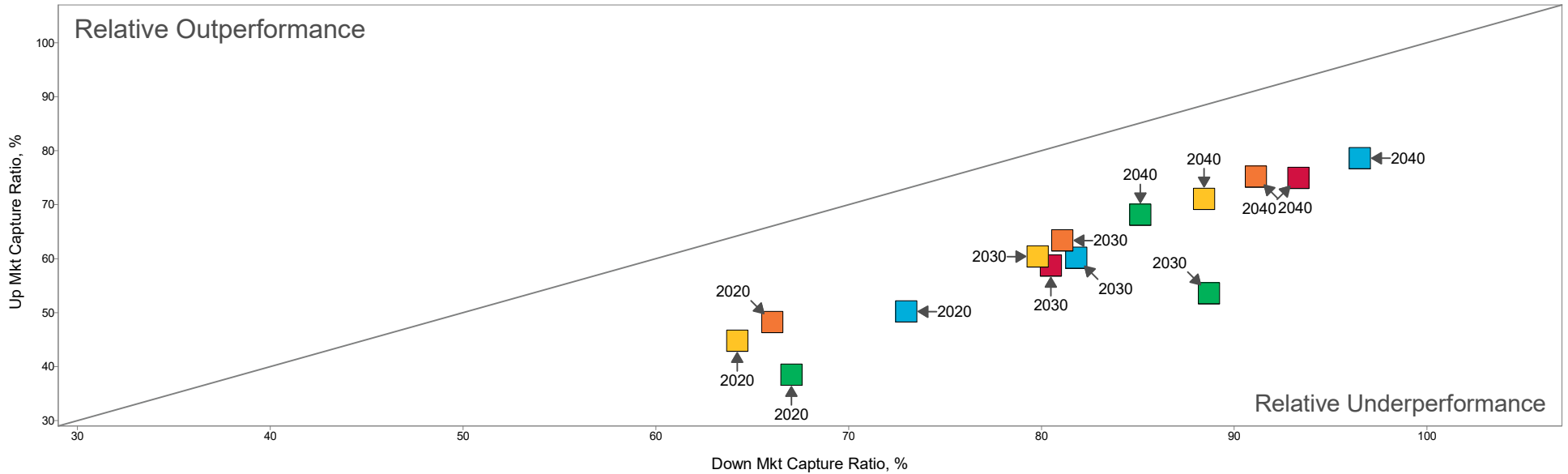
	Up Market Capture Ratio	Down Market Capture Ratio	Up Market Average Return	Down Market Average Return	Number of Up Market Months	Number of Down Market Months	R-Squared
BlackRock LifePath Index 2040 K	74.98	93.33	3.36	-4.31	20.00	16.00	93.89
BlackRock LifePath Index 2030 K	58.71	80.49	2.69	-3.67	20.00	16.00	90.74
Dimensional 2040 Target Dt Rtr Inc Instl	68.14	85.12	3.08	-3.90	21.00	15.00	94.96
Dimensional 2030 Target Dt Rtr Inc Instl	53.60	88.69	2.47	-4.08	20.00	16.00	88.10
Dimensional 2020 Target Dt Rtr Inc Instl	38.50	67.03	1.81	-3.02	20.00	15.00	81.67
Fidelity Freedom Index 2040 Instl Prem	78.61	96.51	3.50	-4.47	20.00	16.00	94.11
Fidelity Freedom Index 2030 Instl Prem	60.18	81.81	2.75	-3.74	20.00	16.00	91.11
Fidelity Freedom Index 2020 Instl Prem	50.24	72.99	2.33	-3.31	19.00	17.00	88.63
Schwab Target 2040 Index	75.21	91.12	3.37	-4.20	20.00	16.00	94.76
Schwab Target 2030 Index	63.37	81.08	2.88	-3.70	20.00	15.00	93.54
Schwab Target 2020 Index	48.28	66.04	2.24	-2.97	20.00	16.00	89.67
Vanguard Target Retirement 2040 Fund	71.08	88.43	3.20	-4.06	20.00	16.00	93.97

Created with Target-Date Radar & MPI Stylus® 2024. Markov Processes International Inc. All Rights Reserved. Monthly performance data and certain fund characteristics provided by Morningstar, Inc. All other performance data, peer rankings which includes both Mutual Funds and CITs, Target Date Fund attributes and results are calculated and provided by MPI as of 8/30/24. For additional details including holdings as-of-date information, see Important Information Section. Returns based glide path and asset allocation information is calculated using MPIs proprietary DSA® model with indices representing broad asset classes. Performance shown represents past performance. Past performance is no guarantee of future results. Current month-end performance data can be found at [advisor.morningstar.com/familyinfo.asp](http://advisor.morningstar.com/familyinfo.asp). **21**

For Institutional Plan Sponsor and Intermediary Use Only

# MPT Statistics vs S&P 500 Index

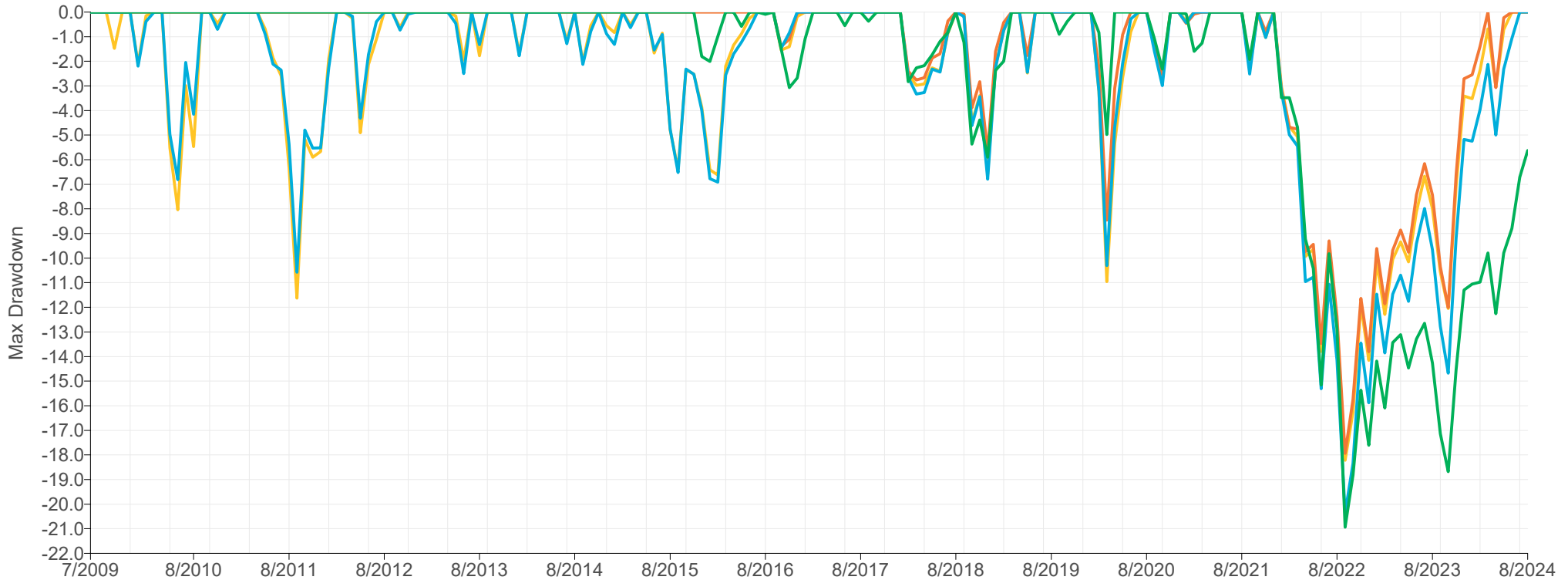
## 3-YEAR UP/DOWN-MARKET CAPTURE RATIO



	Up Market Capture Ratio	Down Market Capture Ratio	Up Market Average Return	Down Market Average Return	Number of Up Market Months	Number of Down Market Months	R-Squared
<span style="color: yellow;">■</span> Vanguard Target Retirement 2030 Fund	60.41	79.80	2.76	-3.64	20.00	16.00	92.24
<span style="color: orange;">■</span> Vanguard Target Retirement 2020 Fund	44.82	64.22	2.09	-2.89	19.00	17.00	88.99

# Max Drawdown

## MAX DRAWDOWN



	Max Drawdown Return	Max Drawdown Duration	Recovery Duration	Max Drawdown Period	Recovery Period	Worst Monthly Return	Worst Month	95% VaR
■ Dimensional 2020 Target Dt Rtr Inc Instl	-20.94	9 Months	23 Months	1/2022 - 9/2022	10/2022 - 8/2024	-9.26	9/2022	3.94
■ Fidelity Freedom Index 2020 Instl Prem	-20.38	9 Months	22 Months	1/2022 - 9/2022	10/2022 - 7/2024	-7.33	3/2020	4.17
■ Schwab Target 2020 Index	-17.94	9 Months	18 Months	1/2022 - 9/2022	10/2022 - 3/2024	-6.35	9/2022	3.97
■ Vanguard Target Retirement 2020 Fund	-18.21	9 Months	21 Months	1/2022 - 9/2022	10/2022 - 6/2024	-7.99	3/2020	4.18

# Asset Allocation (holdings-based)

Holdings As of Jul 31, 2024

BlackRock LifePath Index	2065	2060	2055	2050	2045	2040	2035	2030	2025					Income
Equities	95.80	95.80	95.52	92.45	85.09	74.71	63.64	51.95	39.30					37.67
Bonds	1.01	1.01	1.31	4.44	11.56	21.73	32.57	43.91	56.37					57.88
Cash	3.11	3.12	3.10	3.04	3.28	3.49	3.73	4.08	4.30					4.41
Other	0.08	0.08	0.08	0.08	0.07	0.07	0.06	0.05	0.04					0.04

Holdings As of Jul 31, 2024

Dimensional Tgt Date Ret Inc Ser	2065	2060	2055	2050	2045	2040	2035	2030	2025	2020	2015	2010	Income
Equities	93.24	93.82	93.57	92.10	77.69	64.60	51.53	38.80	25.90	24.63	24.60	20.23	20.00
Bonds	2.68	2.67	2.71	3.50	10.49	25.54	41.57	57.49	73.55	75.02	75.12	68.39	61.05
Cash	4.06	3.50	3.71	4.39	11.80	9.84	6.89	3.70	0.56	0.35	0.28	11.38	18.95
Other	0.01	0.01	0.01	0.01	0.02	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00

Holdings As of Jul 31, 2024

Fidelity Freedom Index Series	2065	2060	2055	2050	2045	2040	2035	2030	2025	2020	2015	2010	Income
Equities	88.32	88.32	88.32	88.32	88.32	81.65	66.55	56.07	49.85	42.38	33.74	25.05	18.04
Bonds	9.76	9.76	9.76	9.76	9.76	15.39	28.50	38.33	44.54	50.25	56.59	62.98	68.28
Cash	1.88	1.88	1.88	1.88	1.88	2.92	4.92	5.57	5.58	7.34	9.65	11.95	13.67
Other	0.05	0.05	0.05	0.05	0.05	0.05	0.04	0.03	0.03	0.03	0.02	0.02	0.01

Holdings As of Aug 31, 2024

Schwab Target Index Series	2065	2060	2055	2050	2045	2040	2035	2030	2025	2020	2015	2010	Income
Equities	96.56	95.02	92.96	90.54	86.07	79.17	71.29	61.20	47.38	42.56	39.74	35.72	
Bonds	2.51	4.06	6.00	8.41	12.73	19.18	26.79	36.52	49.84	54.42	56.83	60.38	
Cash	0.87	0.87	0.99	1.00	1.16	1.61	1.89	2.25	2.76	3.00	3.41	3.89	
Other	0.06	0.05	0.05	0.05	0.04	0.04	0.03	0.03	0.02	0.02	0.02	0.01	

Morningstar Target Date Cat Avg	2065	2060	2055	2050	2045	2040	2035	2030	2025	2020	2015	2010	Income
Equities	89.10	85.92	85.16	82.29	79.76	71.87	64.16	54.85	46.37	39.94	37.52	32.53	30.72
Bonds	5.70	6.28	6.82	8.45	10.99	16.52	23.19	31.34	37.18	44.46	46.79	48.55	47.64
Cash	3.36	5.47	5.30	6.12	5.82	7.28	7.77	8.50	9.77	9.26	8.83	10.84	14.23
Other	1.85	2.32	2.72	3.15	3.44	4.33	4.88	5.30	6.68	6.35	6.87	8.08	7.40

Morningstar Category peer universe is based off of the oldest share class.

**Allocations and holdings are subject to change.** The above sector weights data are based on a Broad Asset Class Breakdown. Please see Important Information section for detailed information.

Created with Target-Date Radar & MPI Stylus® 2024. Markov Processes International Inc. All Rights Reserved. Monthly performance data and certain fund characteristics provided by Morningstar, Inc. All other performance data, peer rankings which includes both Mutual Funds and CITs, Target Date Fund attributes and results are calculated and provided by MPI as of 8/30/24. For additional details including holdings as-of-date information, see Important Information Section. Returns based glide path and asset allocation information is calculated using MPIs proprietary DSA® model with indices representing broad asset classes. Performance shown represents past performance. Past performance is no guarantee of future results. Current month-end performance data can be found at [advisor.morningstar.com/familyinfo.asp](http://advisor.morningstar.com/familyinfo.asp). **24**

For Institutional Plan Sponsor and Intermediary Use Only

# Asset Allocation (holdings-based)

Holdings As of Aug 31, 2024

Vanguard Target Retirement Seri	2065	2060	2055	2050	2045	2040	2035	2030	2025	2020				Income
■ Equities	86.58	86.62	86.68	86.68	79.67	71.86	64.03	56.14	47.00	34.07				26.68
■ Bonds	9.41	9.46	9.51	9.43	15.24	21.89	28.38	34.85	43.05	54.27				60.81
■ Cash	3.95	3.87	3.75	3.83	5.03	6.20	7.55	8.95	9.89	11.61				12.47
■ Other	0.06	0.06	0.06	0.06	0.06	0.05	0.06	0.06	0.06	0.05				0.05

Morningstar Target Date Cat Avg	2065	2060	2055	2050	2045	2040	2035	2030	2025	2020	2015	2010	Income
■ Equities	89.10	85.92	85.16	82.29	79.76	71.87	64.16	54.85	46.37	39.94	37.52	32.53	30.72
■ Bonds	5.70	6.28	6.82	8.45	10.99	16.52	23.19	31.34	37.18	44.46	46.79	48.55	47.64
■ Cash	3.36	5.47	5.30	6.12	5.82	7.28	7.77	8.50	9.77	9.26	8.83	10.84	14.23
■ Other	1.85	2.32	2.72	3.15	3.44	4.33	4.88	5.30	6.68	6.35	6.87	8.08	7.40

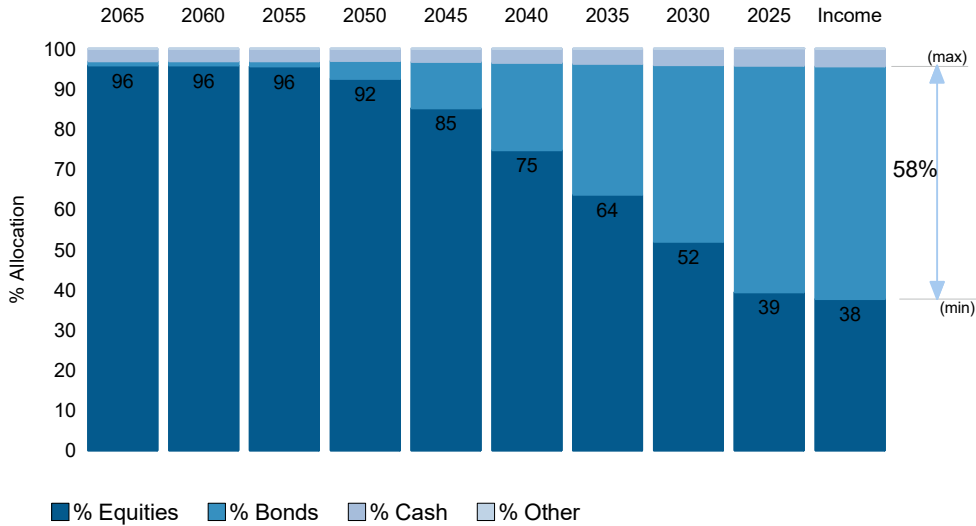
Morningstar Category peer universe is based off of the oldest share class.

**Allocations and holdings are subject to change.** The above sector weights data are based on a Broad Asset Class Breakdown. Please see Important Information section for detailed information.

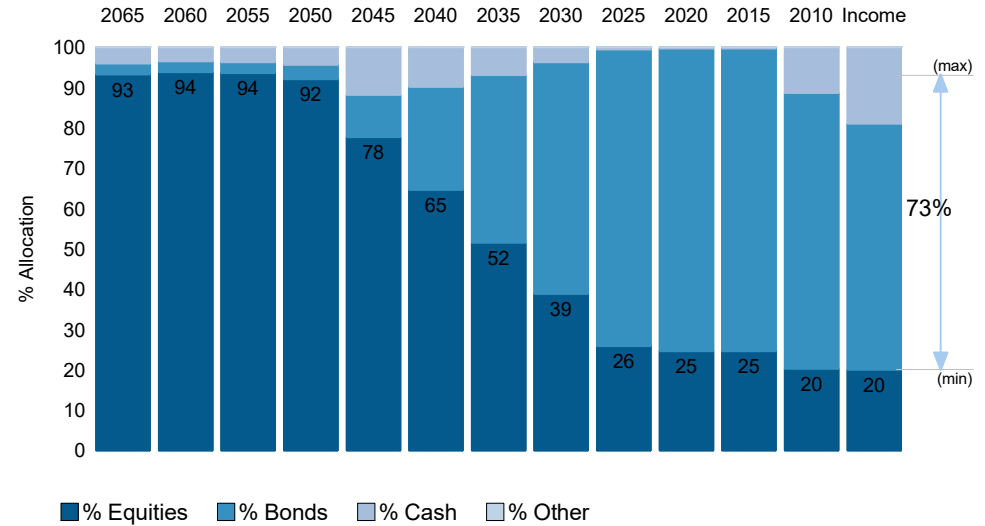
Created with Target-Date Radar & MPI Stylus<sup>®</sup> 2024. Markov Processes International Inc. All Rights Reserved. Monthly performance data and certain fund characteristics provided by Morningstar, Inc. All other performance data, peer rankings which includes both Mutual Funds and CITs, Target Date Fund attributes and results are calculated and provided by MPI as of 8/30/24. For additional details including holdings as-of-date information, see Important Information Section. Returns based glide path and asset allocation information is calculated using MPIs proprietary DSA<sup>®</sup> model with indices representing broad asset classes. Performance shown represents past performance. Past performance is no guarantee of future results. Current month-end performance data can be found at [advisor.morningstar.com/familyinfo.asp](http://advisor.morningstar.com/familyinfo.asp).

# Glide Path (holdings-based)

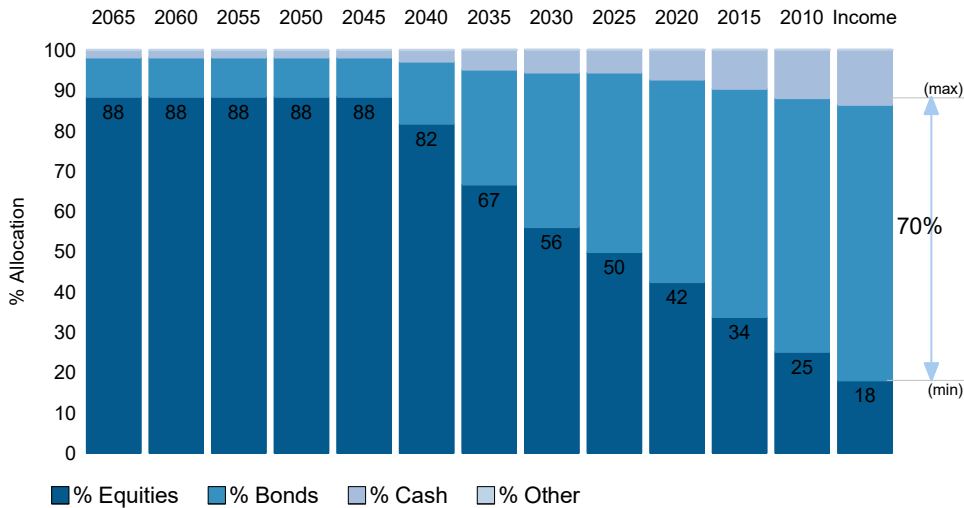
BlackRock LifePath Index



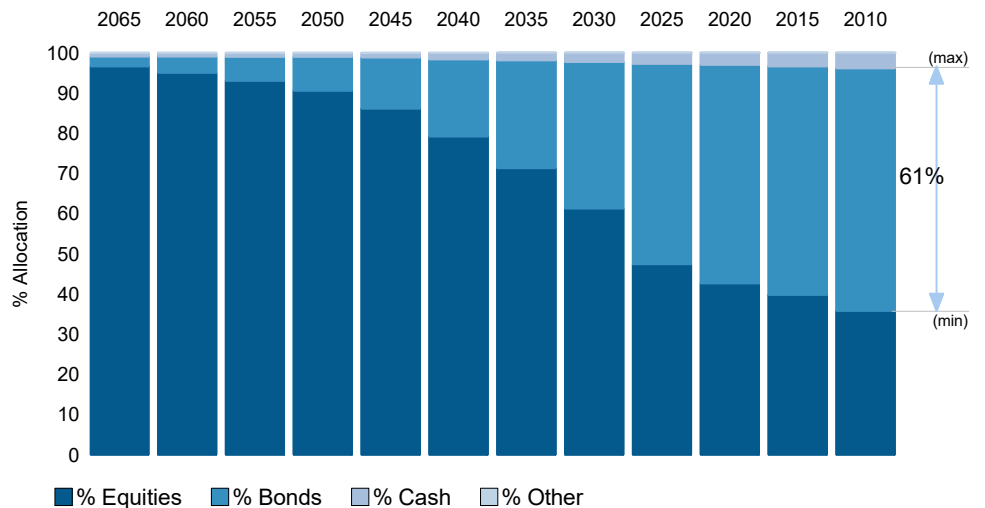
Dimensional Tgt Date Ret Inc Series



Fidelity Freedom Index Series



Schwab Target Index Series



**Allocations and holdings are subject to change.** The above sector weights data are based on a Broad Asset Class Breakdown. Please see Important Information section for detailed information.

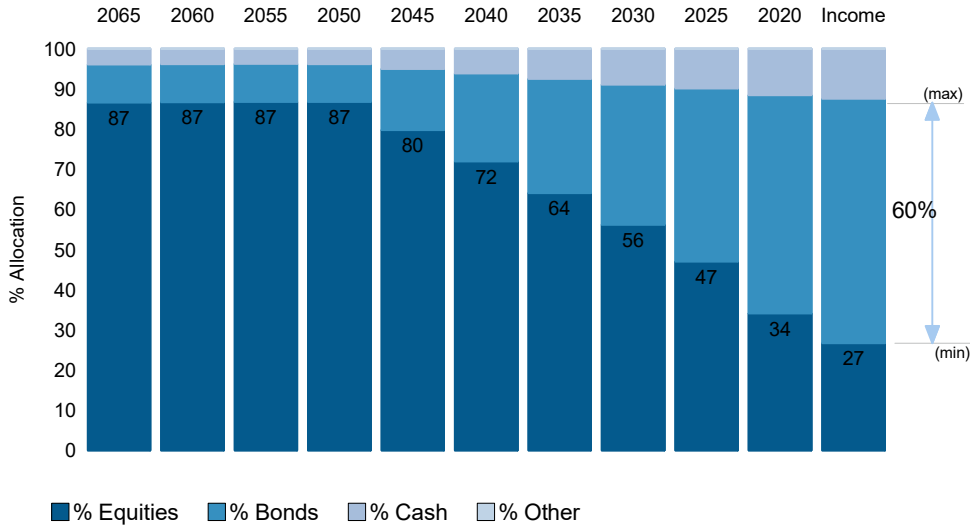
Created with Target-Date Radar & MPI Stylus® 2024. Markov Processes International Inc. All Rights Reserved. Monthly performance data and certain fund characteristics provided by Morningstar, Inc. All other performance data, peer rankings which includes both Mutual Funds and CITs, Target Date Fund attributes and results are calculated and provided by MPI as of 8/30/24. For additional details including holdings as-of-date information, see Important Information Section. Returns based glide path and asset allocation information is calculated using MPIs proprietary DSA® model with indices representing broad asset classes. Performance shown represents past performance. Past performance is no guarantee of future results. Current month-end performance data can be found at [advisor.morningstar.com/familyinfo.asp](http://advisor.morningstar.com/familyinfo.asp). **26**

For Institutional Plan Sponsor and Intermediary Use Only



# Glide Path (holdings-based)

Vanguard Target Retirement Series



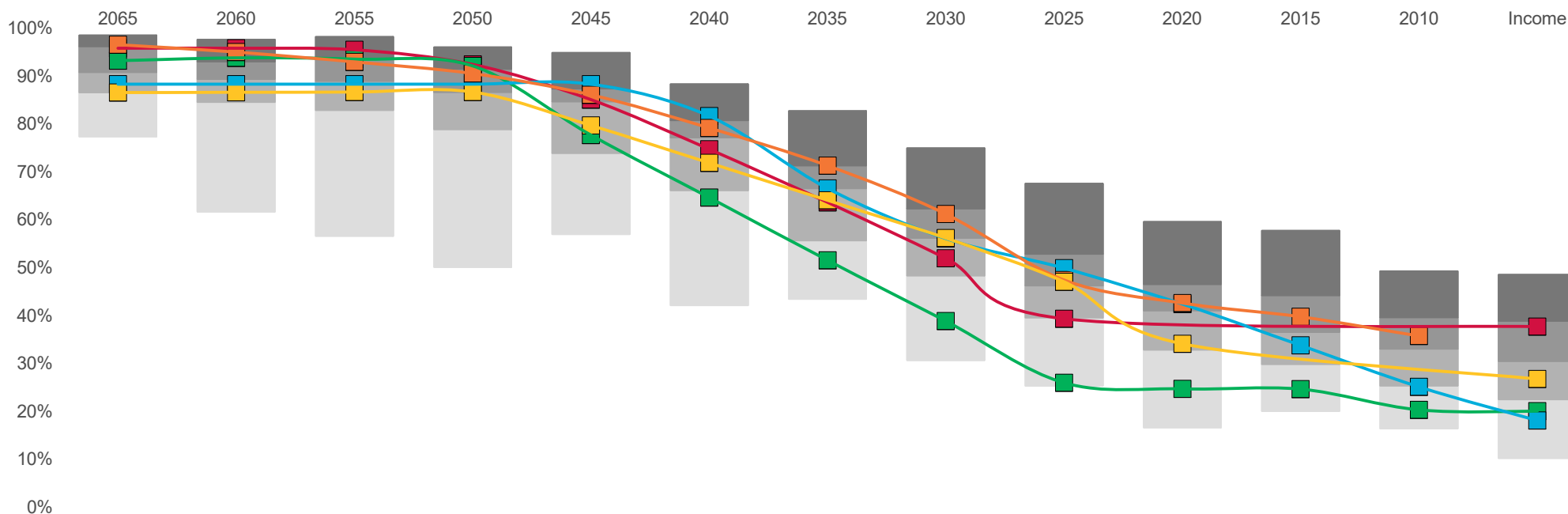
**Allocations and holdings are subject to change.** The above sector weights data are based on a Broad Asset Class Breakdown. Please see Important Information section for detailed information.

Created with Target-Date Radar & MPI Stylus<sup>®</sup> 2024. Markov Processes International Inc. All Rights Reserved. Monthly performance data and certain fund characteristics provided by Morningstar, Inc. All other performance data, peer rankings which includes both Mutual Funds and CITs, Target Date Fund attributes and results are calculated and provided by MPI as of 8/30/24. For additional details including holdings as-of-date information, see Important Information Section. Returns based glide path and asset allocation information is calculated using MPI's proprietary DSA<sup>®</sup> model with indices representing broad asset classes. Performance shown represents past performance. Past performance is no guarantee of future results. Current month-end performance data can be found at [advisor.morningstar.com/familyinfo.asp](https://advisor.morningstar.com/familyinfo.asp). **27**

For Institutional Plan Sponsor and Intermediary Use Only

# Equity Glide Path (holdings-based)

HOLDINGS-BASED EQUITY GLIDE PATH



Strategy Name	As of Date	2065	2060	2055	2050	2045	2040	2035	2030	2025	2020	2015	2010	Income
BlackRock LifePath Index	07/31/2024	95.80	95.80	95.52	92.45	85.09	74.71	63.64	51.95	39.30				37.67
Dimensional Tgt Date Ret Inc Series	07/31/2024	93.24	93.82	93.57	92.10	77.69	64.60	51.53	38.80	25.90	24.63	24.60	20.23	20.00
Fidelity Freedom Index Series	07/31/2024	88.32	88.32	88.32	88.32	88.32	81.65	66.55	56.07	49.85	42.38	33.74	25.05	18.04
Schwab Target Index Series	08/31/2024	96.56	95.02	92.96	90.54	86.07	79.17	71.29	61.20	47.38	42.56	39.74	35.72	
Vanguard Target Retirement Series	08/31/2024	86.58	86.62	86.68	86.68	79.67	71.86	64.03	56.14	47.00	34.07			26.68
Morningstar Target Date Cat Avg		89.10	85.92	85.16	82.29	79.76	71.87	64.16	54.85	46.37	39.94	37.52	32.53	30.72
Morningstar Target Date Cat Median		90.82	89.38	88.95	86.60	84.65	77.15	66.53	56.17	46.21	41.01	36.51	32.99	30.43

Morningstar Category peer universe is based off of the oldest share class.

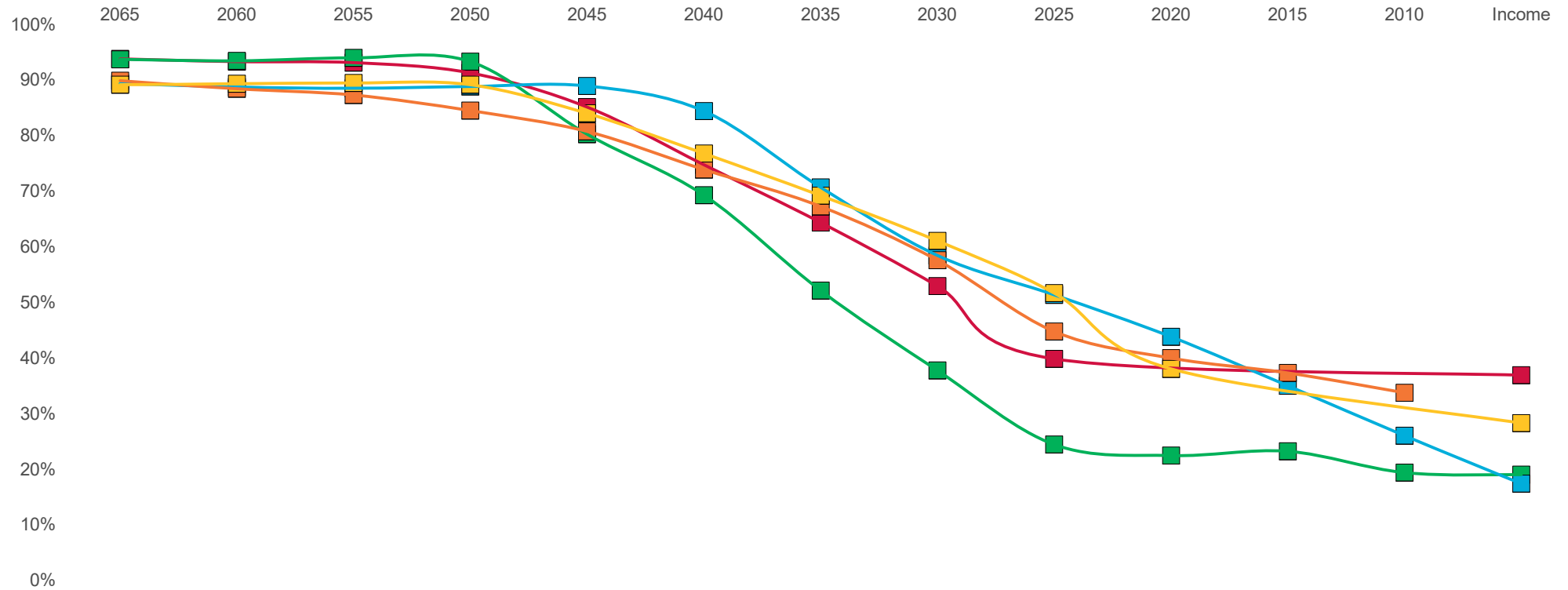
**Allocations and holdings are subject to change.** Equity Holdings are measured as the sum of U.S. Equity and Non-U.S. Equity.

Created with Target-Date Radar & MPI Stylus® 2024. Markov Processes International Inc. All Rights Reserved. Monthly performance data and certain fund characteristics provided by Morningstar, Inc. All other performance data, peer rankings which includes both Mutual Funds and CITs, Target Date Fund attributes and results are calculated and provided by MPI as of 8/30/24. For additional details including holdings as-of-date information, see Important Information Section. Returns based glide path and asset allocation information is calculated using MPIs proprietary DSA® model with indices representing broad asset classes. Performance shown represents past performance. Past performance is no guarantee of future results. Current month-end performance data can be found at [advisor.morningstar.com/familyinfo.asp](http://advisor.morningstar.com/familyinfo.asp). **28**

For Institutional Plan Sponsor and Intermediary Use Only

# Equity Exposure Glide Path (returns-based)

RETURNS-BASED EQUITY EXPOSURE GLIDE PATH



Strategy Name	As of Date	2065	2060	2055	2050	2045	2040	2035	2030	2025	2020	2015	2010	Income
BlackRock LifePath Index	08/30/24	93.75	93.27	93.08	91.22	85.10	74.71	64.32	52.91	39.82				36.87
Dimensional Tgt Date Ret Inc Series	08/30/24	93.67	93.40	93.96	93.27	80.23	69.27	52.08	37.73	24.43	22.43	23.20	19.39	19.01
Fidelity Freedom Index Series	08/30/24	89.33	88.72	88.51	88.79	88.89	84.40	70.65	58.43	51.34	43.77	35.01	26.01	17.39
Schwab Target Index Series	08/30/24	89.84	88.38	87.26	84.45	80.71	73.88	67.22	57.58	44.75	39.96	37.31	33.74	
Vanguard Target Retirement Series	08/30/24	89.13	89.32	89.44	89.12	83.96	76.74	69.16	61.06	51.65	38.02			28.27

Returns based Total Equity Exposure is the result of multi-variate regression of each product to five equity indices that comprise both US and Non-US Equity.

Created with Target-Date Radar & MPI Stylus® 2024. Markov Processes International Inc. All Rights Reserved. Monthly performance data and certain fund characteristics provided by Morningstar, Inc. All other performance data, peer rankings which includes both Mutual Funds and CITs, Target Date Fund attributes and results are calculated and provided by MPI as of 8/30/24. For additional details including holdings as-of-date information, see Important Information Section. Returns based glide path and asset allocation information is calculated using MPI's proprietary DSA® model with indices representing broad asset classes. Performance shown represents past performance. Past performance is no guarantee of future results. Current month-end performance data can be found at [advisor.morningstar.com/familyinfo.asp](http://advisor.morningstar.com/familyinfo.asp). 29

For Institutional Plan Sponsor and Intermediary Use Only

# Equity Allocation Breakdown (holdings-based)

2020	Holdings Date	Equity (%)		Regional Exposure (%)		Market Cap (%)				
		US Equity	Non-US Equity	Emerging Market	Developed Country	Giant Cap	Large Cap	Medium Cap	Small Cap	Micro Cap
Dimensional Tgt Date Ret Inc Series	07/31/2024	17.61	7.02	5.63	94.37	39.81	30.92	21.51	5.96	1.81
Fidelity Freedom Index Series	07/31/2024	25.33	17.05	7.57	92.43	46.36	33.32	15.45	3.68	1.20
Schwab Target Index Series	08/31/2024	32.79	9.77	0.12	99.88	40.32	32.12	21.15	5.03	1.38
Vanguard Target Retirement Series	08/31/2024	20.45	13.62	7.99	92.01	42.61	31.32	19.11	5.47	1.49
Morningstar Target Date Cat Avg	08/31/2024	26.24	12.31	5.38	94.62	38.56	31.82	20.71	7.11	1.79

2030	Date	US Equity	Non-US Equity	Emerging Market	Developed Country	Giant Cap	Large Cap	Medium Cap	Small Cap	Micro Cap
BlackRock LifePath Index	07/31/2024	34.05	17.90	6.21	93.79	41.48	31.48	20.55	5.39	1.09
Dimensional Tgt Date Ret Inc Series	07/31/2024	27.73	11.07	5.63	94.37	39.81	30.92	21.51	5.96	1.80
Fidelity Freedom Index Series	07/31/2024	33.51	22.56	7.58	92.42	46.36	33.32	15.44	3.68	1.20
Schwab Target Index Series	08/31/2024	44.54	16.66	2.61	97.39	40.37	32.00	20.72	5.37	1.54
Vanguard Target Retirement Series	08/31/2024	33.75	22.39	7.96	92.04	42.61	31.32	19.11	5.47	1.49
Morningstar Target Date Cat Avg	08/31/2024	35.23	17.82	5.58	94.42	39.08	31.36	20.43	7.17	1.97

2040	Date	US Equity	Non-US Equity	Emerging Market	Developed Country	Giant Cap	Large Cap	Medium Cap	Small Cap	Micro Cap
BlackRock LifePath Index	07/31/2024	48.58	26.13	6.28	93.72	41.51	31.58	20.70	5.25	0.96
Dimensional Tgt Date Ret Inc Series	07/31/2024	46.15	18.45	5.65	94.35	39.78	30.90	21.53	5.98	1.81
Fidelity Freedom Index Series	07/31/2024	48.81	32.84	7.57	92.43	46.35	33.31	15.44	3.69	1.20
Schwab Target Index Series	08/31/2024	55.59	23.58	3.87	96.13	40.16	31.75	20.38	5.93	1.78
Vanguard Target Retirement Series	08/31/2024	43.97	27.89	7.75	92.25	42.57	31.30	19.13	5.50	1.51
Morningstar Target Date Cat Avg	08/31/2024	45.92	23.61	5.81	94.19	38.84	31.18	20.57	7.39	2.02

Morningstar Category peer universe is based off of the oldest share class.

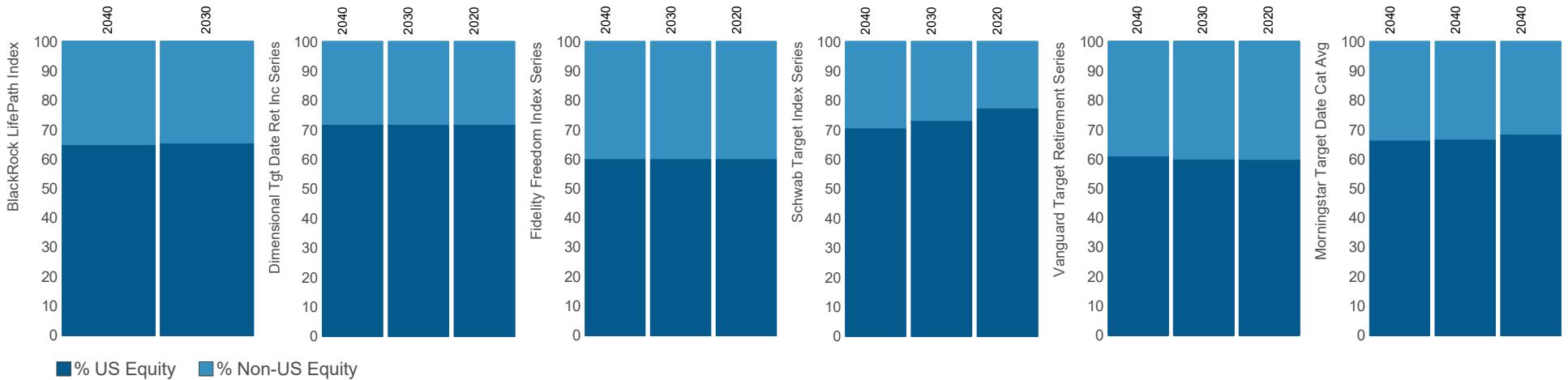
**Allocations and holdings are subject to change.** The above sector weights data are based on a Broad Asset Class Breakdown. Please see Important Information section for detailed information.

Created with Target-Date Radar & MPI Stylus® 2024. Markov Processes International Inc. All Rights Reserved. Monthly performance data and certain fund characteristics provided by Morningstar, Inc. All other performance data, peer rankings which includes both Mutual Funds and CITs, Target Date Fund attributes and results are calculated and provided by MPI as of 8/30/24. For additional details including holdings as-of-date information, see Important Information Section. Returns based glide path and asset allocation information is calculated using MPI's proprietary DSA® model with indices representing broad asset classes. Performance shown represents past performance. Past performance is no guarantee of future results. Current month-end performance data can be found at [advisor.morningstar.com/familyinfo.asp](https://advisor.morningstar.com/familyinfo.asp). **30**

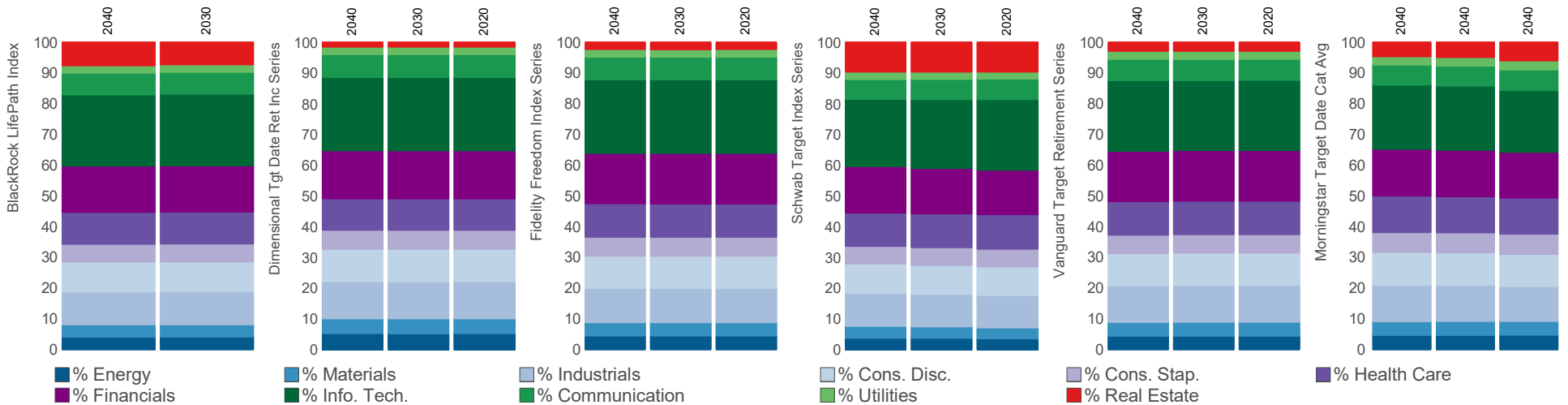
For Institutional Plan Sponsor and Intermediary Use Only

# Equity Allocation Breakdown (holdings-based)

## EQUITY ALLOCATION BREAKDOWN



## SECTOR ALLOCATION BREAKDOWN (GICS)



Morningstar Category peer universe is based off of the oldest share class.

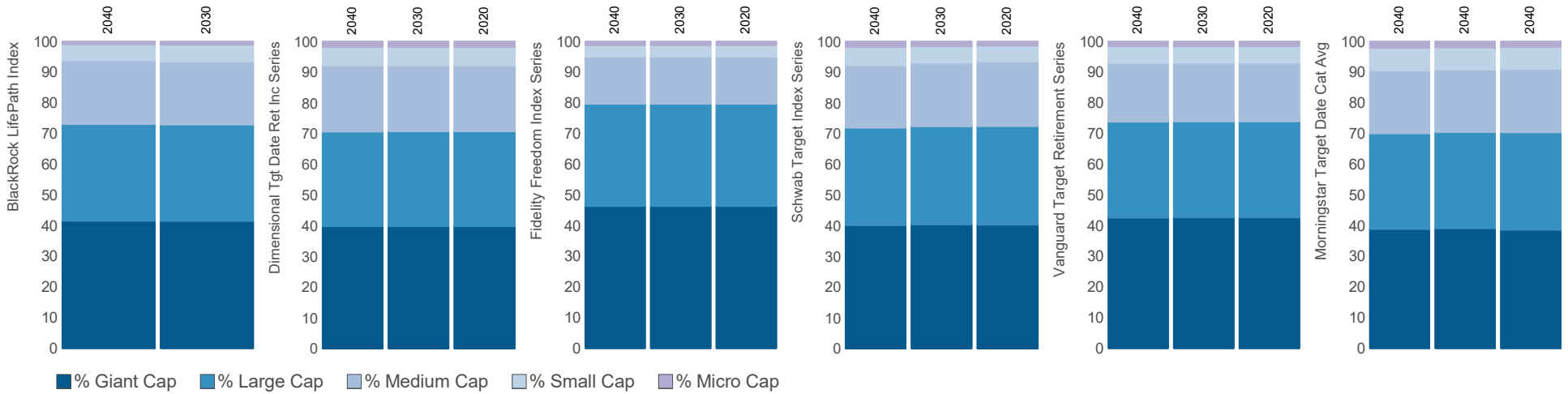
**Allocations and holdings are subject to change.** The above sector weights data are based on a Broad Asset Class Breakdown. Please see Important Information section for detailed information.

Created with Target-Date Radar & MPI Stylus® 2024. Markov Processes International Inc. All Rights Reserved. Monthly performance data and certain fund characteristics provided by Morningstar, Inc. All other performance data, peer rankings which includes both Mutual Funds and CITs, Target Date Fund attributes and results are calculated and provided by MPI as of 8/30/24. For additional details including holdings as-of-date information, see Important Information Section. Returns based glide path and asset allocation information is calculated using MPI's proprietary DSA® model with indices representing broad asset classes. Performance shown represents past performance. Past performance is no guarantee of future results. Current month-end performance data can be found at [advisor.morningstar.com/familyinfo.asp](http://advisor.morningstar.com/familyinfo.asp). **31**

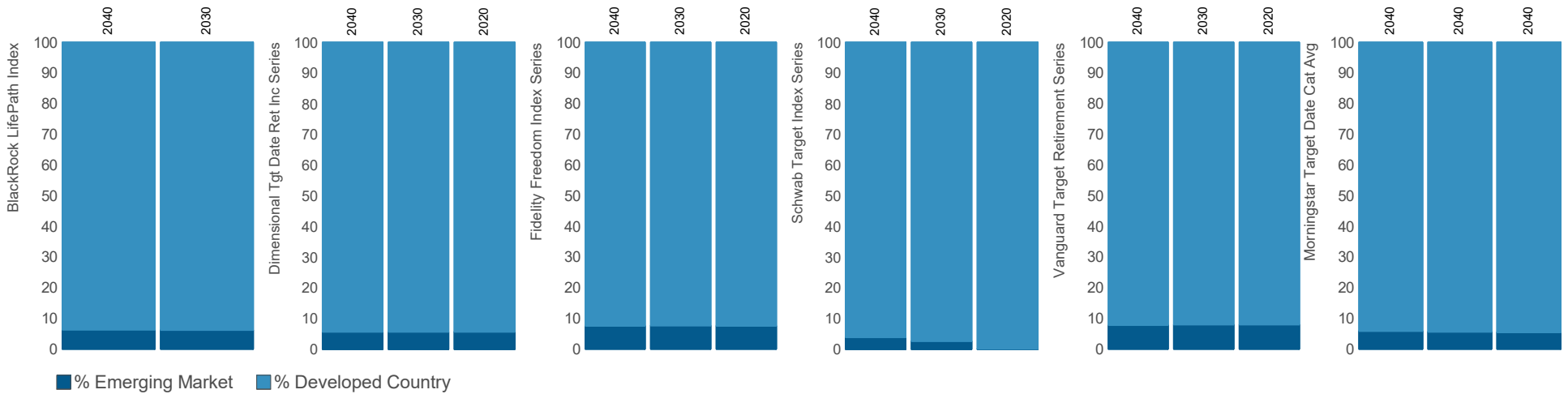
For Institutional Plan Sponsor and Intermediary Use Only

# Equity Allocation Breakdown (holdings-based)

## MARKET CAP BREAKDOWN



## REGION BREAKDOWN



Morningstar Category peer universe is based off of the oldest share class.

**Allocations and holdings are subject to change.** The above sector weights data are based on a Broad Asset Class Breakdown. Please see Important Information section for detailed information.

Created with Target-Date Radar & MPI Stylus® 2024. Markov Processes International Inc. All Rights Reserved. Monthly performance data and certain fund characteristics provided by Morningstar, Inc. All other performance data, peer rankings which includes both Mutual Funds and CITs, Target Date Fund attributes and results are calculated and provided by MPI as of 8/30/24. For additional details including holdings as-of-date information, see Important Information Section. Returns based glide path and asset allocation information is calculated using MPIs proprietary DSA® model with indices representing broad asset classes. Performance shown represents past performance. Past performance is no guarantee of future results. Current month-end performance data can be found at [advisor.morningstar.com/familyinfo.asp](http://advisor.morningstar.com/familyinfo.asp). **32**

For Institutional Plan Sponsor and Intermediary Use Only

# Fixed Income Allocation Breakdown (holdings-based)

2020	Holdings Date	Regional (%)		Sector (%)						Credit Quality (%)					
		US Bonds	Non-US Bonds	Govt	Muni	Corp	Securitized	Cash	Other	AAA	AA	A	BBB	Below Inv Grade	Not Rated
Dimensional Tgt Date Ret Inc Series	07/31/2024	75.02	0.00	99.54	0.00	0.00	0.00	0.46	0.00	0.00	100.00	0.00	0.00	0.00	0.00
Fidelity Freedom Index Series	07/31/2024	43.51	6.74	60.95	0.24	13.78	14.73	10.12	0.18	85.61	5.12	8.11	6.91	0.00	0.00
Schwab Target Index Series	08/31/2024	51.42	3.00	55.66	0.38	18.25	20.49	5.22	0.00	5.08	76.37	8.99	9.56	0.00	0.00
Vanguard Target Retirement Series	08/31/2024	39.49	14.78	55.57	0.25	15.26	11.31	3.79	13.81	66.26	8.10	13.45	11.66	0.54	0.00
Morningstar Target Date Cat Avg	08/31/2024	37.32	5.59	43.51	0.31	22.68	17.03	14.70	1.78	50.26	17.29	9.93	12.00	11.01	0.72

2030	Date	US Bonds	Non-US Bonds	Govt	Muni	Corp	Securitized	Cash	Other	AAA	AA	A	BBB	Below Inv Grade	Not Rated
Dimensional Tgt Date Ret Inc Series	07/31/2024	56.02	1.47	91.52	0.00	2.86	0.00	3.71	1.91	1.05	96.79	0.90	1.27	0.00	0.00
Fidelity Freedom Index Series	07/31/2024	32.10	6.23	57.15	0.25	14.47	15.46	12.44	0.23	85.31	6.00	8.80	7.36	0.00	0.00
Schwab Target Index Series	08/31/2024	34.23	2.29	49.98	0.43	20.66	23.14	5.80	0.00	5.77	73.14	10.22	10.86	0.00	0.00
Vanguard Target Retirement Series	08/31/2024	23.09	11.76	47.25	0.30	18.39	13.65	3.91	16.51	58.05	10.04	16.73	14.51	0.67	0.00
Morningstar Target Date Cat Avg	08/31/2024	25.96	4.36	40.05	0.28	22.64	17.54	17.26	2.23	46.68	20.87	10.24	12.39	10.58	0.82

2040	Date	US Bonds	Non-US Bonds	Govt	Muni	Corp	Securitized	Cash	Other	AAA	AA	A	BBB	Below Inv Grade	Not Rated
Dimensional Tgt Date Ret Inc Series	07/31/2024	21.37	4.17	59.97	0.00	14.10	0.00	16.48	9.45	6.67	79.50	5.72	8.10	0.00	0.00
Fidelity Freedom Index Series	07/31/2024	12.85	2.54	59.05	0.21	12.01	12.84	15.65	0.24	87.95	5.82	7.82	6.44	0.00	0.00
Schwab Target Index Series	08/31/2024	17.87	1.31	44.97	0.45	22.18	24.67	7.72	0.00	6.29	70.71	11.15	11.85	0.00	0.00
Vanguard Target Retirement Series	08/31/2024	14.52	7.37	46.27	0.29	18.01	13.37	5.92	16.14	58.08	10.03	16.72	14.51	0.66	0.00
Morningstar Target Date Cat Avg	08/31/2024	13.35	2.63	35.63	0.34	22.51	15.72	23.49	2.31	44.27	20.86	10.43	13.23	12.02	0.82

For more information on the calculation of Credit Quality, please see Important Information section.

Morningstar Category peer universe is based off of the oldest share class.

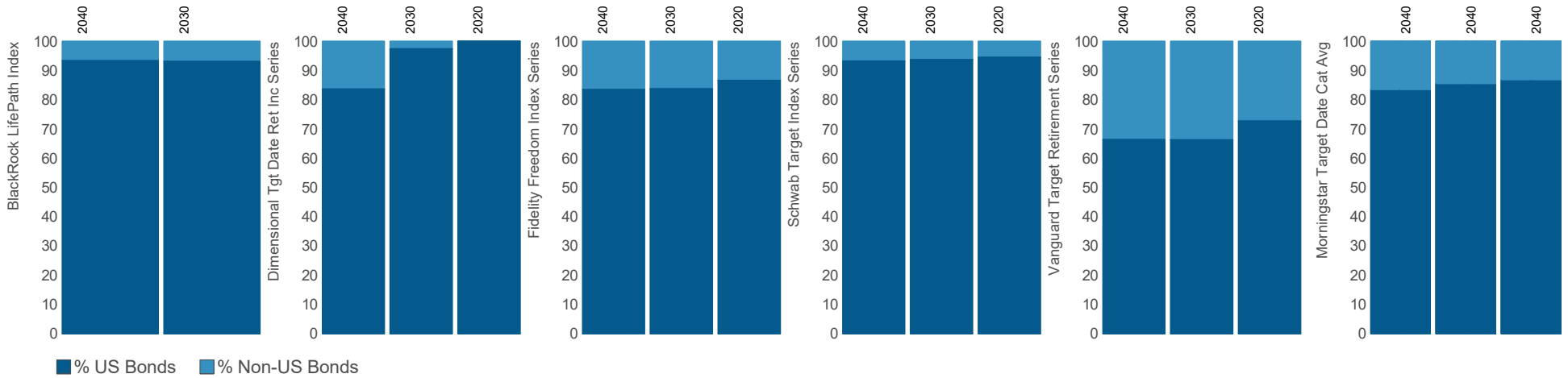
**Allocations and holdings are subject to change.** The above sector weights data are based on a Broad Asset Class Breakdown. Please see Important Information section for detailed information.

Created with Target-Date Radar & MPI Stylus® 2024. Markov Processes International Inc. All Rights Reserved. Monthly performance data and certain fund characteristics provided by Morningstar, Inc. All other performance data, peer rankings which includes both Mutual Funds and CITs, Target Date Fund attributes and results are calculated and provided by MPI as of 8/30/24. For additional details including holdings as-of-date information, see Important Information Section. Returns based glide path and asset allocation information is calculated using MPIs proprietary DSA® model with indices representing broad asset classes. Performance shown represents past performance. Past performance is no guarantee of future results. Current month-end performance data can be found at [advisor.morningstar.com/familyinfo.asp](http://advisor.morningstar.com/familyinfo.asp). **33**

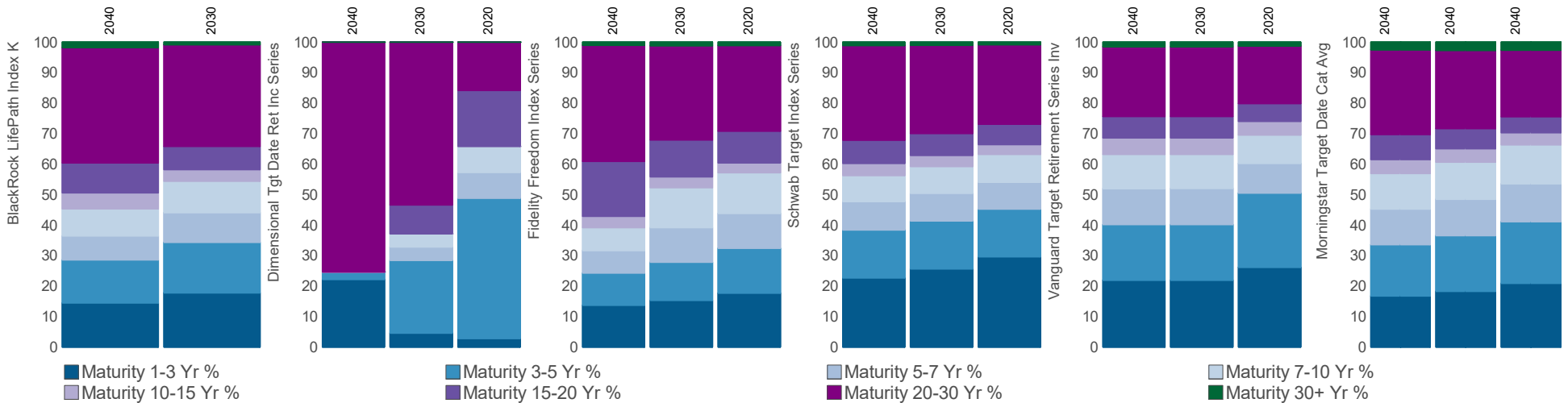
For Institutional Plan Sponsor and Intermediary Use Only

# Fixed Income Allocation Breakdown (holdings-based)

## REGIONAL BREAKDOWN



## MATURITY BREAKDOWN



Morningstar Category peer universe is based off of the oldest share class.

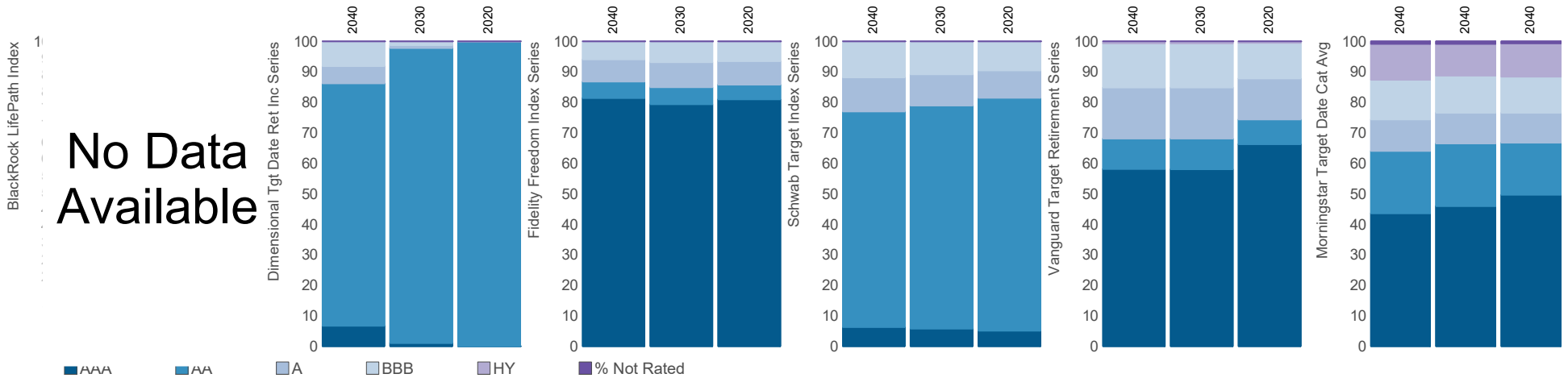
**Allocations and holdings are subject to change.** The above sector weights data are based on a Broad Asset Class Breakdown. Please see Important Information section for detailed information.

Created with Target-Date Radar & MPI Stylus® 2024. Markov Processes International Inc. All Rights Reserved. Monthly performance data and certain fund characteristics provided by Morningstar, Inc. All other performance data, peer rankings which includes both Mutual Funds and CITs, Target Date Fund attributes and results are calculated and provided by MPI as of 8/30/24. For additional details including holdings as-of-date information, see Important Information Section. Returns based glide path and asset allocation information is calculated using MPIs proprietary DSA® model with indices representing broad asset classes. Performance shown represents past performance. Past performance is no guarantee of future results. Current month-end performance data can be found at [advisor.morningstar.com/familyinfo.asp](http://advisor.morningstar.com/familyinfo.asp). **34**

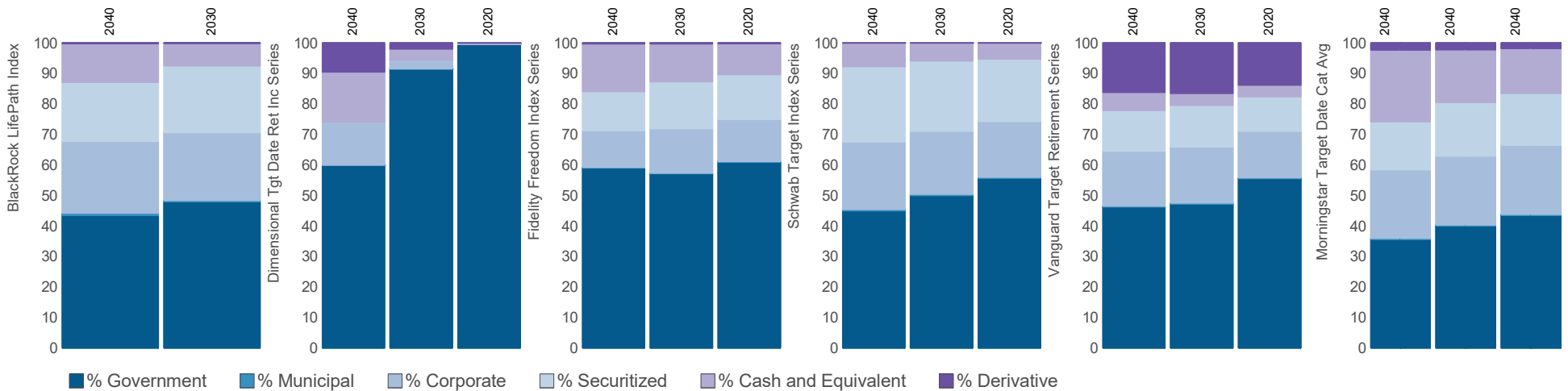


# Fixed Income Allocation Breakdown (holdings-based)

## QUALITY BREAKDOWN



## SECTOR BREAKDOWN



For more information on the calculation of Credit Quality, please see Important Information section.

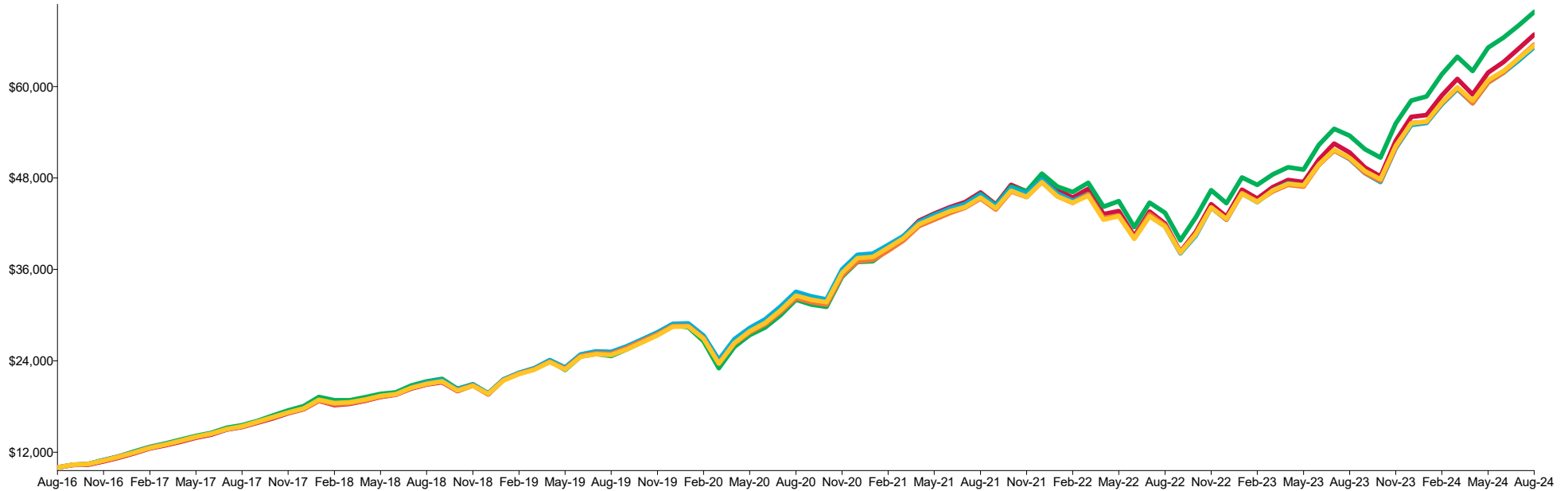
Morningstar Category peer universe is based off of the oldest share class.

**Allocations and holdings are subject to change.** The above sector weights data are based on a Broad Asset Class Breakdown. Please see Important Information section for detailed information.

Created with Target-Date Radar & MPI Stylus® 2024. Markov Processes International Inc. All Rights Reserved. Monthly performance data and certain fund characteristics provided by Morningstar, Inc. All other performance data, peer rankings which includes both Mutual Funds and CITs, Target Date Fund attributes and results are calculated and provided by MPI as of 8/30/24. For additional details including holdings as-of-date information, see Important Information Section. Returns based glide path and asset allocation information is calculated using MPIs proprietary DSA® model with indices representing broad asset classes. Performance shown represents past performance. Past performance is no guarantee of future results. Current month-end performance data can be found at [advisor.morningstar.com/familyinfo.asp](https://advisor.morningstar.com/familyinfo.asp). **35**

# Investment of \$10,000 & Monthly Contribution of \$300

CUMULATIVE PERFORMANCE OF \$10,000 (Aug-16 - Aug-24)



	<b>BlackRock LifePath Index 2050 K</b> ■	<b>Dimensional 2050 Target Dt Rtr Inc Instl</b> ■	<b>Fidelity Freedom Index 2050 Instl Prem</b> ■	<b>Schwab Target 2050 Index</b> ■	<b>Vanguard Target Retirement 2050 Fund</b> ■
Initial Investment (Aug-16)	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Ending Value (Aug-24)	\$66,827	\$69,782	\$65,181	\$65,535	\$65,386
Total Annualized Return	10.51%	11.31%	10.24%	10.22%	10.22%
Total Cumulative Return	122.46%	135.63%	118.17%	117.87%	117.75%
Best Monthly Return	11.99% (Nov-20)	11.66% (Nov-20)	11.35% (Nov-20)	11.20% (Nov-20)	11.26% (Nov-20)
Worst Monthly Return	-14.62% (Mar-20)	-14.50% (Mar-20)	-12.74% (Mar-20)	-13.44% (Mar-20)	-13.26% (Mar-20)
Max Drawdown Return	-25.52%	-22.95%	-25.17%	-24.44%	-24.43%
Max Drawdown Period	Jan-22 - Sep-22 (9)	Jan-22 - Sep-22 (9)	Jan-22 - Sep-22 (9)	Jan-22 - Sep-22 (9)	Jan-22 - Sep-22 (9)
Recovery Period	Oct-22 - Feb-24 (17)	Oct-22 - Dec-23 (15)	Oct-22 - Feb-24 (17)	Oct-22 - Feb-24 (17)	Oct-22 - Feb-24 (17)

This chart represents historical performance and does not assume the effects of sales charges. If shown with sales charges, performance would have been lower.

Values for strategies will only be shown here if the strategy has a product associated with the selected Morningstar Category of *Target Date 2050*

Created with Target-Date Radar & MPI Stylus® 2024. Markov Processes International Inc. All Rights Reserved. Monthly performance data and certain fund characteristics provided by Morningstar, Inc. All other performance data, peer rankings which includes both Mutual Funds and CITs, Target Date Fund attributes and results are calculated and provided by MPI as of 8/30/24. For additional details including holdings as-of-date information, see Important Information Section. Returns based glide path and asset allocation information is calculated using MPI's proprietary DSA® model with indices representing broad asset classes. Performance shown represents past performance. Past performance is no guarantee of future results. Current month-end performance data can be found at [advisor.morningstar.com/familyinfo.asp](https://advisor.morningstar.com/familyinfo.asp). **36**

For Institutional Plan Sponsor and Intermediary Use Only

# Investment of \$2,000,000 & Monthly Withdrawal of \$2,000

CUMULATIVE PERFORMANCE OF \$2,000,000 (Aug-16 - Aug-24)



	<b>Dimensional 2020 Target Dt Rtr Inc Instl</b>	<b>Fidelity Freedom Index 2020 Instl Prem</b>	<b>Schwab Target 2020 Index</b>	<b>Vanguard Target Retirement 2020 Fund</b>
Initial Investment (Aug-16)	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000
Ending Value (Aug-24)	\$2,652,871	\$3,039,386	\$2,965,993	\$3,001,522
Total Annualized Return	4.66%	6.39%	6.09%	6.24%
Total Cumulative Return	44.00%	64.16%	60.51%	62.28%
Best Monthly Return	6.29% (Jul-22)	6.83% (Nov-20)	6.14% (Nov-23)	6.38% (Nov-20)
Worst Monthly Return	-9.26% (Sep-22)	-7.33% (Mar-20)	-6.35% (Sep-22)	-7.99% (Mar-20)
Max Drawdown Return	-20.94%	-20.38%	-17.94%	-18.21%
Max Drawdown Period	Jan-22 - Sep-22 (9)	Jan-22 - Sep-22 (9)	Jan-22 - Sep-22 (9)	Jan-22 - Sep-22 (9)
Recovery Period	Oct-22 - Aug-24 (23)	Oct-22 - Jul-24 (22)	Oct-22 - Mar-24 (18)	Oct-22 - Jun-24 (21)

This chart represents historical performance and does not assume the effects of sales charges. If shown with sales charges, performance would have been lower.

Values for strategies will only be shown here if the strategy has a product associated with the selected Morningstar Category of *Target Date 2020*

Created with Target-Date Radar & MPI Stylus® 2024. Markov Processes International Inc. All Rights Reserved. Monthly performance data and certain fund characteristics provided by Morningstar, Inc. All other performance data, peer rankings which includes both Mutual Funds and CITs, Target Date Fund attributes and results are calculated and provided by MPI as of 8/30/24. For additional details including holdings as-of-date information, see Important Information Section. Returns based glide path and asset allocation information is calculated using MPIs proprietary DSA® model with indices representing broad asset classes. Performance shown represents past performance. Past performance is no guarantee of future results. Current month-end performance data can be found at [advisor.morningstar.com/familyinfo.asp](http://advisor.morningstar.com/familyinfo.asp). **37**

For Institutional Plan Sponsor and Intermediary Use Only

# Important Information

**Note on Data:** All information was sourced through the Morningstar database, and all data was analyzed through MPI Stylus Software. Morningstar is an unaffiliated third-party data provider. Information contained herein is based upon sources we consider to be reliable. Risk/return statistics are calculated using monthly data and are net of fees. All calculated statistics are as of August 30, 2024. Specific Target-Date Fund Strategy level holding and other information, provided by Morningstar, is as of the following dates: BlackRock LifePath Index: 07/31/2024, Dimensional Tgt Date Ret Inc Series: 07/31/2024, Fidelity Freedom Index Series: 07/31/2024, Schwab Target Index Series: 08/31/2024, Vanguard Target Retirement Series: 08/31/2024.

**Beta:** Beta is defined as a Manager's sensitivity to market movements and is used to evaluate market related, or systematic risk. Beta is a measure of the linear relationship, over time, of the Manager's returns and those of the Benchmark. Beta is computed by regressing the Manager's excess returns over the risk free rate (cash proxy) against the excess returns of the Benchmark over the risk free rate. An investment that is as equally volatile as the market will have a Beta of 1.0; an investment half as volatile as the market will have a Beta of 0.5; and so on. Thus, Betas higher than 1.0 indicate that the fund is more volatile than the market.

**Broad Asset Class Breakdown:** Broad Asset Class Breakdown is based on underlying holdings classified by Morningstar into four general investment groups. They are calculated using long-only rescaled position holdings, as of the portfolio holdings date indicated. In a rare instance, the portfolio date across vintage years within may differ.

- **% Equities:** Equities include only common stocks (U.S. and Non-U.S. Equities).
- **% Bonds:** Bonds include everything from government notes to high-yield corporate bonds (U.S. and Non-U.S. Bonds).
- **% Cash:** Cash encompasses both actual cash and cash equivalents (fixed-income securities with a maturity of one year or less) held by the portfolio plus receivables minus payables.
- **% Other:** Other includes preferred stocks (equity securities that pay dividends at a specific rate) as well as convertible bonds and convertible preferreds, which are corporate securities that are exchangeable for a set amount of another form of security (usually common shares) at a pre-stated price. Other also denotes all those not-so-neatly categorized securities, such as warrants and options.

**Credit Quality:** Credit quality is calculated using the highest rating assigned by a nationally recognized statistical rating organization (NRSRO) such as Moody's, S&P, or Fitch. The Not Rated category consists of securities that have not been rated by an NRSRO. Credit ratings are subject to change. Morningstar's database ranges from AAA (highest) to B (lowest). U.S. Government bonds carry the highest credit rating, while bonds issued by speculative companies usually carry the lowest credit ratings. For taxable bonds, anything at or below BB is considered a high-yield or junk bond. For municipal bonds, anything at or below BBB is considered a high-yield or junk bond. For the purpose of Morningstar's calculations, U.S. government bonds are considered AAA. Nonrated municipal bonds generally are classified as BBB. Other nonrated bonds generally are considered B.

**Down Market Average Return:** Average monthly return over the time period analyzed in which the market (benchmark) earned a negative return.

**Down Market (Mkt) Capture Ratio:** Down Market Capture Ratio is a measure of an investment's performance in down markets relative to the market itself. A down market is one in which the market's return is less than zero. The lower the investment's Down Market Capture Ratio, the better the investment protected capital during a market decline. A negative Down Market Capture Ratio indicates that an investment's returns rose while the market declined.

**Equity Sector Allocations:** The percentage a manager has allocated to specific GICS classified economic sectors. Sectors are based on what companies actually do. That is, unlike some standard sector classification systems, sectors aren't based on expected behavior of the stocks of these companies. This is calculated for all stock portfolios based on the securities in the most recent portfolio. For domestic-stock portfolios, this statistic shows the percentage of the domestic stock assets invested in each of the 11 GICS sector classifications.

**Excess:** Denotes that a statistic is being measured relative to the Market Index selected. The data set analyzed consists of the periodic differences between the investment's measure and the selected Market Index's definition.

# Important Information

**Fixed Income Super Sector Allocations:** The fixed-income securities and fixed-income derivative exposures within a portfolio are rolled up into one of the following super sectors.

- **% Government:** This Super Sector includes all conventional debt issued by governments, bonds issued by a Central Bank or Treasury, and bonds issued by local governments, cantons, regions and provinces.
- **%Municipal:** The Municipal Super Sector includes taxable and tax-exempt debt obligations issued under the auspices of states, cities, counties, provinces, and other non-federal government entities.
- **%Corporate:** This Super Sector includes bank loans, convertible bonds, conventional debt securities issued by corporations, and preferred stock.
- **%Securitized:** The Securitized Super Sector includes all types of mortgage-backed securities, covered bonds and asset-backed securities.
- **%Cash:** This Super Sector includes cash in the bank, certificates of deposit, currency, and money market holdings. Cash can also be any fixed-income securities that mature in less than 12 months. This Super Sector also includes commercial paper and any repurchase agreements held by the fund.
- **%Other:** The Derivatives Super Sector includes the common types of fixed-income derivative contracts: futures and forwards, options and swaps. For display purposes products may elect to identify this sector as Other.

**Information Ratio:** The Information Ratio is a measure of value added by an investment manager. It is the ratio of (annualized) excess return above the selected Market Index to (annualized) Tracking Error. Excess return is calculated by linking the difference of the manager's return for each period minus the selected Market Index return for each period, then annualizing the result.

**Market Cap:** Morningstar separates stock portfolio holdings into five market-capitalization groups: Giant, Large, Mid, Small, and Micro. Of the 5000 largest domestic stocks in the equities database, the top 1% are categorized as Giant, the next 4% are Large, the next 15% are Mid, the next 30% are Small, and the remaining 50% are Micro. Stocks outside of the largest 5000 are also classified as Micro.

**Max Drawdown:** Is the maximum loss incurred by a portfolio during a specified time period. It is used to measure the 'worst case scenario' of investing in a portfolio at the worst possible time.

**Morningstar Target Date Cat Avg:** This is the arithmetic (holdings based data points) or geometric (time series data points) average which is computed by MPI Stylus based on Morningstar's assigned Morningstar Category.

**Morningstar Target Date Cat Med:** This is the arithmetic (holdings based data points) or geometric (time series data points) median which is computed by MPI Stylus based on Morningstar's assigned Morningstar Category.

**Peer Group Data:** Peer group data throughout the report is calculated by MPI based on Morningstar categories. As Target Date funds span across a number of vintages (years to retirement) each vintage is calculated using its unique peer group. A single graph will combine multiple peer group categories which can be visually seen by the date in the column which is associated with the fund and category of the same name. Peer groups contain both Mutual Funds and Collective Investment Trusts (CITs).

**Prospectus Net Expense Ratio:** Morningstar pulls the net prospectus expense ratio from the fund's prospectus. Prospectus-report expense ratios reflect the actual fees charged during a particular fiscal year. The prospectus expense ratio for a fund of funds is the wrap or sponsor fee only. The expense ratio expresses the percentage of assets deducted each fiscal year for fund expenses, including 12b-1 fees, management fees, administrative fees, operating costs, and all other asset-based costs incurred by the fund. Portfolio transaction fees, or brokerage costs, as well as initial or deferred sales charges are not included in the expense ratio. The expense ratio, which is deducted from the fund's average net assets, is accrued on a daily basis. If the fund's assets are small, its expense ratio can be quite high because the fund must meet its expenses from a restricted asset base. Conversely, as the net assets of the fund grow, the expense percentage should ideally diminish as expenses are spread across the wider base. Funds may also opt to waive all or a portion of the expenses that make up their overall expense ratio. The Morningstar peer universe is based off all available share classes.

# Important Information

**R-Squared (R2):** The diversification measure R2 indicates the percentage of volatility in portfolio returns which can be “explained” by market volatility. This statistic indicates the degree to which the observed values of one variable, such as the returns of a managed portfolio, can be explained by, or are associated with the values of another variable, such as a Market Index. The R2 values generally range from 0.0 to 1.0. An investment with an R2 of 1.0 is perfectly correlated with the market whereas an investment with an R2 of 0.0 will behave independently of the market. An R2 of 0.95, for example, implies that 95% of the fluctuations in a portfolio are explained by fluctuations in the market.

**Recovery Period:** The time it takes for the asset to recover all value that was lost during its Max Drawdown period.

**Regional Allocation:** This data set provides a breakdown of the geographical exposure of a fund's stock assets. Regional exposure summarizes a portfolio's exposure to geopolitical risk, and it also provides a reference point for understanding fund returns. Morningstar Categories are assigned based on three years of regional exposure.

- **% Emerging Market:** This data set provides a broad breakdown of an investment's geographical exposure in the Emerging Market region. Each region's exposure is presented as a percentage of non-cash equity assets held by the fund. Regional exposure information summarizes a portfolio's exposure to geopolitical risk.
- **% Developed Country:** This data set provides a broad breakdown of an investment's geographical exposure in the Developed Country region. Each region's exposure is presented as a percentage of non-cash equity assets held by the fund. Regional exposure information summarizes a portfolio's exposure to geopolitical risk.

**Return:** Expressed in percentage terms, Morningstar's calculation of total return is determined each month by taking the change in monthly net asset value, reinvesting all income and capital-gains distributions during that month, and dividing by the starting NAV. Reinvestments are made using the actual reinvestment NAV, and daily payoffs are reinvested monthly. Unless otherwise noted, Morningstar does not adjust total returns for sales charges (such as front-end loads, deferred loads and redemption fees), preferring to give a clearer picture of a fund's performance. The total returns do account for management, administrative, 12b-1 fees and other costs taken out of fund assets. Total returns for periods longer than one year are expressed in terms of compounded average annual returns (also known as geometric total returns), affording a more meaningful picture of fund performance than non-annualized figures.

**Standard Deviation (StdDev):** A measure of the extent to which observations in a series vary from the arithmetic mean of the series. The Standard Deviation of a series of asset returns is a measure of volatility or risk of the asset.

**Sharpe Ratio:** The Sharpe Ratio indicates the excess return per unit of total risk as measured by Standard Deviation. It is a ratio of the arithmetic average of excess returns over the risk free rate to the Standard Deviation. The Sharpe Ratio is a measure of the premium earned for the risk incurred by the portfolio.

**Tracking Error (Excess Standard Deviation):** Tracking Error is a measure of how closely an investment's returns track the returns of the selected Market Index. It is the annualized Standard Deviation of the differences between the investment's and the associated index's returns. If an investment tracks its associated index closely, then Tracking Error will be low. If an investment tracks its associated index perfectly, then Tracking Error will be zero.

**Up Market (Mkt) Capture Ratio:** Up Market Capture Ratio is a measure of a product's performance in up markets relative to the market itself. An up market is one in which the market's return is greater than or equal to zero. The higher the investment's Up Market Capture Ratio, the better the investment capitalized on a rising market.

**Up Market Average Return:** Average monthly return over the time period analyzed in which the market (benchmark) earned a positive return.

# Index Definitions

**S&P Target Date Index Series:** Comprises twelve multi-asset class indices, each corresponding to a particular target retirement date. The asset allocation for each index in the series is determined once a year through survey of large fund management companies that offer target date products. Each index is fully investable, with varying levels of exposure to equities, fixed income and commodities.

**Dow Jones Target Date Indices:** Comprise a series of risk allocations corresponding to target date years. They are composed of sub-indices ranging across several asset classes. The indices serve as market risk-sensitive benchmarks for target date, or "lifecycle", funds, which are typically used within defined contribution retirement plans or to meet other long-term capital accumulation goals. The indices adjust their asset allocations over time to reflect reductions in potential risk as an investor's target date approaches. This aspect of asset class exposure is frequently referred to as a "target date glide path", wherein total equity exposure typically lessens with the passage of time.

**Morningstar Lifetime Allocation Index Family:** The index family is designed to meet the benchmarking needs of target-date investors by offering an objective yardstick for performance comparison. Conceptually, the Morningstar Lifetime Allocation Index family are indexes of indexes. These are a broadly diversified set of indices that helps investors mitigate the challenges related to rising life expectancies, evolving risk appetites, inflation in major retirement expense categories, and postretirement income investing.

## Category Universe / Benchmark Assignments:

Target Date	Morningstar Category	Benchmark
2065	Target-Date 2065+	DJ US 2060 Target Index
2060	Target-Date 2060	DJ US 2060 Target Index
2055	Target-Date 2055	DJ US 2055 Target Index
2050	Target-Date 2050	DJ US 2050 Target Index
2045	Target-Date 2045	DJ US 2045 Target Index
2040	Target-Date 2040	DJ US 2040 Target Index
2035	Target-Date 2035	DJ US 2035 Target Index
2030	Target-Date 2030	DJ US 2030 Target Index
2025	Target-Date 2025	DJ US 2025 Target Index
2020	Target-Date 2020	DJ US 2020 Target Index
2015	Target-Date 2015	DJ US 2015 Target Index
2010	Target-Date 2000-2010	DJ US 2010 Target Index
Income	Target-Date Retirement	DJ Global Target Today Index

# Expense Ratio Information

	Net Expense Ratio	Gross Expense Ratio	Exp Ratio Waiver Type	Exp Ratio Waiver Amount	Exp Ratio Waiver Expir Date	Mgt Fee Waiver Type	Mgt Fee Waiver Amount	Mgt Fee Waiver Expir Date
BlackRock LifePath Index 2025 K	0.09	0.13	Contractual	0.04	06/30/2025			
BlackRock LifePath Index 2030 K	0.09	0.13	Contractual	0.04	06/30/2025			
BlackRock LifePath Index 2035 K	0.09	0.14	Contractual	0.05	06/30/2025			
BlackRock LifePath Index 2040 K	0.09	0.14	Contractual	0.05	06/30/2025			
BlackRock LifePath Index 2045 K	0.09	0.14	Contractual	0.05	06/30/2025			
BlackRock LifePath Index 2050 K	0.09	0.14	Contractual	0.05	06/30/2025			
BlackRock LifePath Index 2055 K	0.09	0.14	Contractual	0.05	06/30/2025			
BlackRock LifePath Index 2060 K	0.09	0.14	Contractual	0.05	06/30/2025			
BlackRock LifePath Index 2065 K	0.09	0.15	Contractual	0.06	06/30/2025			
BlackRock LifePath Index Retire K	0.09	0.13	Contractual	0.04	06/30/2025			
Dimensional 2010 Target Dt Rtr Inc Instl	0.18	0.30	Contractual	0.12	02/28/2025			
Dimensional 2015 Target Dt Rtr Inc Instl	0.17	0.24	Contractual	0.07	02/28/2025			
Dimensional 2020 Target Dt Rtr Inc Instl	0.19	0.20	Contractual	0.01	02/28/2025			
Dimensional 2025 Target Dt Rtr Inc Instl	0.18	0.18	Contractual	0.01	02/28/2023			
Dimensional 2030 Target Dt Rtr Inc Instl	0.18	0.18	Contractual	0.01	02/28/2023			
Dimensional 2035 Target Dt Rtr Inc Instl	0.20	0.20	Contractual	0.01	02/28/2023			
Dimensional 2040 Target Dt Rtr Inc Instl	0.22	0.22	Contractual	0.01	02/28/2023			
Dimensional 2045 Target Dt Rtr Inc Instl	0.22	0.22	Contractual	0.01	02/28/2023			
Dimensional 2050 Target Dt Rtr Inc Instl	0.22	0.22	Contractual	0.03	02/28/2023			
Dimensional 2055 Target Dt Rtr Inc Instl	0.22	0.23	Contractual	0.01	02/28/2025			
Dimensional 2060 Target Dt Rtr Inc Instl	0.22	0.24	Contractual	0.02	02/28/2025			
Dimensional 2065 Target Dt Rtr Inc Instl	0.22	0.53	Contractual	0.31	02/28/2025			
Dimensional Retirement Income Instl	0.19	0.22	Contractual	0.03	02/28/2025			
Fidelity Freedom Index 2010 Instl Prem	0.08	0.08	Contractual	0.05	06/30/2021			
Fidelity Freedom Index 2015 Instl Prem	0.08	0.08	Contractual	0.05	06/30/2021			
Fidelity Freedom Index 2020 Instl Prem	0.08	0.08	Contractual	0.05	06/30/2021			
Fidelity Freedom Index 2025 Instl Prem	0.08	0.08	Contractual	0.05	06/30/2021			
Fidelity Freedom Index 2030 Instl Prem	0.08	0.08	Contractual	0.06	06/30/2021			
Fidelity Freedom Index 2035 Instl Prem	0.08	0.08	Contractual	0.06	06/30/2021			
Fidelity Freedom Index 2040 Instl Prem	0.08	0.08	Contractual	0.06	06/30/2021			
Fidelity Freedom Index 2045 Instl Prem	0.08	0.08	Contractual	0.06	06/30/2021			



# Expense Ratio Information

	Net Expense Ratio	Gross Expense Ratio	Exp Ratio Waiver Type	Exp Ratio Waiver Amount	Exp Ratio Waiver Expir Date	Mgt Fee Waiver Type	Mgt Fee Waiver Amount	Mgt Fee Waiver Expir Date
Fidelity Freedom Index 2050 Instl Prem	0.08	0.08	Contractual	0.06	06/30/2021			
Fidelity Freedom Index 2055 Instl Prem	0.08	0.08	Contractual	0.06	06/30/2021			
Fidelity Freedom Index 2060 Instl Prem	0.08	0.08	Contractual	0.06	06/30/2021			
Fidelity Freedom Index 2065 Instl Prem	0.09	0.09						
Fidelity Freedom Index Inc Instl Prem	0.08	0.08	Contractual	0.04	06/30/2021			
Schwab Target 2010 Index	0.08	0.13	Contractual	0.05				
Schwab Target 2015 Index	0.08	0.13	Contractual	0.05				
Schwab Target 2020 Index	0.08	0.13	Contractual	0.05				
Schwab Target 2025 Index	0.08	0.13	Contractual	0.05				
Schwab Target 2030 Index	0.08	0.13	Contractual	0.05				
Schwab Target 2035 Index	0.08	0.13	Contractual	0.05				
Schwab Target 2040 Index	0.08	0.13	Contractual	0.05				
Schwab Target 2045 Index	0.08	0.13	Contractual	0.05				
Schwab Target 2050 Index	0.08	0.13	Contractual	0.05				
Schwab Target 2055 Index	0.08	0.13	Contractual	0.05				
Schwab Target 2060 Index	0.08	0.13	Contractual	0.05				
Schwab Target 2065 Index	0.08	0.14	Contractual	0.06				
Vanguard Target Retirement 2020 Fund	0.08	0.08						
Vanguard Target Retirement 2025 Fund	0.08	0.08						
Vanguard Target Retirement 2030 Fund	0.08	0.08						
Vanguard Target Retirement 2035 Fund	0.08	0.08						
Vanguard Target Retirement 2040 Fund	0.08	0.08						
Vanguard Target Retirement 2045 Fund	0.08	0.08						
Vanguard Target Retirement 2050 Fund	0.08	0.08						
Vanguard Target Retirement 2055 Fund	0.08	0.08						
Vanguard Target Retirement 2060 Fund	0.08	0.08						
Vanguard Target Retirement 2065 Fund	0.08	0.08						
Vanguard Target Retirement Income Fund	0.08	0.08						