



# MPI Target Date Fund Report

## Target Date Families:

American Funds Trgt Date Rtrmt Series R5

Fidelity Freedom Series

Putnam Retirement Advantage I

State Street Target Retirement Series K

T. Rowe Price Retirement Series

Vanguard Target Retirement Series Inv

### **Date**

March 12, 2018

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# Portfolio Details

	American Funds Trgt Date Rtrmt Series	Fidelity Freedom Series	Putnam Retirement Advantage	State Street Target Retirement Series	T. Rowe Price Retirement Series	Vanguard Target Retirement Series
<b>Share Class / Type</b>	R5 / MF	Other / MF	I / CIT	K / MF	No Load / MF	Inv / MF
<b>Vintages Offered (Incl. Income)</b>	2010 - 2060	2005 - 2060	2020 - 2060	2015 - 2060	2005 - 2060	2015 - 2065
<b>Total # Offered</b>	11	13	10	11	12	12
<b>Active/Passive<sup>o</sup></b>	Active	Active	Active	Passive	Active	Passive
<b>Open/Proprietary<sup>1</sup></b>	Proprietary	Proprietary	Proprietary	Proprietary	Proprietary	Proprietary
<b>Glide Path Type (To / Through)</b>	Through	Through	Through	Through	Through	Through
<b>Landing Point</b>	30 Years After Retirement	15 Years After Retirement	5 Years After Retirement	5 Years After Retirement	30 Years After Retirement	10 Years After Retirement
<b>Equity Exposure (holdings-based)<sup>2</sup></b>	83.91% (2060) 40.68% (2010) 43.23% (Spread)	88.10% (2050) 23.67% (Income) 64.43% (Spread)	82.00% (2060) 25.75% (Income) 56.25% (Spread)	86.77% (2045) 33.51% (Income) 53.26% (Spread)	86.63% (2050) 35.47% (2005) 51.16% (Spread)	88.40% (2060) 29.86% (Income) 58.54% (Spread)
<b>Equity Exposure (returns-based)<sup>3</sup></b>	88.36% (2050) 39.81% (2010) 48.55% (Spread)	94.63% (2045) 22.72% (Income) 71.91% (Spread)	96.99% (2060) 27.46% (Income) 69.53% (Spread)	86.89% (2050) 28.53% (Income) 58.36% (Spread)	85.24% (2050) 35.87% (2005) 49.37% (Spread)	89.32% (2050) 29.22% (Income) 60.10% (Spread)
<b>Non-Traditional Exposure Rank (returns-based)<sup>4</sup></b>	3rd Quartile	1st Quartile	4th Quartile	1st Quartile	2nd Quartile	4th Quartile
<b>Average Prosp. Net Exp. Ratio</b>	0.44	0.66	0.50	0.13	0.68	0.14
<b>Longest Manager Tenure (Years)</b>	11.08	6.75	10.16	3.42	15.42	5.02
<b>Average Manager Tenure (Years)</b>	10.07	6.44	9.05	3.42	13.04	5.02
<b>Largest Net Assets (\$ Millions)</b>	\$16,499.00 (2030)	\$32,153.00 (2030)	\$2,977.39 (2030)	\$952.00 (2025)	\$27,054.00 (2030)	\$39,830.00 (2025)
<b>Average Net Assets Across Vintages (\$ Millions)</b>	\$8,589.36	\$14,280.62	\$1,610.91	\$488.82	\$12,173.08	\$22,126.82
<b>Largest # Underlying Funds</b>	22	32	2290	11	23	6

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.

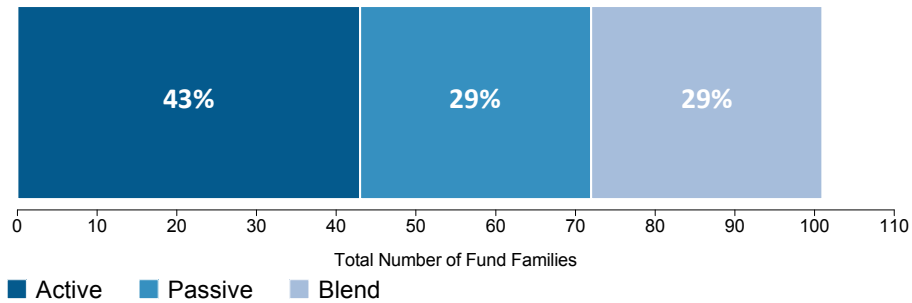
Created with Target-Date Radar & MPI Stylus<sup>®</sup> 2018. Markov Processes International Inc. All Rights Reserved. Monthly performance data and certain fund characteristics provided by Morningstar, Inc. All other performance data, peer rankings which includes both Mutual Funds and CITs, Target Date Fund attributes and results are calculated and provided by MPI as of 2/28/18. 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**

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# Active vs Passive

Active, Passive, or Blend, describes whether the target date fund manager should have an active, passive, or blended investment strategy. Active strategies are when managers actively try to outperform a benchmark by adjusting their holdings to exploit profitable opportunities. Passive strategies are strategies where managers invest in a similar mix of assets as a benchmark/index in order to replicate the results of that index. Blend strategies seek to track the performance of a benchmark/index in addition to earning positive excess returns.

TDF UNIVERSE BREAKDOWN: ACTIVE vs. PASSIVE

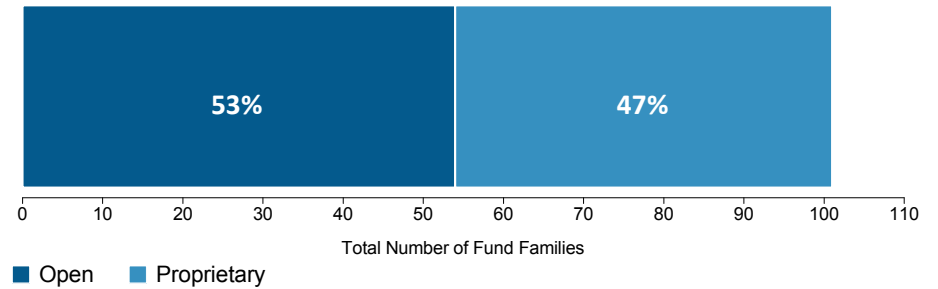


Active vs. Passive vs. Blend	
American Funds Trgt Date Rtrmt Series	Active
Fidelity Freedom Series	Active
Putnam Retirement Advantage	Active
State Street Target Retirement Series	Passive
T. Rowe Price Retirement Series	Active
Vanguard Target Retirement Series	Passive

# Open vs Proprietary

Open or Proprietary describes whether the assets that the target date funds invest in should be managed by the same organization that manages the target date fund itself (Proprietary) or by multiple organizations (Open).

TDF UNIVERSE BREAKDOWN: OPEN vs. PROPRIETARY



Open vs. Proprietary	
American Funds Trgt Date Rtrmt Series	Proprietary
Fidelity Freedom Series	Proprietary
Putnam Retirement Advantage	Proprietary
State Street Target Retirement Series	Proprietary
T. Rowe Price Retirement Series	Proprietary
Vanguard Target Retirement Series	Proprietary

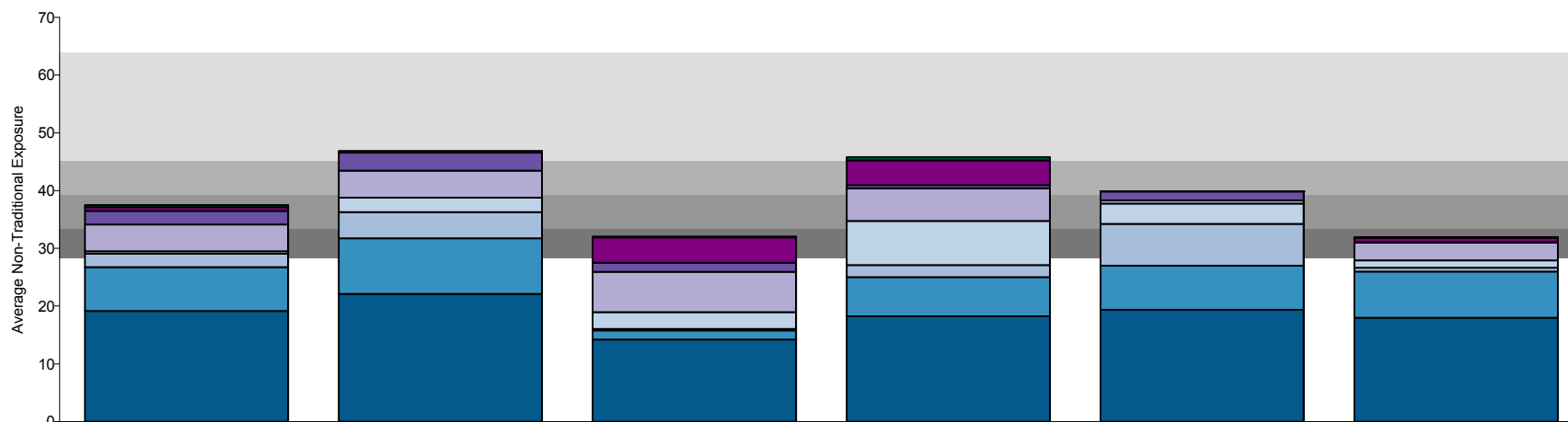
This proprietary universe consists of 101 target date families. The categorizations of Active/Passive/Blend and Open/Proprietary are based on the following thresholds: Active/Passive categorization is based on Morningstar's Top 10 Holdings: <25% passive exposure is Active; >=25% & <75% passive exposure 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.

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# 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



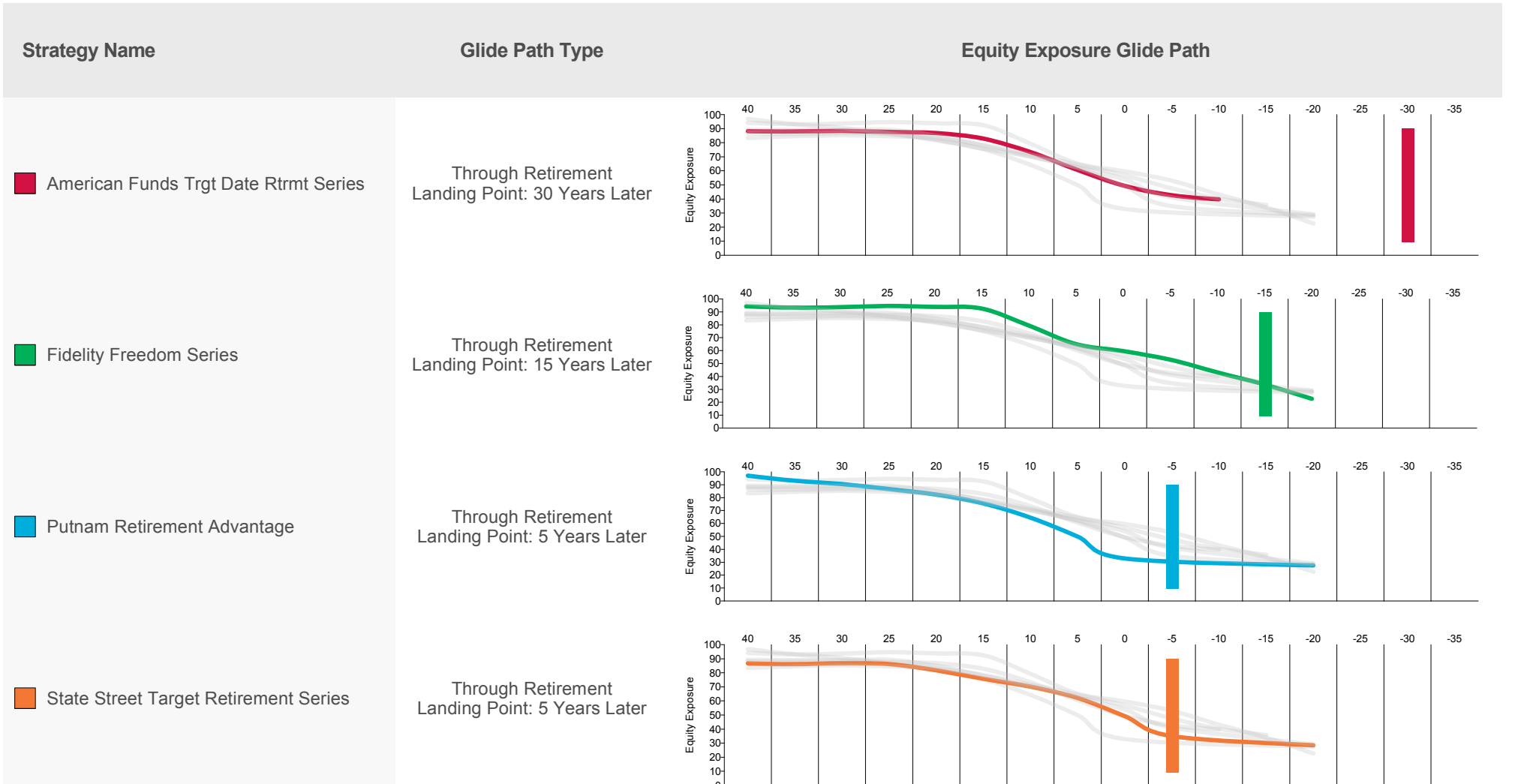
	American Funds Trgt Date Rtrmt Series	Fidelity Freedom Series	Putnam Retirement Advantage	State Street Target Retirement Series	T. Rowe Price Retirement Series	Vanguard Target Retirement Series
Developed Foreign Equity	19.14	22.12	14.19	18.24	19.34	17.99
Emerging Markets Equity	7.61	9.62	1.62	6.78	7.68	8.01
Developed Foreign Debt	2.36	4.54	0.26	2.07	7.20	0.65
Emerging Markets Debt	0.38	2.51	2.86	7.65	3.55	1.29
TIPS	4.64	4.68	6.99	5.66	0.54	3.09
High Yield	2.36	3.11	1.57	0.56	1.55	0.03
REITs	0.64	0.09	4.40	4.26	0.03	0.79
Commodities	0.35	0.20	0.15	0.56	0.02	0.07
Non-Trad. Exposure Total	37.46	46.86	32.05	45.78	39.91	31.91
Non-Trad. Exposure Rank	3rd Quartile	1st Quartile	4th Quartile	1st Quartile	2nd Quartile	4th Quartile

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# Landing Point Breakdown

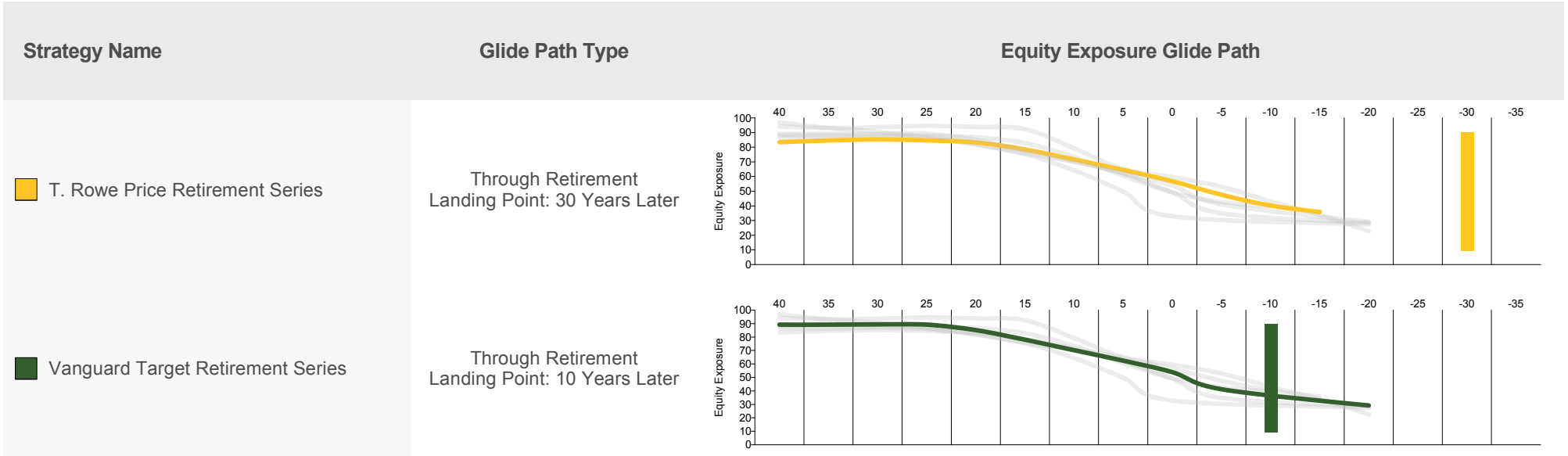
Landing point determines where in a retiree's lifetime the lowest equity allocation occurs. In some cases, this can be before retirement (defined as age 65) or up to retirement ("Through Funds") and the retiree's account moves to the Target Date suite's Income fund at that point. In other cases, the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



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# Landing Point Breakdown

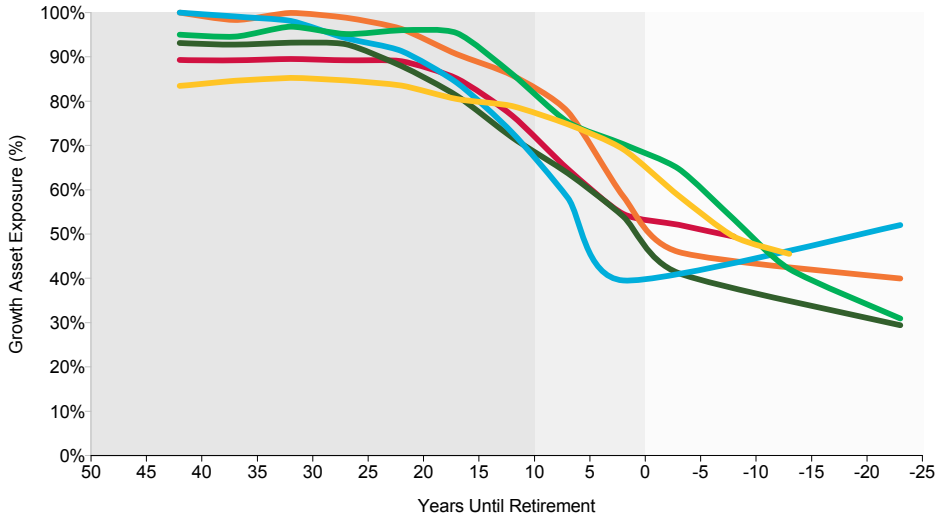
Landing point determines where in a retiree's lifetime the lowest equity allocation occurs. In some cases, this can be before retirement (defined as age 65) or up to retirement ("To Funds") and the retiree's account moves to the Target Date suite's Income fund at that point. In other cases, the landing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



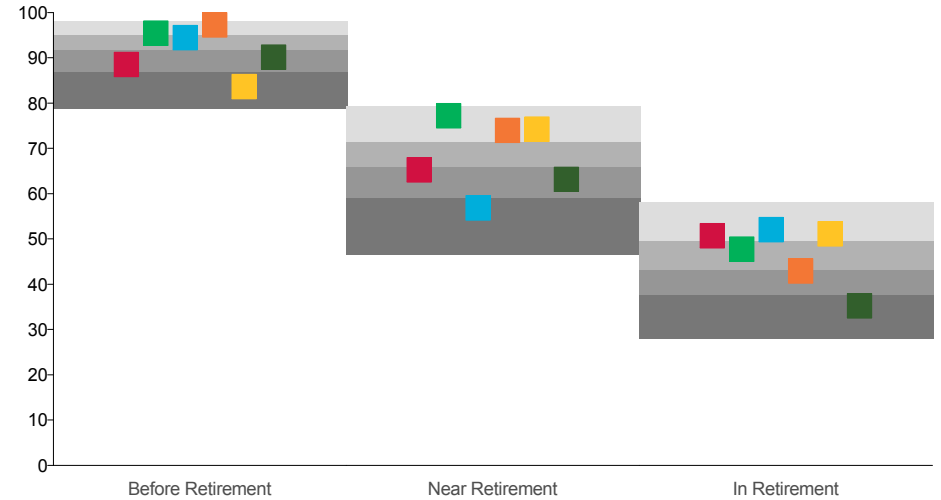
# Growth Asset Breakdown

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**



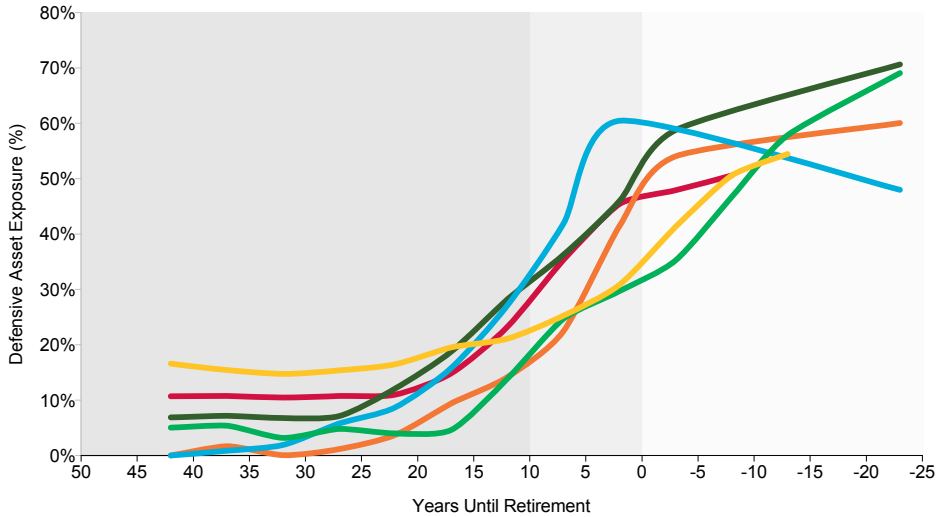
	Before Retirement Zone	Near Retirement Zone	In Retirement Zone
<span style="color: red;">■</span> American Funds Trgt Date Rtrmt Series	3rd Quartile	3rd Quartile	1st Quartile
<span style="color: green;">■</span> Fidelity Freedom Series	1st Quartile	1st Quartile	2nd Quartile
<span style="color: cyan;">■</span> Putnam Retirement Advantage	2nd Quartile	4th Quartile	1st Quartile
<span style="color: orange;">■</span> State Street Target Retirement Series	1st Quartile	1st Quartile	3rd Quartile
<span style="color: yellow;">■</span> T. Rowe Price Retirement Series	4th Quartile	1st Quartile	1st Quartile
<span style="color: darkgreen;">■</span> Vanguard Target Retirement Series	3rd Quartile	3rd Quartile	4th Quartile



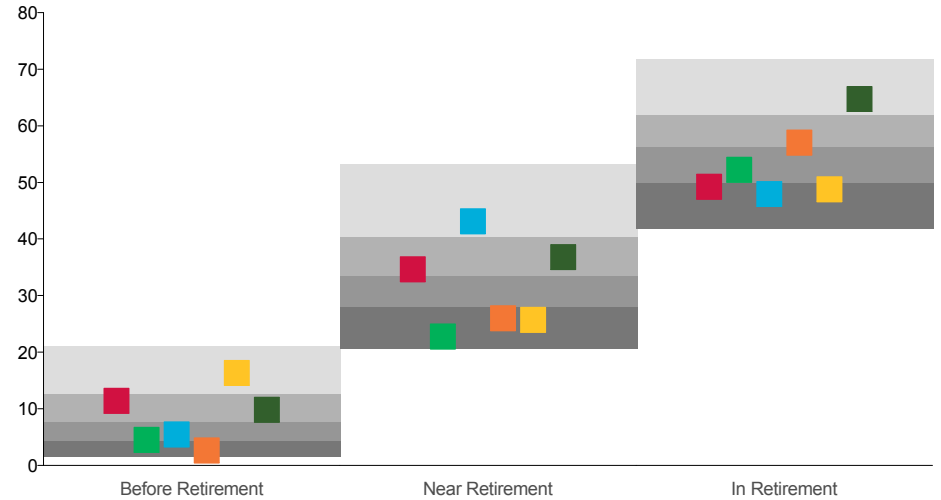
# Defensive Asset Breakdown

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

- American Funds Trgt Date Rtrmt Series
- Fidelity Freedom Series
- Putnam Retirement Advantage
- State Street Target Retirement Series
- T. Rowe Price Retirement Series
- Vanguard Target Retirement Series

- 2nd Quartile
- 3rd Quartile
- 3rd Quartile
- 4th Quartile
- 1st Quartile
- 2nd Quartile

## Near Retirement Zone

- 2nd Quartile
- 4th Quartile
- 1st Quartile
- 4th Quartile
- 4th Quartile
- 2nd Quartile

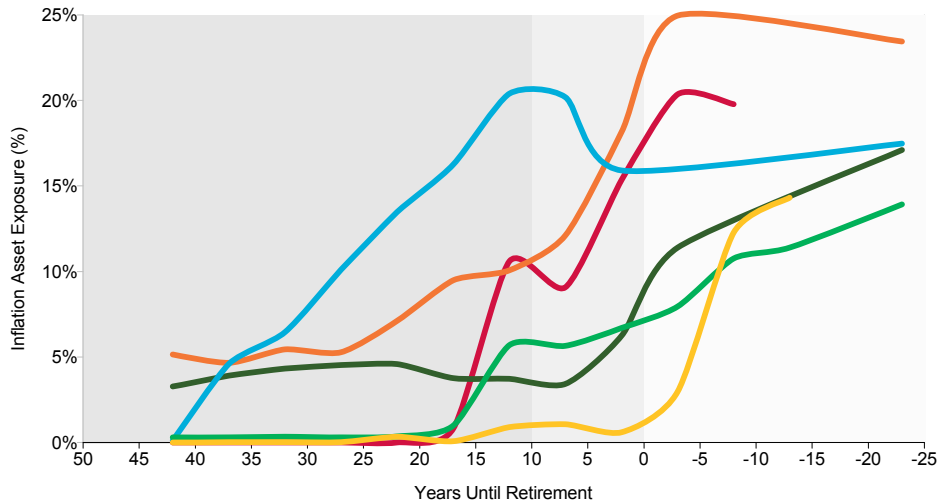
## In Retirement Zone

- 4th Quartile
- 3rd Quartile
- 4th Quartile
- 2nd Quartile
- 4th Quartile
- 1st Quartile

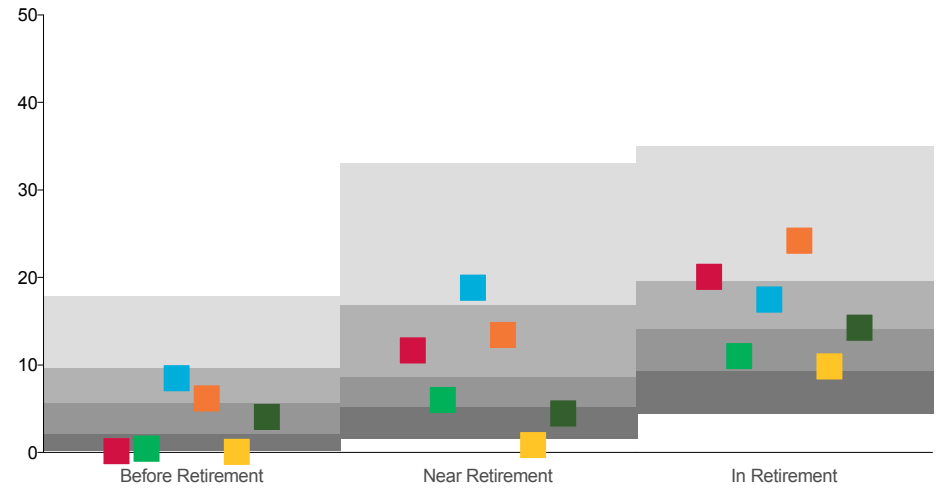
# Inflation Asset Breakdown

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**

- American Funds Trgt Date Rtrmt Series
- Fidelity Freedom Series
- Putnam Retirement Advantage
- State Street Target Retirement Series
- T. Rowe Price Retirement Series
- Vanguard Target Retirement Series

- 4th Quartile
- 4th Quartile
- 2nd Quartile
- 2nd Quartile
- 4th Quartile
- 3rd Quartile

**Near Retirement Zone**

- 2nd Quartile
- 3rd Quartile
- 1st Quartile
- 2nd Quartile
- 4th Quartile
- 4th Quartile

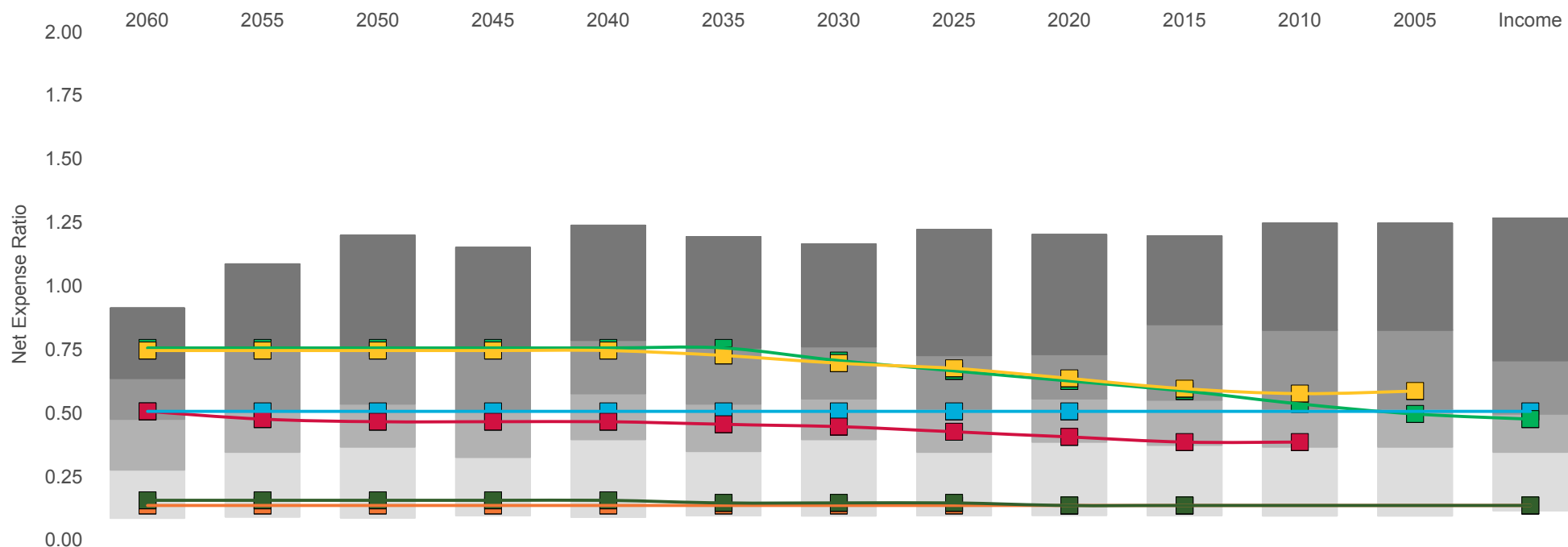
**In Retirement Zone**

- 1st Quartile
- 3rd Quartile
- 2nd Quartile
- 1st Quartile
- 3rd Quartile
- 2nd Quartile

# Prospectus Net Expense Ratio

As of Jan 31, 2018\*

## PROSPECTUS NET EXPENSE RATIO



Strategy Name	Share Class	2060	2055	2050	2045	2040	2035	2030	2025	2020	2015	2010	2005	Income
American Funds Trgt Date Rtrmt Series	R5	0.50	0.47	0.46	0.46	0.46	0.45	0.44	0.42	0.40	0.38	0.38		
Fidelity Freedom Series	Other	0.75	0.75	0.75	0.75	0.75	0.75	0.70	0.66	0.62	0.58	0.53	0.49	0.47
Putnam Retirement Advantage	I	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50				0.50
State Street Target Retirement Series	K	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13			0.13
T. Rowe Price Retirement Series	No Load	0.74	0.74	0.74	0.74	0.74	0.72	0.69	0.67	0.63	0.59	0.57	0.58	
Vanguard Target Retirement Series	Inv	0.15	0.15	0.15	0.15	0.15	0.14	0.14	0.14	0.13	0.13			0.13
Morningstar Target Date Cat Avg		0.47	0.56	0.57	0.56	0.61	0.58	0.59	0.58	0.59	0.60	0.59	0.59	0.56

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.

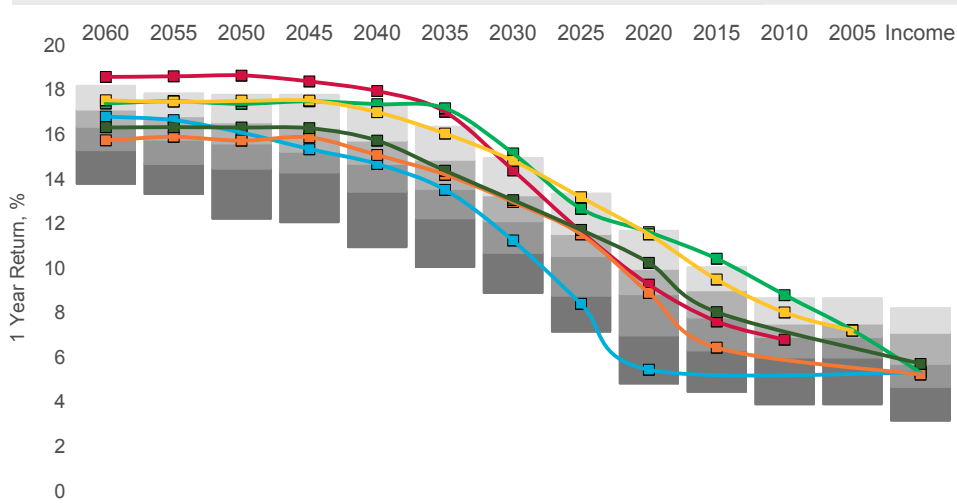
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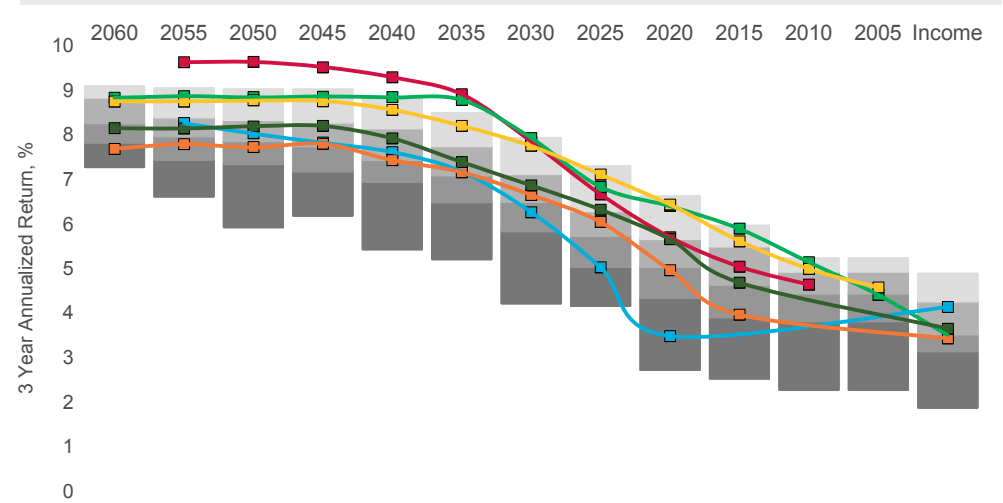
# Performance Over Time

As of Feb 28, 2018

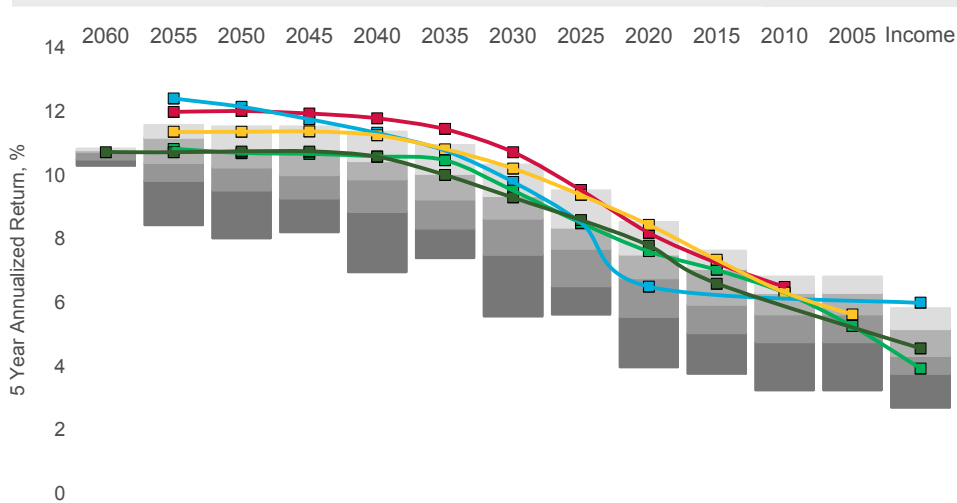
1-YEAR PERFORMANCE VS. MORNINGSTAR TARGET DATE CATEGORY UNIVERSE



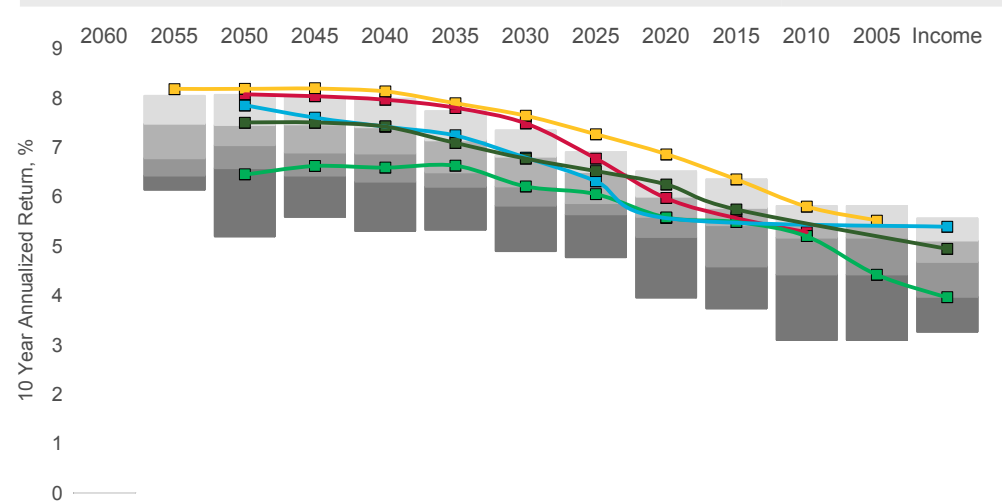
3-YEAR PERFORMANCE VS. MORNINGSTAR TARGET DATE CATEGORY UNIVERSE



5-YEAR PERFORMANCE VS. MORNINGSTAR TARGET DATE CATEGORY UNIVERSE



10-YEAR PERFORMANCE VS. MORNINGSTAR TARGET DATE CATEGORY UNIVERSE



- American Funds Trgt Date Rtrmt Series
- Fidelity Freedom Series
- T. Rowe Price Retirement Series
- Vanguard Target Retirement Series
- Putnam Retirement Advantage
- State Street Target Retirement Series

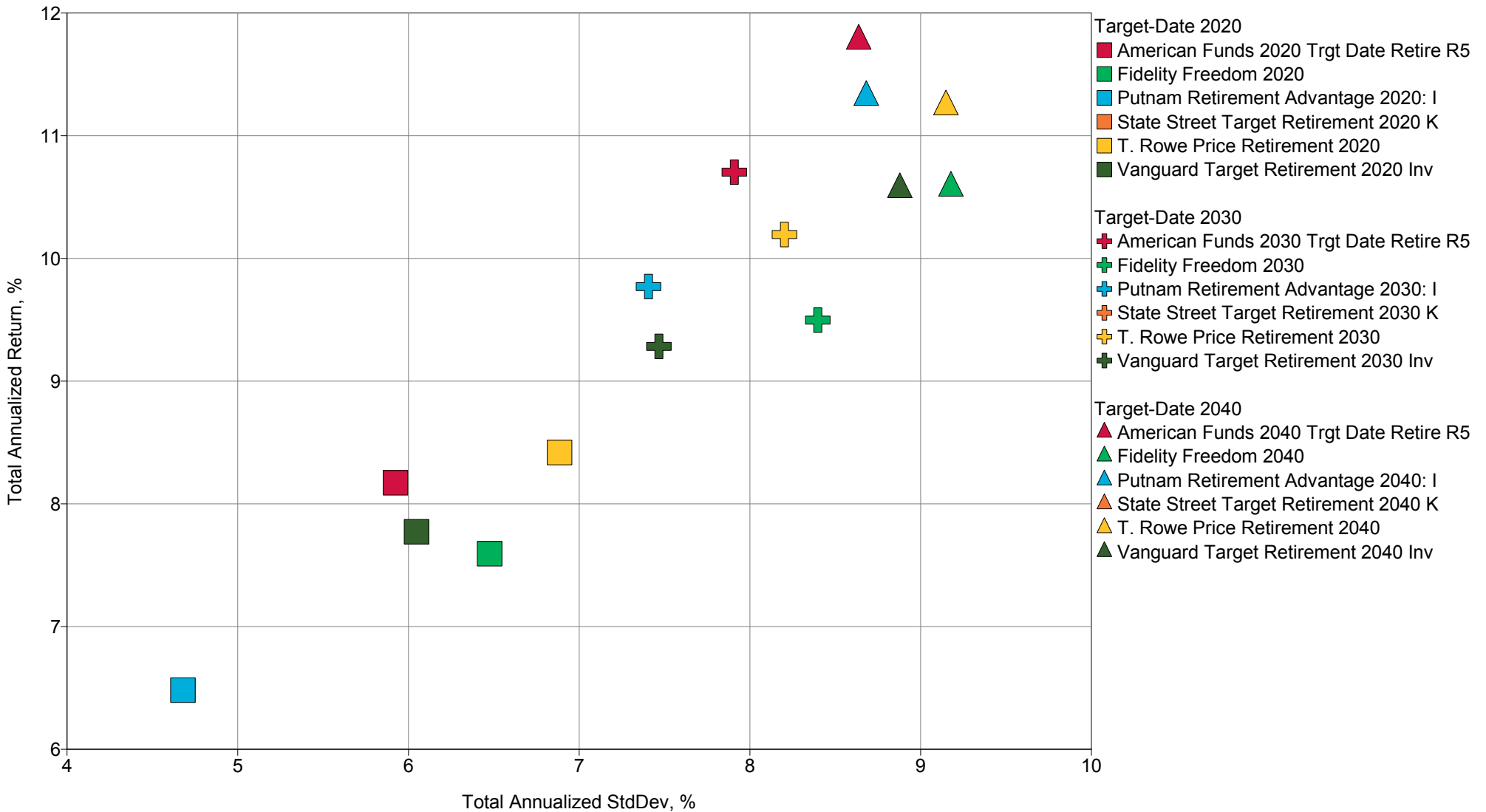
Morningstar Category peer universe is based off of the oldest share class.

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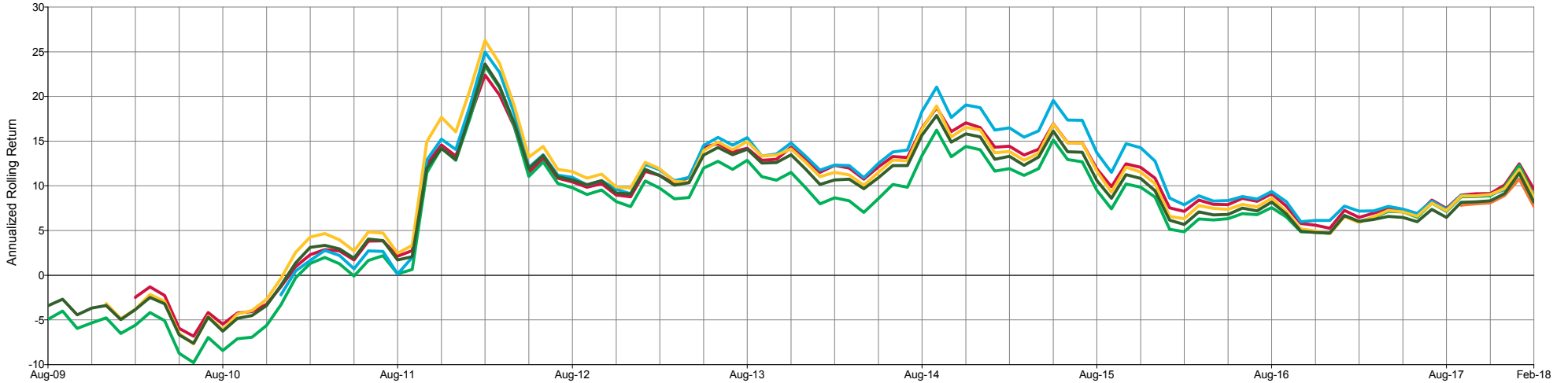
# Risk / Return

## 5 YEAR RISK / RETURN

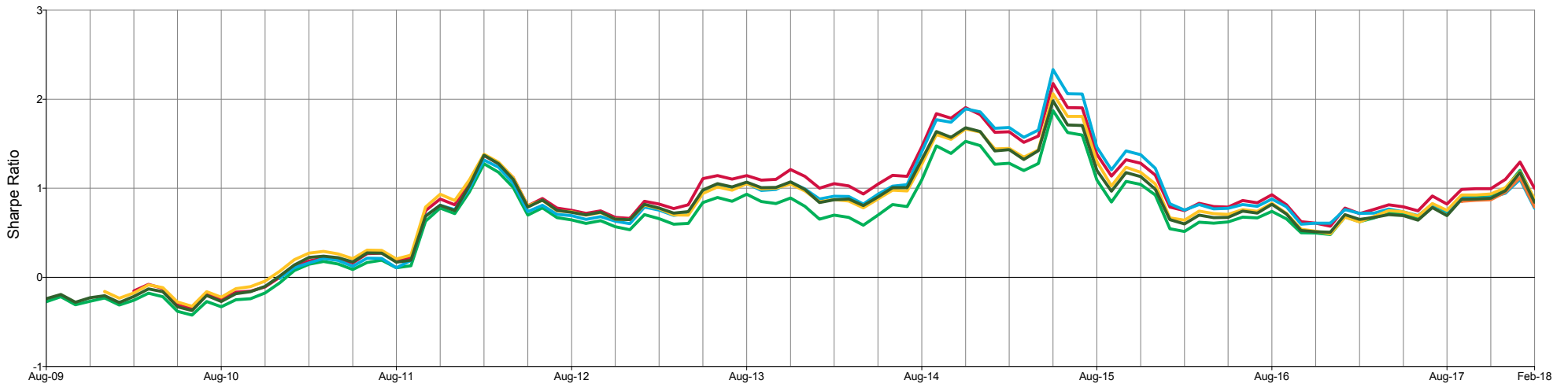


# Rolling Period Returns & Risk Adjusted

## 3 YEAR ROLLING ANNUALIZED RETURNS



## 3 YEAR ROLLING SHARPE RATIO



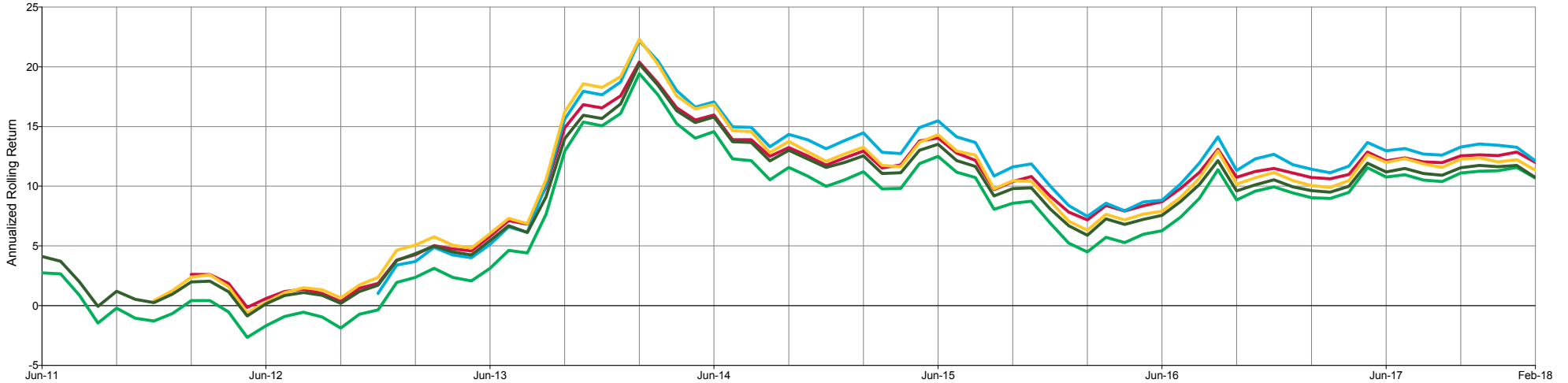
- American Funds Trgt Date Rtrmt Series 2050
- Fidelity Freedom Series 2050
- Putnam Retirement Advantage 2050
- State Street Target Retirement Series 2050
- T. Rowe Price Retirement Series 2050
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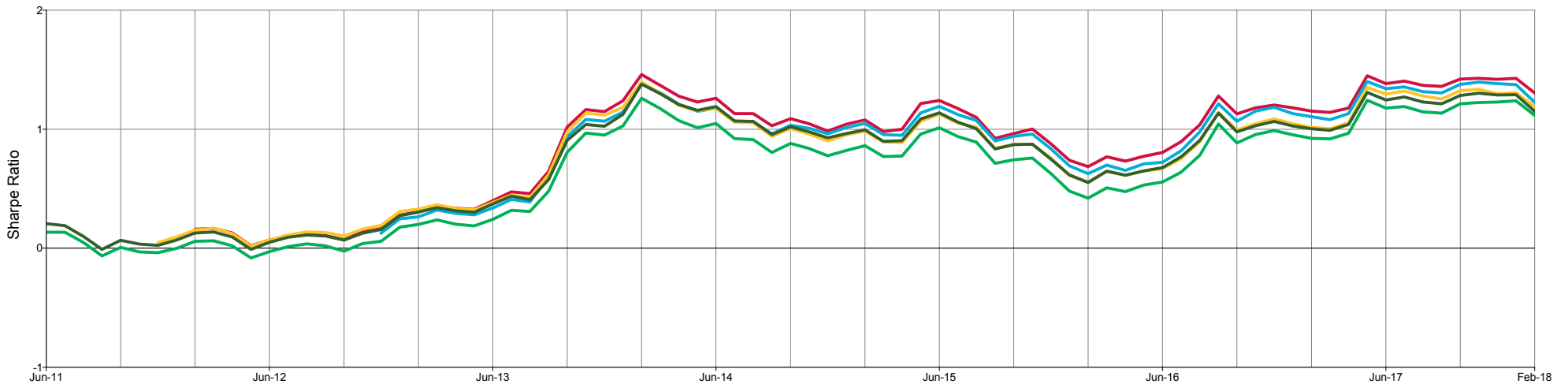
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# Rolling Period Returns & Risk Adjusted

## 5 YEAR ROLLING ANNUALIZED RETURNS



## 5 YEAR ROLLING SHARPE RATIO



- American Funds Trgt Date Rtrmt Series 2050
- Fidelity Freedom Series 2050
- Putnam Retirement Advantage 2050
- State Street Target Retirement Series 2050
- T. Rowe Price Retirement Series 2050
- Vanguard Target Retirement Series 2050

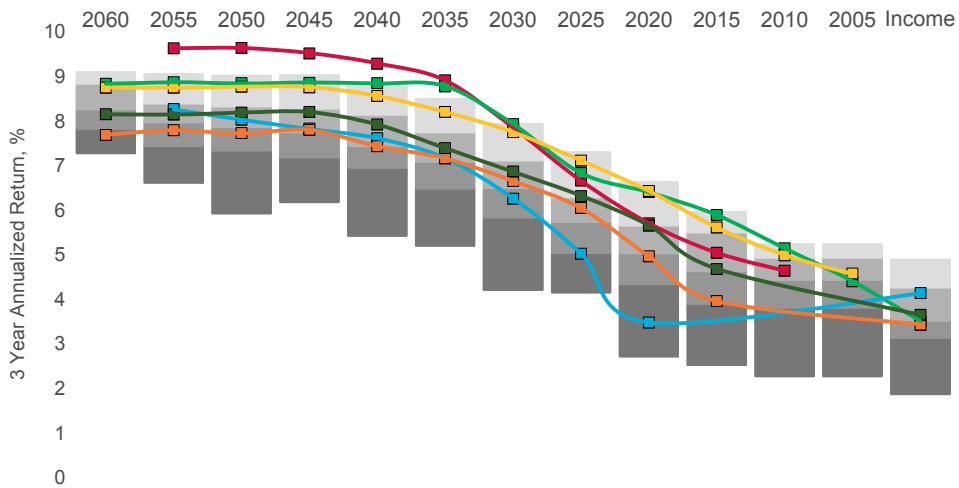
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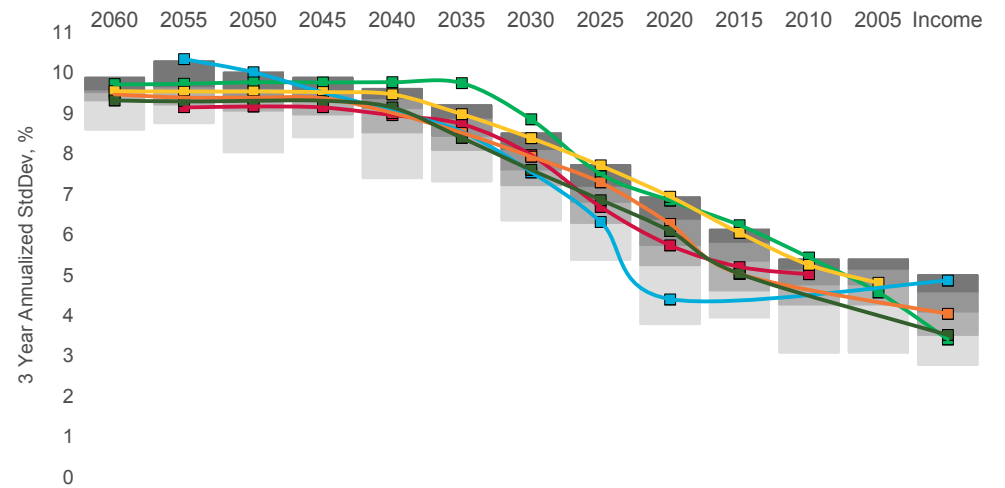
# 3-Year Risk / Return Analysis

As of Feb 28, 2018

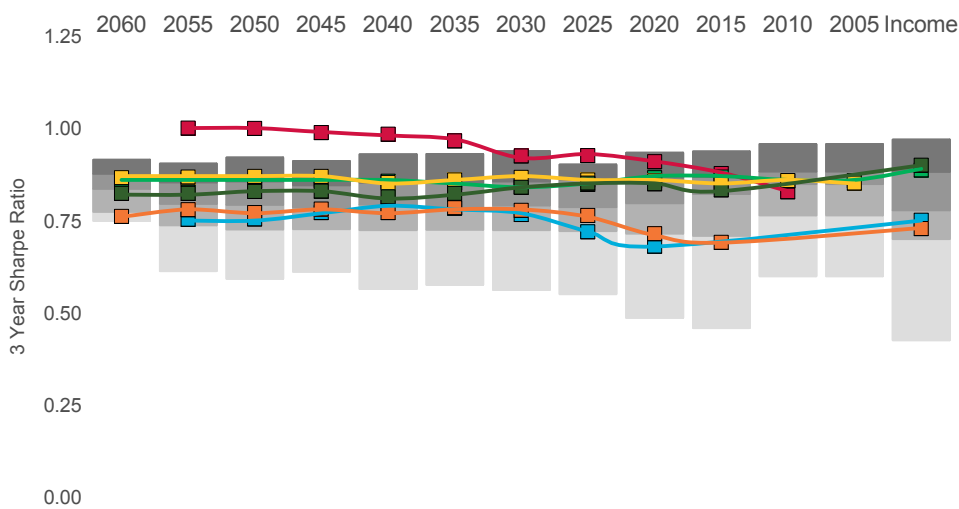
3YR RETURN VS. MORNINGSTAR TARGET DATE CATEGORY UNIVERSE



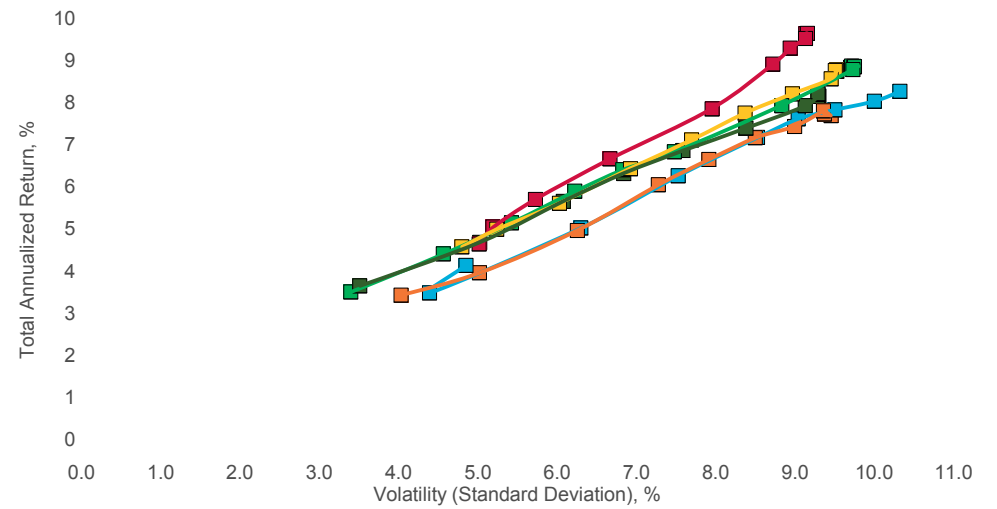
3YR RISK VS. MORNINGSTAR TARGET DATE CATEGORY UNIVERSE



3YR SHARPE RATIO VS. MORNINGSTAR TARGET DATE CATEGORY UNIVERSE



3YR RISK VS. RETURN



■ American Funds Trgt Date Rtrmt Series    ■ Fidelity Freedom Series  
■ T. Rowe Price Retirement Series    ■ Vanguard Target Retirement Series  
■ Putnam Retirement Advantage    ■ State Street Target Retirement Series

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

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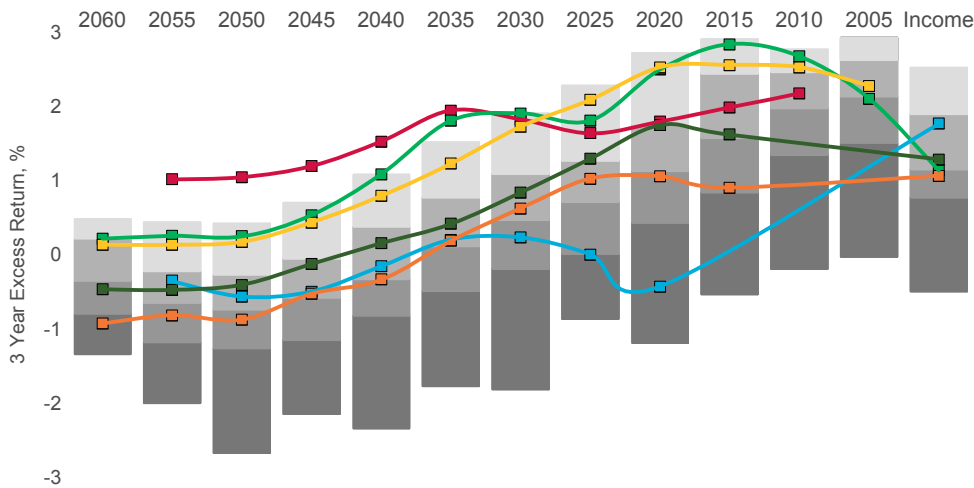
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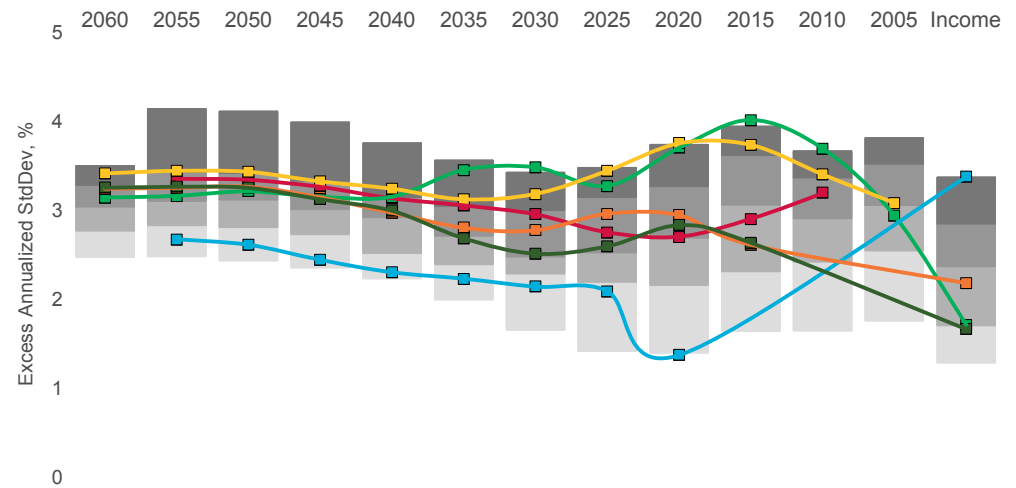
# 3-Year Relative Risk / Return Analysis

As of Feb 28, 2018

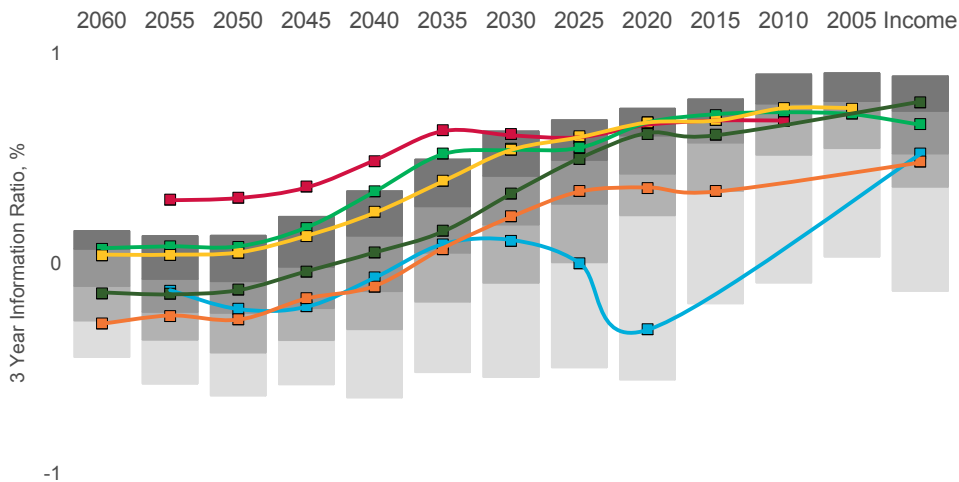
3YR EXCESS RETURN VS. MORNINGSAR TARGET DATE CATEGORY UNIVERSE



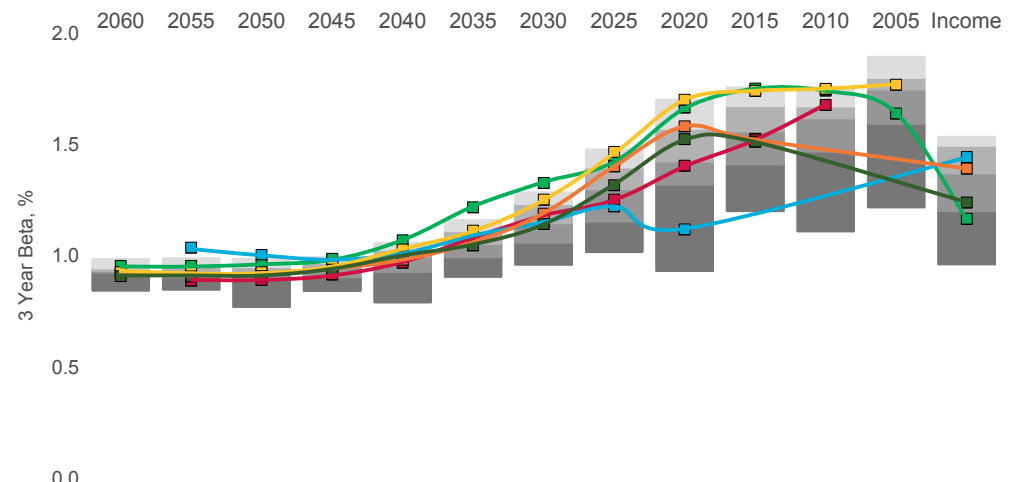
3YR TRACKING ERROR VS. MORNINGSAR TARGET DATE CATEGORY UNIVERSE



3YR INFORMATION RATIO VS. MORNINGSAR TARGET DATE CATEGORY UNIVERSE



3YR BETA VS. MORNINGSAR TARGET DATE CATEGORY UNIVERSE



- American Funds Trgt Date Rtrmt Series
- Fidelity Freedom Series
- Putnam Retirement Advantage
- State Street Target Retirement Series
- T. Rowe Price Retirement Series
- Vanguard Target Retirement Series

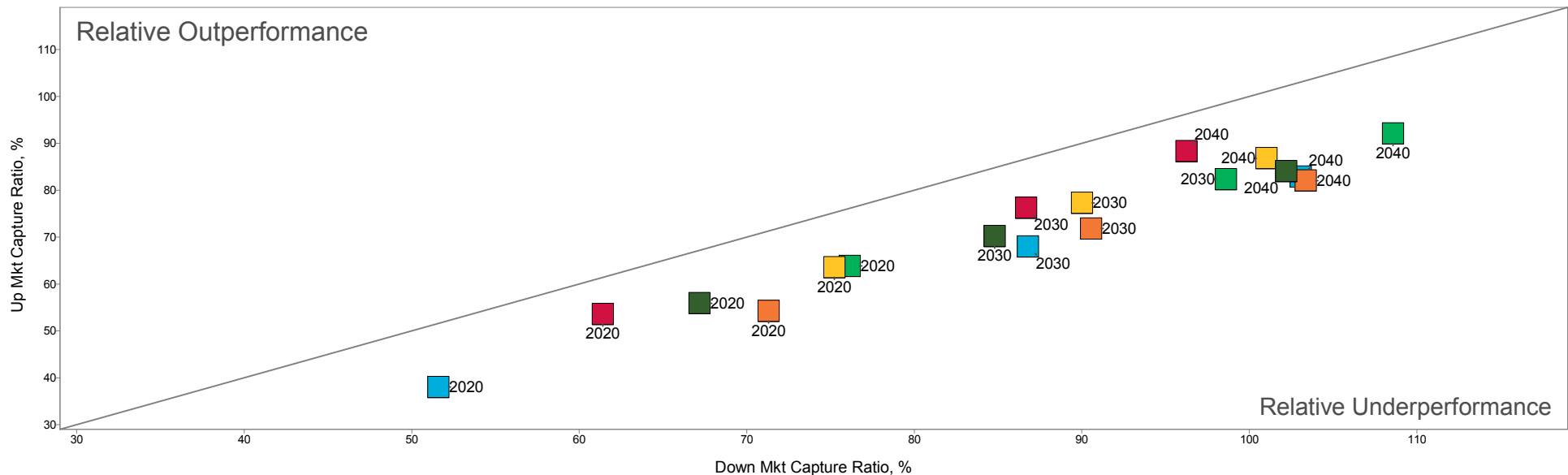
Benchmark series used is Dow Jones Target Date Indices. Specific benchmarks can be found in the disclosure section. Morningstar Category peer universe is based off of the oldest share class.

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# MPT Statistics vs S&P 500 Index

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



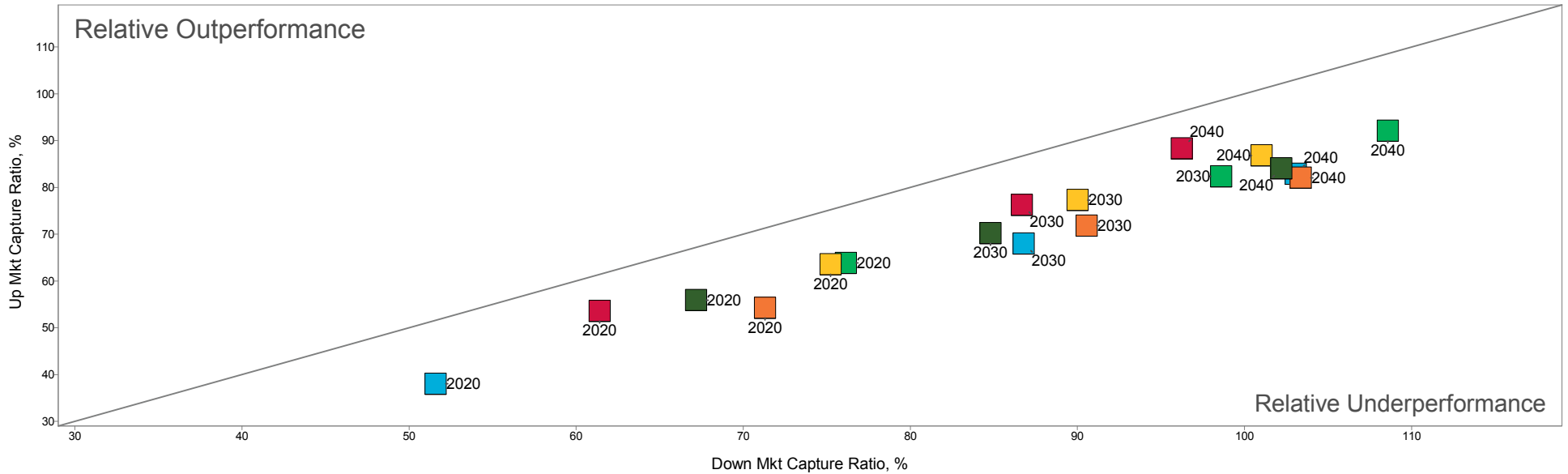
	Up Market Capture Ratio	Down Market Capture Ratio	Up Market Average Return	Down Market Average Return	Number of Up Market Months	Number of Down Market Months	R-Squared
American Funds 2040 Trgt Date Retire R5	88.37	96.25	1.88	-2.60	27.00	9.00	93.10
American Funds 2030 Trgt Date Retire R5	76.25	86.68	1.64	-2.34	26.00	9.00	92.85
American Funds 2020 Trgt Date Retire R5	53.58	61.40	1.17	-1.64	25.00	11.00	88.09
Fidelity Freedom 2040	92.12	108.57	1.96	-2.94	26.00	10.00	92.57
Fidelity Freedom 2030	82.38	98.61	1.76	-2.67	26.00	10.00	91.72
Fidelity Freedom 2020	63.86	76.14	1.39	-2.05	26.00	9.00	89.62
Putnam Retirement Advantage 2040: I	82.90	103.08	1.77	-2.79	26.00	10.00	96.43
Putnam Retirement Advantage 2030: I	68.04	86.78	1.47	-2.34	25.00	10.00	95.74
Putnam Retirement Advantage 2020: I	38.04	51.59	0.84	-1.38	24.00	10.00	88.22
State Street Target Retirement 2040 K	82.10	103.37	1.76	-2.80	26.00	10.00	92.83
State Street Target Retirement 2030 K	71.84	90.55	1.55	-2.44	26.00	10.00	91.09
State Street Target Retirement 2020 K	54.24	71.29	1.19	-1.91	25.00	11.00	87.26

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# MPT Statistics vs S&P 500 Index

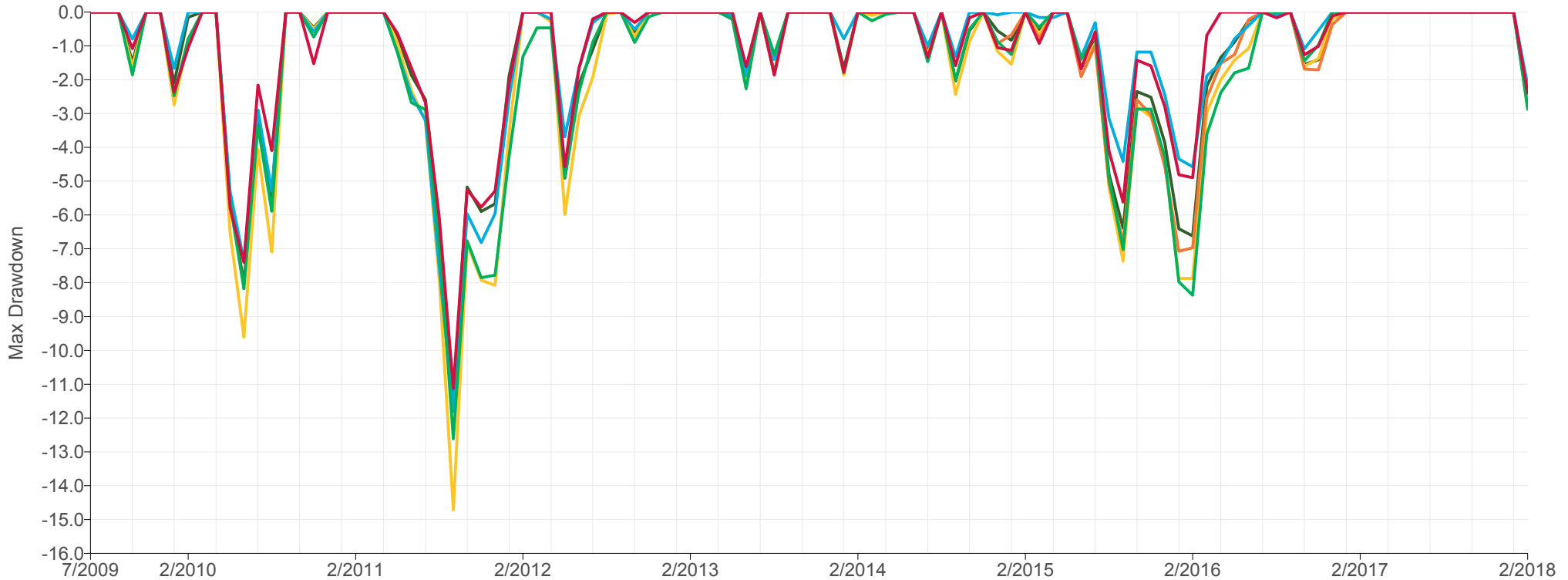
## 3-YEAR UP/DOWN-MARKET CAPTURE RATIO



	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
T. Rowe Price Retirement 2040	86.88	101.02	1.85	-2.73	25.00	11.00	91.80
T. Rowe Price Retirement 2030	77.33	90.01	1.66	-2.43	25.00	11.00	91.47
T. Rowe Price Retirement 2020	63.57	75.23	1.38	-2.02	26.00	9.00	90.07
Vanguard Target Retirement 2040 Inv	84.10	102.20	1.80	-2.77	26.00	10.00	93.57
Vanguard Target Retirement 2030 Inv	70.25	84.80	1.52	-2.28	26.00	10.00	92.56
Vanguard Target Retirement 2020 Inv	55.94	67.18	1.22	-1.80	26.00	10.00	89.69

# Max Drawdown

## MAX DRAWDOWN



	Max Drawdown Return	Max Drawdown Duration	Recovery Duration	Max Drawdown Period	Recovery Period	Worst Monthly Return	Worst Month	95% VaR
American Funds 2020 Trgt Date Retire R5	-11.12	5 Months	5 Months	5/2011 - 9/2011	10/2011 - 2/2012	-5.80	5/2010	3.78
Fidelity Freedom 2020	-12.62	5 Months	11 Months	5/2011 - 9/2011	10/2011 - 8/2012	-6.21	9/2011	4.05
Putnam Retirement Advantage 2020: I	-11.82	5 Months	5 Months	5/2011 - 9/2011	10/2011 - 2/2012	-5.31	5/2010	3.44
State Street Target Retirement 2020 K	-7.07	9 Months	6 Months	5/2015 - 1/2016	2/2016 - 7/2016	-4.11	8/2015	2.88
T. Rowe Price Retirement 2020	-14.71	5 Months	5 Months	5/2011 - 9/2011	10/2011 - 2/2012	-7.38	9/2011	4.63
Vanguard Target Retirement 2020 Inv	-11.62	5 Months	5 Months	5/2011 - 9/2011	10/2011 - 2/2012	-5.66	9/2011	3.89

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# Asset Allocation (holdings-based)

Holdings As of Dec 31, 2017

American Funds Trgt Date Rtrrn	2060	2055	2050	2045	2040	2035	2030	2025	2020	2015	2010
Equities	83.91	83.91	83.91	83.15	81.88	78.69	68.77	57.79	48.32	43.85	40.68
Bonds	8.69	8.69	8.69	9.46	10.76	13.89	23.27	33.86	43.39	48.02	51.49
Cash	7.12	7.12	7.12	7.09	7.04	7.10	7.61	8.00	7.90	7.67	7.36
Other	0.28	0.28	0.28	0.30	0.32	0.32	0.34	0.35	0.40	0.46	0.48

Holdings As of Jan 31, 2018

Fidelity Freedom Series	2060	2055	2050	2045	2040	2035	2030	2025	2020	2015	2010	2005	Income
Equities	88.03	88.01	88.10	88.09	88.09	86.38	75.35	63.20	57.41	51.05	42.31	33.47	23.67
Bonds	5.54	5.54	5.53	5.54	5.54	7.16	17.68	24.75	28.60	32.43	37.47	42.31	47.26
Cash	5.66	5.66	5.58	5.58	5.58	5.67	6.25	11.39	13.35	15.92	19.68	23.73	28.61
Other	0.77	0.79	0.79	0.79	0.79	0.79	0.73	0.66	0.64	0.60	0.55	0.50	0.46

Holdings As of Dec 31, 2017

Putnam Retirement Advantage	2060	2055	2050	2045	2040	2035	2030	2025	2020	Income
Equities	82.00	79.96	74.38	68.05	62.30	57.61	51.22	41.94	32.24	25.75
Bonds	4.12	5.54	9.41	13.80	17.02	20.09	24.87	31.18	38.35	45.59
Cash	13.43	14.04	15.69	17.56	19.71	21.02	22.41	24.50	25.43	21.36
Other	0.45	0.46	0.53	0.59	0.97	1.28	1.50	2.39	3.98	7.30

Holdings As of Dec 31, 2017

State Street Target Retirement	2060	2055	2050	2045	2040	2035	2030	2025	2020	2015	Income
Equities	85.99	86.73	86.69	86.77	81.91	77.01	69.89	62.65	50.50	38.62	33.51
Bonds	9.77	9.83	9.83	9.82	14.74	19.66	27.08	34.46	46.58	59.53	63.40
Cash	4.01	3.21	3.25	3.18	3.13	3.12	2.84	2.72	2.78	1.75	3.01
Other	0.23	0.23	0.23	0.23	0.22	0.20	0.20	0.18	0.14	0.09	0.08

Morningstar Target Date Cat Av	2060	2055	2050	2045	2040	2035	2030	2025	2020	2015	2010	2005	Income
Equities	85.32	81.87	81.03	80.52	75.32	71.50	62.52	54.78	45.67	39.35	32.77	32.77	28.37
Bonds	7.34	7.77	8.91	9.75	13.30	17.76	25.00	32.24	40.48	45.26	47.99	47.99	51.69
Cash	4.44	5.34	5.77	4.99	6.19	5.81	7.01	7.43	8.18	8.37	11.49	11.49	14.15
Other	2.90	5.02	4.28	4.74	5.19	4.94	5.47	5.55	5.67	7.01	7.76	7.76	5.79

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.

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# Asset Allocation (holdings-based)

Holdings As of Dec 31, 2017

T. Rowe Price Retirement Serie	2060	2055	2050	2045	2040	2035	2030	2025	2020	2015	2010	2005
Equities	86.15	86.25	86.63	86.40	84.34	79.44	73.73	65.89	58.27	48.41	40.86	35.47
Bonds	10.28	10.31	10.39	10.36	12.70	17.36	23.00	30.50	38.23	48.01	54.85	60.23
Cash	1.14	1.00	0.47	0.72	0.37	0.54	0.58	0.83	0.68	0.74	1.45	1.46
Other	2.44	2.44	2.51	2.52	2.59	2.67	2.69	2.78	2.82	2.85	2.85	2.84

Holdings As of Jan 31, 2018

Vanguard Target Retirement Se	2060	2055	2050	2045	2040	2035	2030	2025	2020	2015	Income	
Equities	88.40	88.33	88.37	88.37	84.30	76.95	69.58	62.53	53.78	41.63	29.86	
Bonds	9.66	9.66	9.68	9.68	13.65	20.79	27.94	34.81	43.35	55.23	66.69	
Cash	1.15	1.22	1.16	1.16	1.23	1.40	1.57	1.72	1.92	2.21	2.53	
Other	0.79	0.79	0.79	0.79	0.82	0.87	0.90	0.95	0.95	0.93	0.93	

Morningstar Target Date Cat Av	2060	2055	2050	2045	2040	2035	2030	2025	2020	2015	2010	2005	Income
Equities	85.32	81.87	81.03	80.52	75.32	71.50	62.52	54.78	45.67	39.35	32.77	32.77	28.37
Bonds	7.34	7.77	8.91	9.75	13.30	17.76	25.00	32.24	40.48	45.26	47.99	47.99	51.69
Cash	4.44	5.34	5.77	4.99	6.19	5.81	7.01	7.43	8.18	8.37	11.49	11.49	14.15
Other	2.90	5.02	4.28	4.74	5.19	4.94	5.47	5.55	5.67	7.01	7.76	7.76	5.79

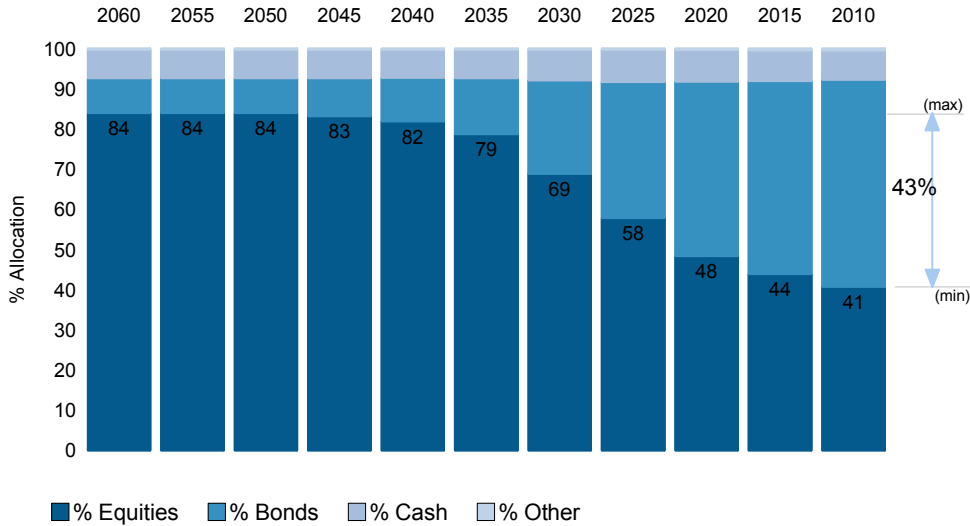
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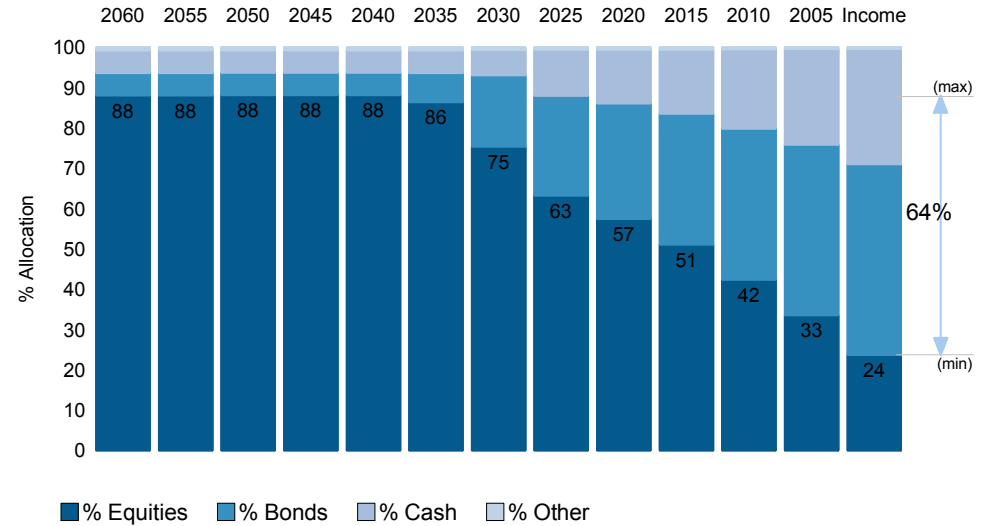
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# Glide Path (holdings-based)

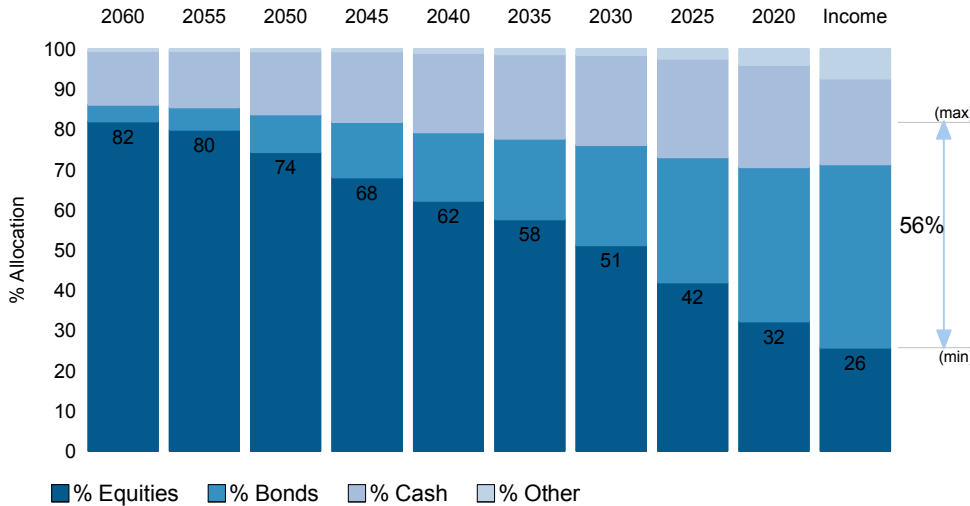
American Funds Trgt Date Rtrmt Series



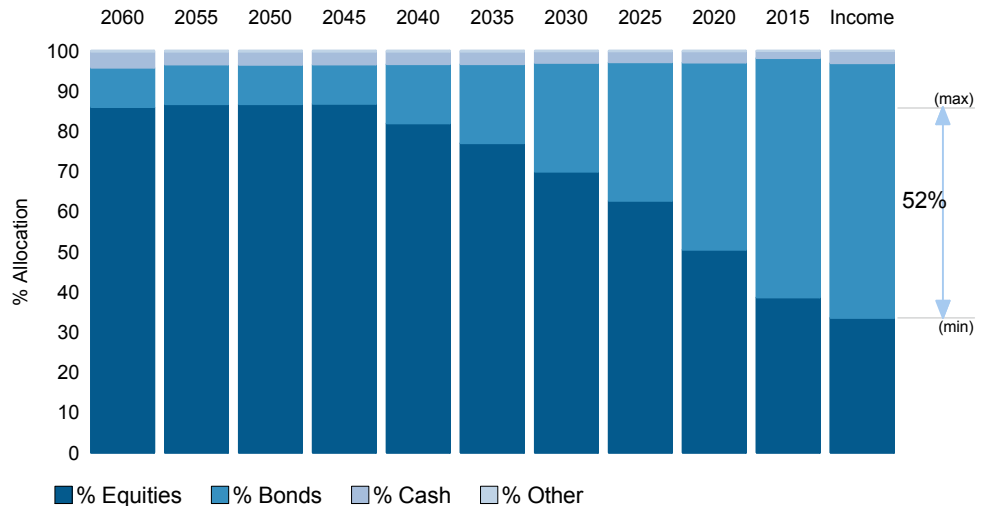
Fidelity Freedom Series



Putnam Retirement Advantage



State Street Target Retirement Series



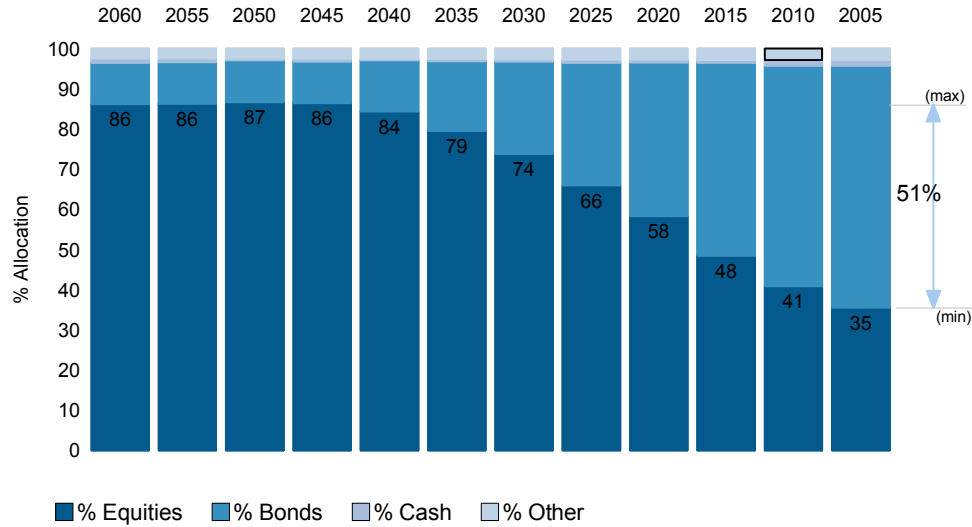
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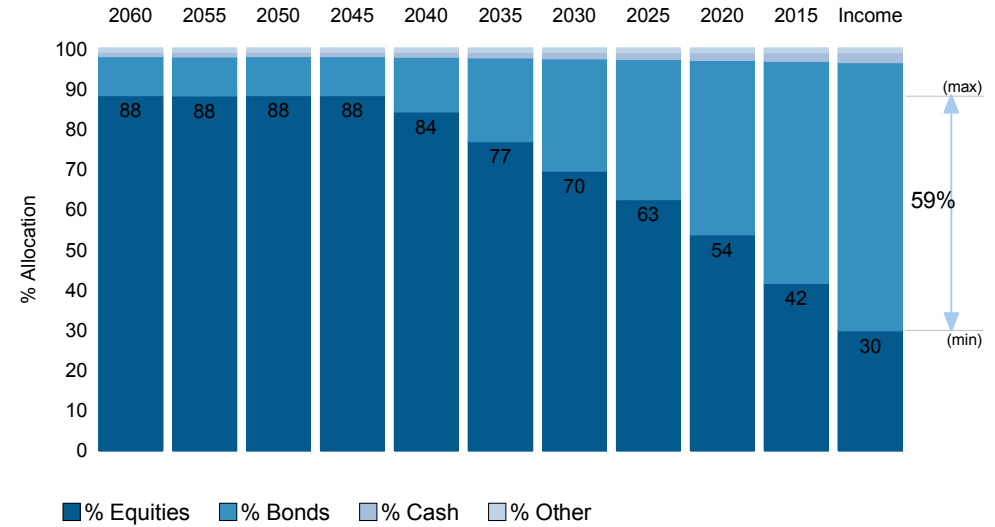
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# Glide Path (holdings-based)

T. Rowe Price Retirement Series



Vanguard Target Retirement Series



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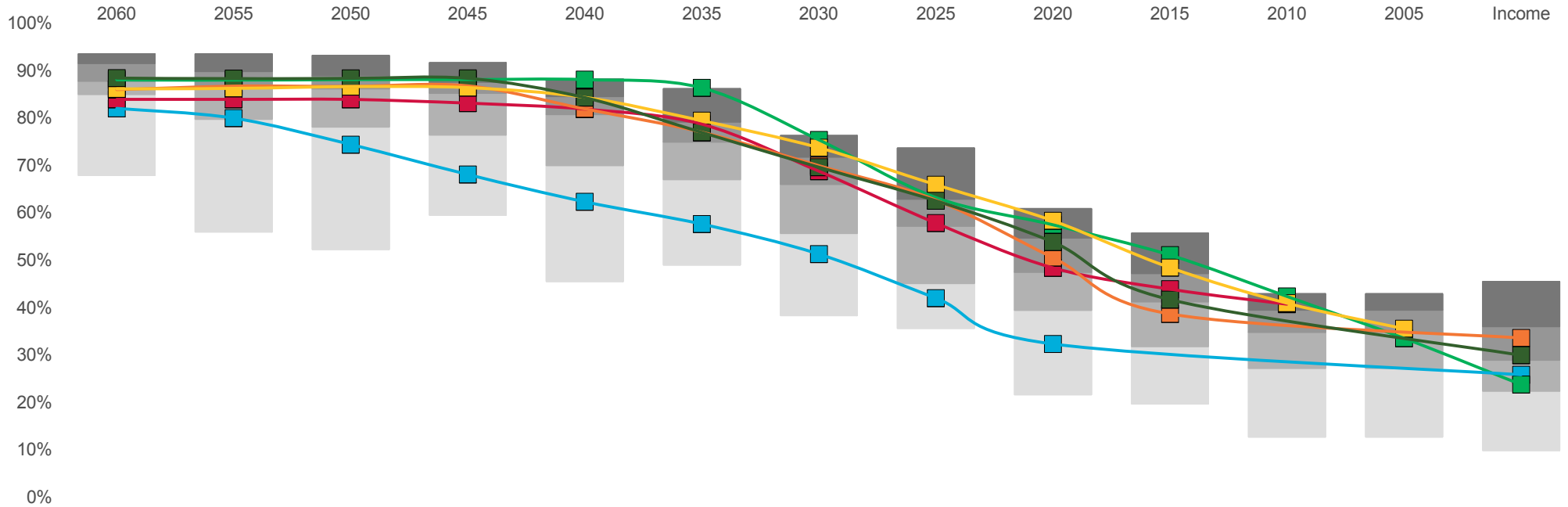
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# Equity Glide Path (holdings-based)

HOLDINGS-BASED EQUITY GLIDE PATH



Strategy Name	As of Date	2060	2055	2050	2045	2040	2035	2030	2025	2020	2015	2010	2005	Income
American Funds Trgt Date Rtrmt Series	12/31/2017	83.91	83.91	83.91	83.15	81.88	78.69	68.77	57.79	48.32	43.85	40.68		
Fidelity Freedom Series	01/31/2018	88.03	88.01	88.10	88.09	88.09	86.38	75.35	63.20	57.41	51.05	42.31	33.47	23.67
Putnam Retirement Advantage	12/31/2017	82.00	79.96	74.38	68.05	62.30	57.61	51.22	41.94	32.24				25.75
State Street Target Retirement Series	12/31/2017	85.99	86.73	86.69	86.77	81.91	77.01	69.89	62.65	50.50	38.62			33.51
T. Rowe Price Retirement Series	12/31/2017	86.15	86.25	86.63	86.40	84.34	79.44	73.73	65.89	58.27	48.41	40.86	35.47	
Vanguard Target Retirement Series	01/31/2018	88.40	88.33	88.37	88.37	84.30	76.95	69.58	62.53	53.78	41.63			29.86
Morningstar Target Date Cat Avg		85.32	81.87	81.03	80.52	75.32	71.50	62.52	54.78	45.67	39.35	32.77	32.77	28.37
Morningstar Target Date Cat Median		87.80	86.26	86.20	85.26	80.73	74.96	66.00	57.19	47.43	41.18	34.75	34.75	28.88

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

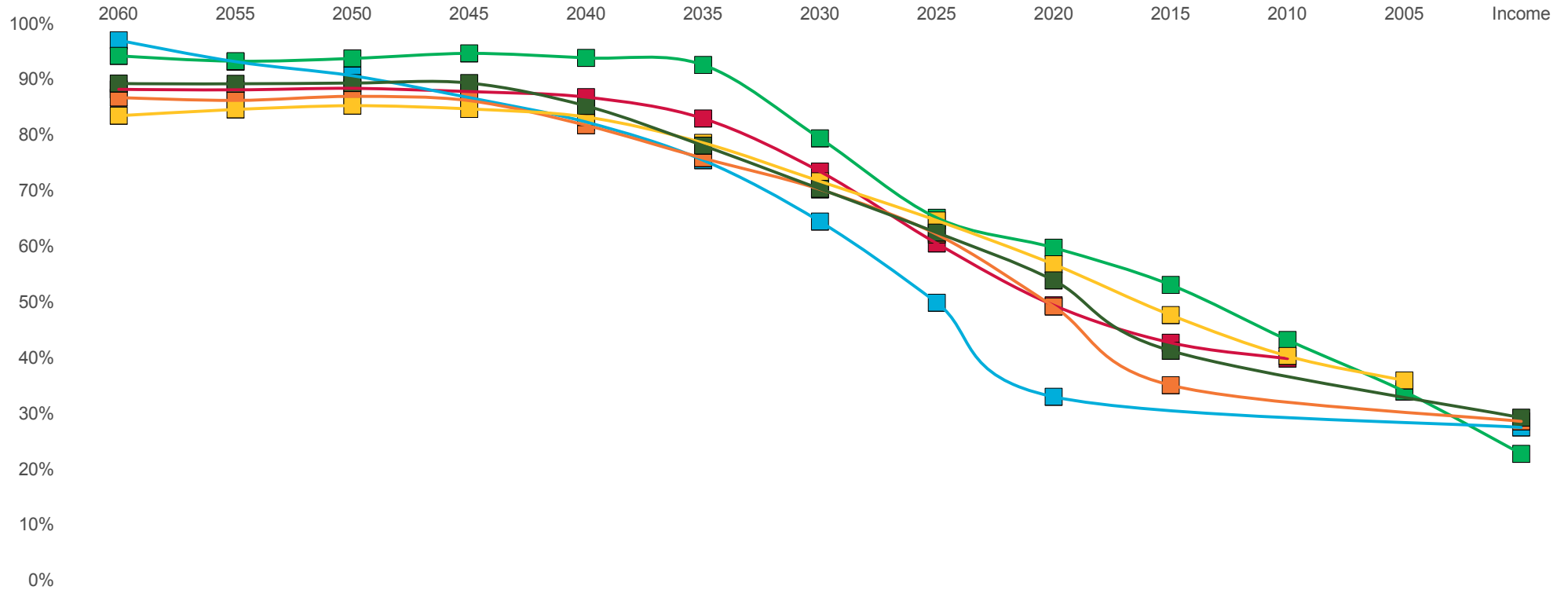
**Allocations and holdings are subject to change.** Equity Holdings are measured as the sum of U.S. Equity and Non-U.S. Equity.

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# Equity Exposure Glide Path (returns-based)

RETURNS-BASED EQUITY EXPOSURE GLIDE PATH



Strategy Name	As of Date	2060	2055	2050	2045	2040	2035	2030	2025	2020	2015	2010	2005	Income
American Funds Trgt Date Rtrmt Series	02/28/18	88.19	88.07	88.36	87.75	86.78	82.94	73.41	60.51	49.40	42.66	39.81		
Fidelity Freedom Series	02/28/18	94.16	93.25	93.72	94.63	93.82	92.54	79.35	65.11	59.72	53.04	43.17	33.90	22.72
Putnam Retirement Advantage	02/28/18	96.99	93.14	90.61	86.67	82.28	75.44	64.41	49.84	32.96				27.46
State Street Target Retirement Series	02/28/18	86.68	86.20	86.89	86.15	81.72	75.79	70.19	62.14	49.15	35.02			28.53
T. Rowe Price Retirement Series	02/28/18	83.43	84.57	85.24	84.64	83.21	78.57	71.63	64.59	56.75	47.63	40.27	35.87	
Vanguard Target Retirement Series	02/28/18	89.21	89.16	89.32	89.30	85.18	78.07	70.28	62.43	53.86	41.20			29.22

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.

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# Equity Allocation Breakdown (holdings-based)

2020	Holdings	Equity (%)		Regional Exposure (%)		Market Cap (%)				
	Date	US Equity	Non-US Equity	Emerging Market	Developed Country	Giant Cap	Large Cap	Medium Cap	Small Cap	Micro Cap
American Funds Trgt Date Rtrmt Series	12/31/2017	32.46	15.86	4.35	95.65	61.36	30.12	7.95	0.49	0.08
Fidelity Freedom Series	01/31/2018	33.87	23.54	10.53	89.47	44.30	28.53	17.81	7.45	1.91
Putnam Retirement Advantage	12/31/2017	25.83	6.41	0.95	99.05	39.72	35.37	22.81	1.82	0.29
State Street Target Retirement Series	12/31/2017	32.01	18.49	6.23	93.77	43.94	32.21	17.46	4.83	1.57
T. Rowe Price Retirement Series	12/31/2017	37.79	20.48	6.56	93.44	42.09	31.55	20.30	4.30	1.77
Vanguard Target Retirement Series	01/31/2018	32.56	21.22	7.06	92.94	44.49	30.33	18.18	5.29	1.71
Morningstar Target Date Cat Avg	02/28/2018	28.14	14.60	6.17	93.83	39.88	30.83	20.21	7.00	2.08

2030	Date	US Equity	Non-US Equity	Emerging Market	Developed Country	Giant Cap	Large Cap	Medium Cap	Small Cap	Micro Cap
American Funds Trgt Date Rtrmt Series	12/31/2017	43.48	25.29	7.14	92.86	56.88	29.39	11.04	2.22	0.48
Fidelity Freedom Series	01/31/2018	45.15	30.20	10.20	89.80	44.18	28.55	17.83	7.51	1.93
Putnam Retirement Advantage	12/31/2017	39.95	11.27	2.29	97.71	41.09	35.28	21.88	1.74	0.01
State Street Target Retirement Series	12/31/2017	43.38	26.51	6.78	93.22	46.13	30.62	15.88	5.39	1.98
T. Rowe Price Retirement Series	12/31/2017	47.25	26.48	6.86	93.14	41.29	32.49	20.26	4.25	1.71
Vanguard Target Retirement Series	01/31/2018	42.13	27.45	7.06	92.94	44.49	30.33	18.18	5.29	1.71
Morningstar Target Date Cat Avg	02/28/2018	37.78	20.60	6.37	93.63	39.74	30.70	20.09	7.25	2.22

2040	Date	US Equity	Non-US Equity	Emerging Market	Developed Country	Giant Cap	Large Cap	Medium Cap	Small Cap	Micro Cap
American Funds Trgt Date Rtrmt Series	12/31/2017	50.62	31.26	8.57	91.43	54.08	29.27	12.92	3.07	0.66
Fidelity Freedom Series	01/31/2018	53.06	35.03	10.10	89.90	44.15	28.55	17.83	7.53	1.94
Putnam Retirement Advantage	12/31/2017	43.23	19.07	6.82	93.18	40.85	35.27	21.79	2.08	0.01
State Street Target Retirement Series	12/31/2017	50.57	31.34	6.87	93.13	44.53	29.52	16.92	6.59	2.43
T. Rowe Price Retirement Series	12/31/2017	53.64	30.70	7.01	92.99	40.90	32.85	20.29	4.25	1.71
Vanguard Target Retirement Series	01/31/2018	51.13	33.17	7.04	92.96	44.48	30.33	18.18	5.29	1.71
Morningstar Target Date Cat Avg	02/28/2018	45.07	24.80	6.62	93.38	39.44	30.72	20.32	7.32	2.19

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

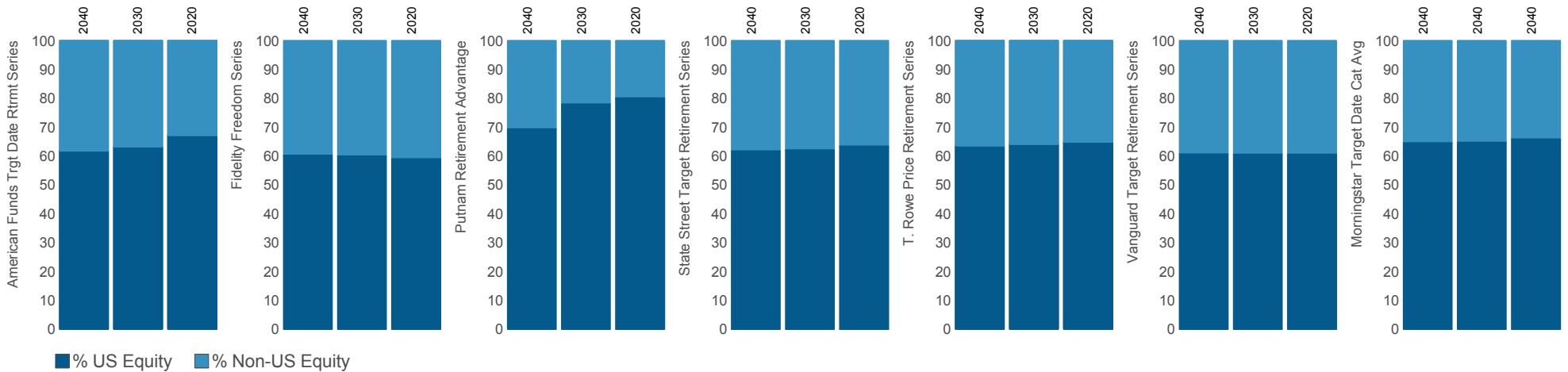
**Allocations and holdings are subject to change.** The above sector weights data are based on a Broad Asset Class Breakdown. Please see Important Information section for detailed information.

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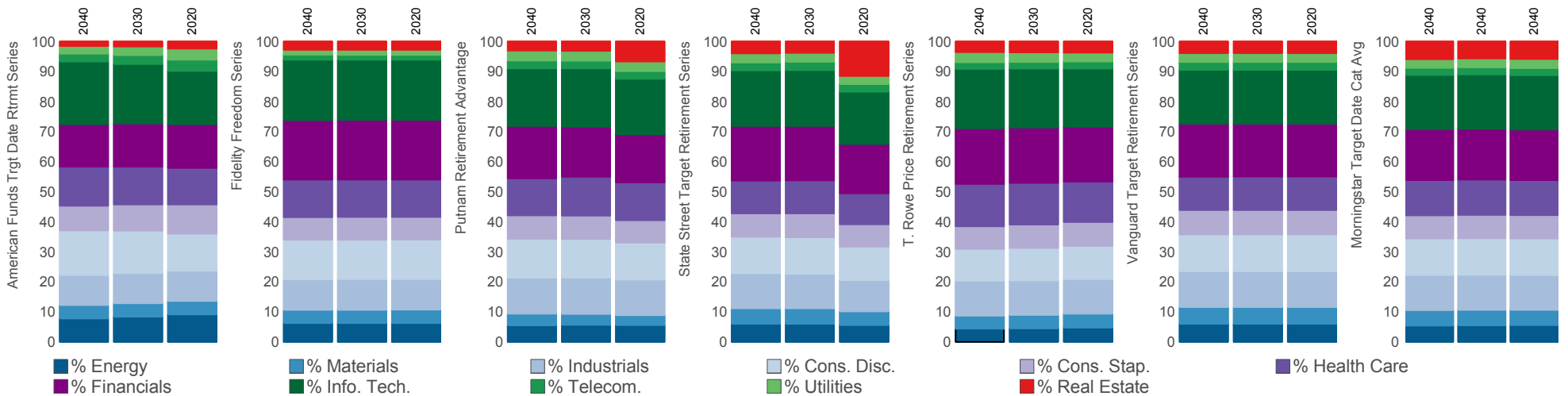
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# Equity Allocation Breakdown (holdings-based)

## EQUITY ALLOCATION BREAKDOWN



## SECTOR ALLOCATION BREAKDOWN (GICS)



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

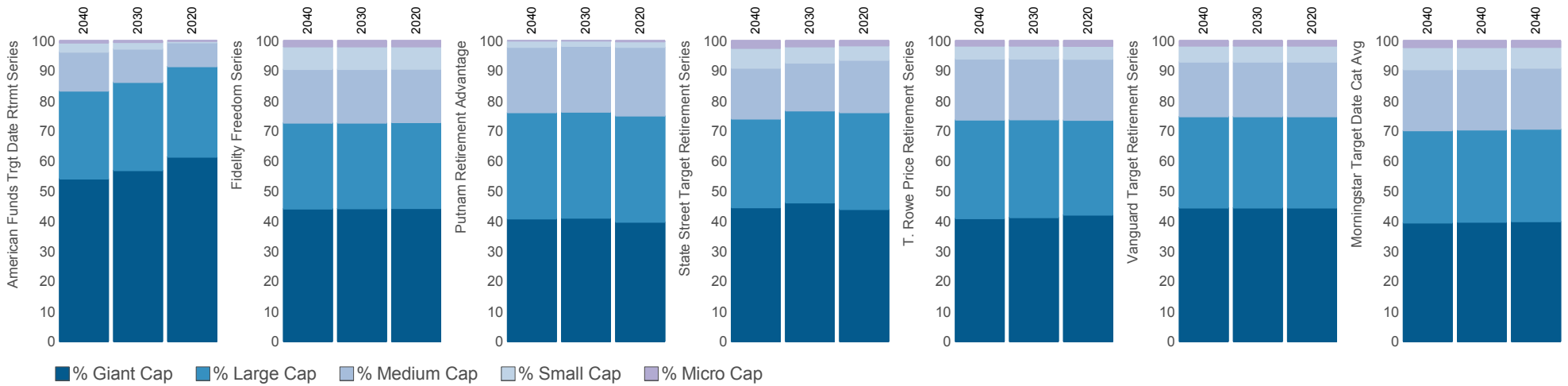
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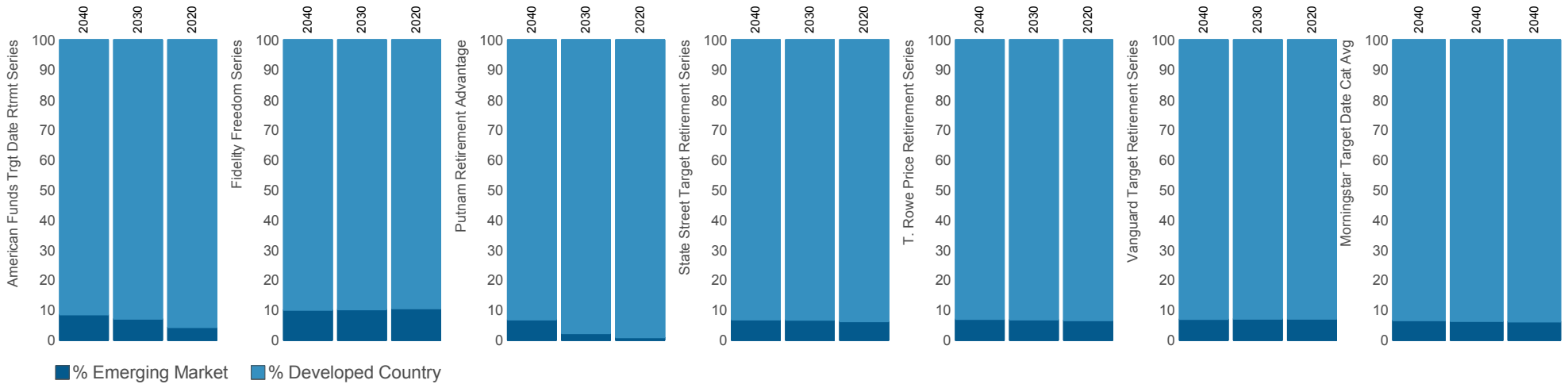
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# Equity Allocation Breakdown (holdings-based)

## MARKET CAP BREAKDOWN



## REGION BREAKDOWN



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

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# 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
American Funds Trgt Date Rtrmt Series	12/31/2017	37.03	6.36	49.50	0.30	20.00	14.87	15.34	0.00	71.57	3.33	8.43	8.04	8.62	0.00
Fidelity Freedom Series	01/31/2018	25.46	3.14	30.07	0.86	23.99	13.63	31.43	0.01	61.69	1.52	10.68	17.72	8.38	0.00
Putnam Retirement Advantage	12/31/2017	33.63	4.72	8.12	0.00	26.05	26.90	38.28	0.64	--	--	--	--	--	--
State Street Target Retirement Series	12/31/2017	43.56	3.02	54.04	0.28	24.89	15.16	5.62	0.01	72.15	2.22	6.04	6.92	12.66	0.00
T. Rowe Price Retirement Series	12/31/2017	28.81	9.42	42.58	0.57	28.99	26.11	1.75	0.01	51.02	3.60	9.03	17.07	19.28	0.00
Vanguard Target Retirement Series	01/31/2018	29.98	13.37	59.07	0.41	20.38	15.90	4.24	0.00	60.19	9.33	15.75	14.73	0.01	0.00
Morningstar Target Date Cat Avg	02/28/2018	32.20	5.67	40.10	0.42	26.29	16.52	14.91	1.77	59.24	4.95	10.42	14.46	11.03	0.45

2030	Date	US Non-US		Sector						Credit Quality					
		Bonds	Bonds	Govt	Muni	Corp	Securitized	Cash	Other	AAA	AA	A	BBB	Below Inv Grade	Not Rated
American Funds Trgt Date Rtrmt Series	12/31/2017	19.48	3.79	50.97	0.12	11.17	13.25	24.49	0.00	80.66	2.62	7.21	6.56	2.95	0.00
Fidelity Freedom Series	01/31/2018	15.63	2.05	34.32	0.85	26.00	13.34	25.46	0.03	62.52	1.06	8.67	15.92	11.85	0.00
Putnam Retirement Advantage	12/31/2017	20.84	4.03	3.27	0.00	24.05	24.89	47.28	0.51	--	--	--	--	--	--
State Street Target Retirement Series	12/31/2017	25.58	1.50	57.38	0.23	20.33	12.56	9.48	0.01	76.29	1.92	5.22	5.98	10.58	0.00
T. Rowe Price Retirement Series	12/31/2017	16.78	6.22	36.65	0.65	31.44	28.80	2.45	0.01	49.42	3.74	9.38	17.26	20.19	0.00
Vanguard Target Retirement Series	01/31/2018	18.45	9.49	54.56	0.45	22.30	17.39	5.30	0.00	56.09	10.28	17.37	16.26	0.01	0.00
Morningstar Target Date Cat Avg	02/28/2018	19.34	4.00	36.24	0.41	27.09	16.10	17.98	2.18	56.42	4.94	10.35	14.49	13.88	0.58

2040	Date	US Non-US		Sector						Credit Quality					
		Bonds	Bonds	Govt	Muni	Corp	Securitized	Cash	Other	AAA	AA	A	BBB	Below Inv Grade	Not Rated
American Funds Trgt Date Rtrmt Series	12/31/2017	9.08	1.68	39.12	0.11	11.74	10.01	39.02	0.00	83.24	1.73	5.78	6.36	2.90	0.00
Fidelity Freedom Series	01/31/2018	4.69	0.85	28.25	0.07	22.09	2.19	47.32	0.08	58.94	0.55	2.80	5.26	32.44	0.00
Putnam Retirement Advantage	12/31/2017	13.98	3.04	3.15	0.00	24.23	18.67	53.52	0.44	--	--	--	--	--	--
State Street Target Retirement Series	12/31/2017	14.32	0.42	66.69	0.15	7.24	8.41	17.50	0.02	90.36	1.41	3.84	4.39	0.00	0.00
T. Rowe Price Retirement Series	12/31/2017	9.29	3.41	34.22	0.69	31.92	30.33	2.82	0.01	52.19	3.65	9.16	16.53	18.48	0.00
Vanguard Target Retirement Series	01/31/2018	9.06	4.59	52.68	0.44	21.74	16.88	8.27	0.00	56.27	10.19	17.30	16.23	0.01	0.00
Morningstar Target Date Cat Avg	02/28/2018	9.90	2.44	30.90	0.36	26.63	13.64	25.97	2.50	52.78	5.43	10.12	14.35	17.40	0.67

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.

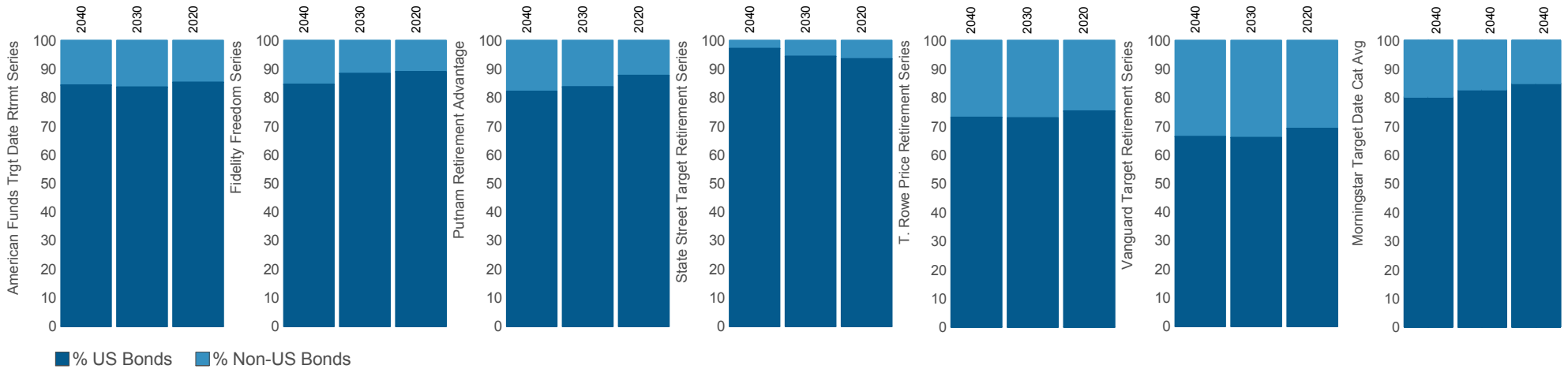
**Allocations and holdings are subject to change.** The above sector weights data are based on a Broad Asset Class Breakdown. Please see Important Information section for detailed information.

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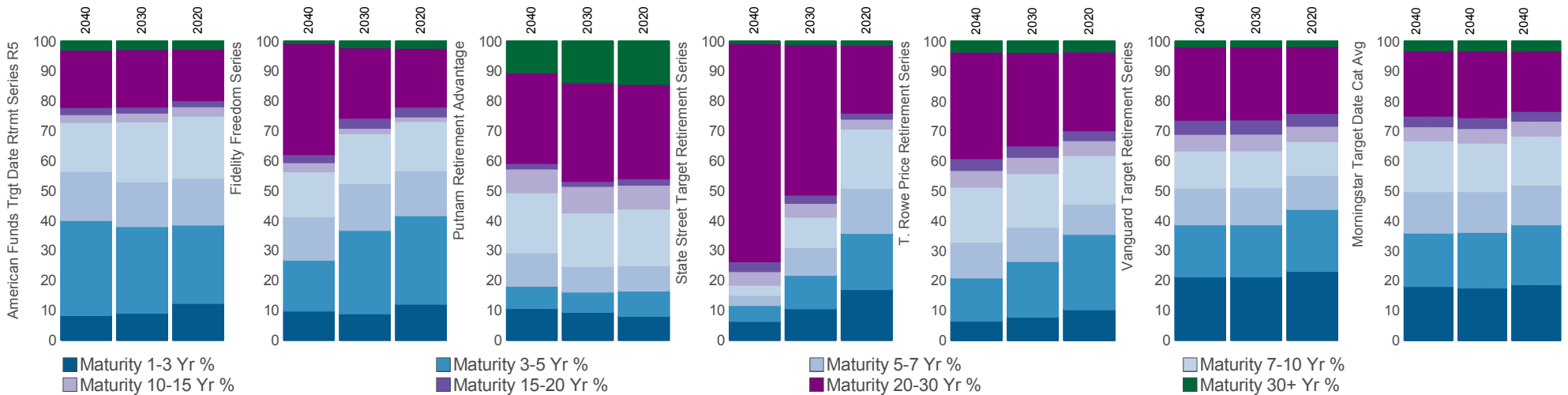
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# Fixed Income Allocation Breakdown (holdings-based)

## REGIONAL BREAKDOWN



## MATURITY BREAKDOWN



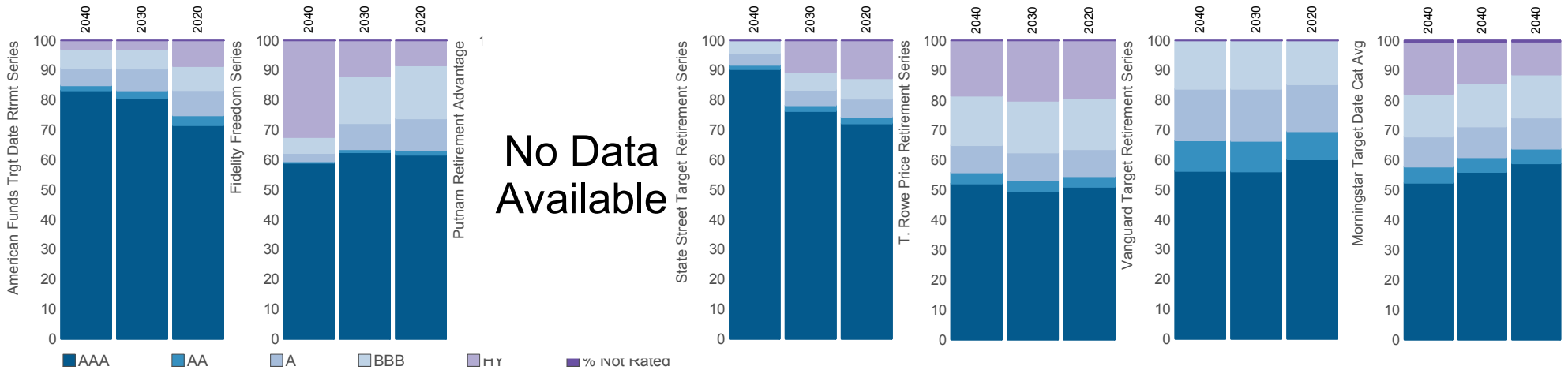
Morningstar Category peer universe is based off of the oldest share class.

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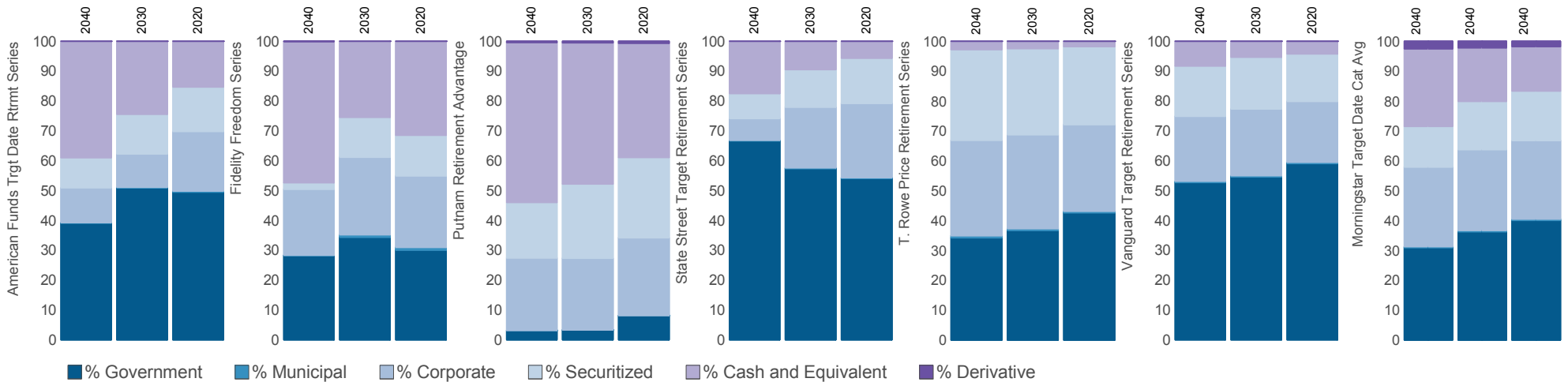
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# Fixed Income Allocation Breakdown (holdings-based)

## 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.

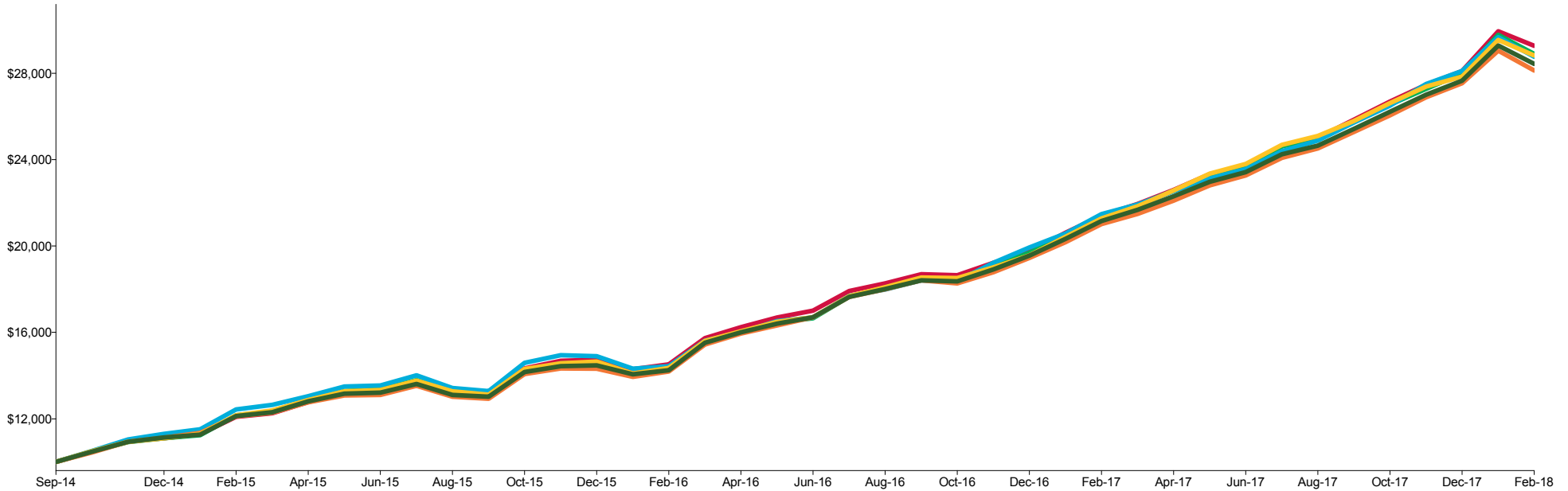
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# Investment of \$10,000 & Monthly Contribution of \$300

CUMULATIVE PERFORMANCE OF \$10,000 (Sep-14 - Feb-18)



	<b>American Funds 2050 Trgt Date Retire R5</b> ■	<b>Fidelity Freedom 2050</b> ■	<b>Putnam Retirement Advantage 2050: I</b> ■	<b>State Street Target Retirement 2050 K</b> ■	<b>T. Rowe Price Retirement 2050</b> ■	<b>Vanguard Target Retirement 2050 Inv</b> ■
Initial Investment (Sep-14)	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Ending Value (Feb-18)	\$29,275	\$28,903	\$28,764	\$28,130	\$28,832	\$28,443
Total Annualized Return	10.11%	9.59%	9.66%	8.48%	9.55%	8.94%
Total Cumulative Return	38.96%	36.76%	37.02%	32.07%	36.58%	33.98%
Best Monthly Return	6.64% (Oct-15)	6.77% (Mar-16)	7.64% (Oct-15)	6.69% (Mar-16)	6.80% (Oct-15)	6.81% (Mar-16)
Worst Monthly Return	-5.63% (Aug-15)	-6.00% (Aug-15)	-6.40% (Aug-15)	-5.97% (Aug-15)	-5.89% (Jan-16)	-5.92% (Aug-15)
Max Drawdown Return	-9.47%	-12.01%	-11.76%	-11.11%	-11.11%	-11.19%
Max Drawdown Period	Jun-15 - Feb-16 (9)	Jun-15 - Feb-16 (9)	Jun-15 - Feb-16 (9)	Jun-15 - Feb-16 (9)	Jun-15 - Feb-16 (9)	Jun-15 - Feb-16 (9)
Recovery Period	Mar-16 - Jul-16 (5)	Mar-16 - Aug-16 (6)	Mar-16 - Nov-16 (9)	Mar-16 - Jul-16 (5)	Mar-16 - Aug-16 (6)	Mar-16 - Jul-16 (5)

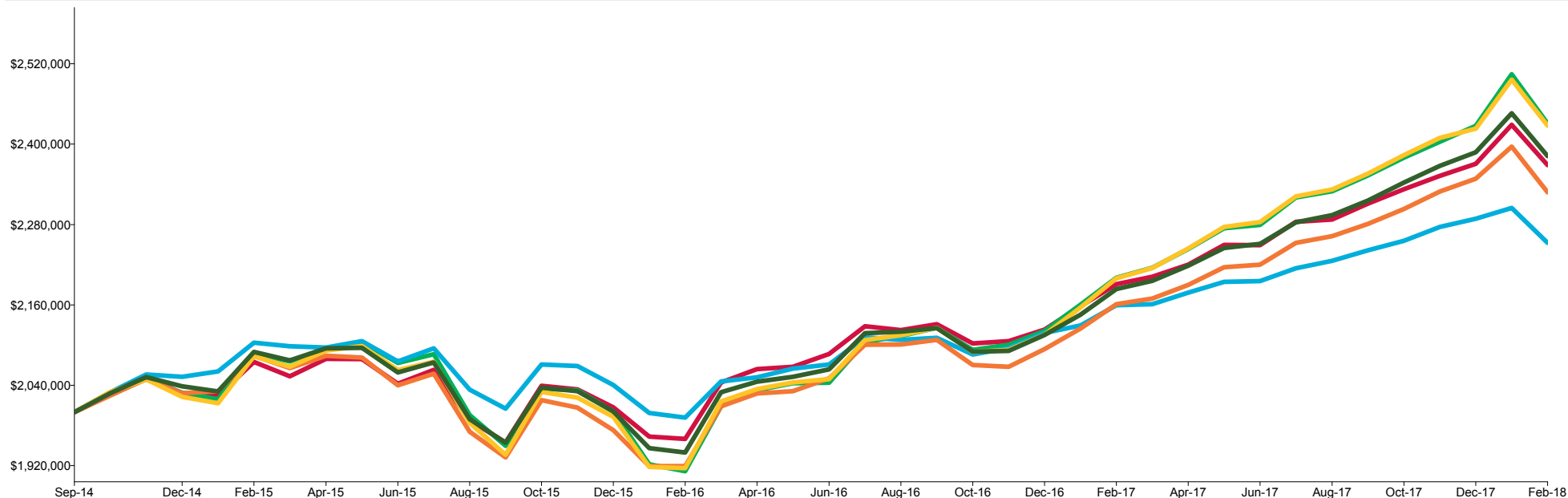
This chart represents historical performance and does not assume the effects of sales charges. If shown with sales charges, performance would have been lower.

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

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

CUMULATIVE PERFORMANCE OF \$2,000,000 (Sep-14 - Feb-18)



	<b>American Funds 2020 Trgt Date Retire R5</b> ■	<b>Fidelity Freedom 2020</b> ■	<b>Putnam Retirement Advantage 2020: I</b> ■	<b>State Street Target Retirement 2020 K</b> ■	<b>T. Rowe Price Retirement 2020</b> ■	<b>Vanguard Target Retirement 2020 Inv</b> ■
Initial Investment (Sep-14)	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000
Ending Value (Feb-18)	\$2,368,783	\$2,430,813	\$2,252,662	\$2,328,252	\$2,427,872	\$2,382,344
Total Annualized Return	6.27%	7.07%	4.72%	5.75%	7.04%	6.45%
Total Cumulative Return	23.09%	26.30%	17.07%	21.07%	26.17%	23.82%
Best Monthly Return	4.44% (Oct-15)	5.18% (Mar-16)	3.38% (Oct-15)	4.75% (Mar-16)	5.32% (Mar-16)	4.74% (Mar-16)
Worst Monthly Return	-3.54% (Aug-15)	-4.24% (Aug-15)	-2.85% (Aug-15)	-4.11% (Aug-15)	-4.30% (Aug-15)	-3.98% (Aug-15)
Max Drawdown Return	-5.62%	-8.37%	-4.57%	-7.07%	-7.87%	-6.62%
Max Drawdown Period	Jun-15 - Sep-15 (4)	Jun-15 - Feb-16 (9)	Jun-15 - Feb-16 (9)	May-15 - Jan-16 (9)	Jun-15 - Jan-16 (8)	Jun-15 - Feb-16 (9)
Recovery Period	Oct-15 - Apr-16 (7)	Mar-16 - Jul-16 (5)	Mar-16 - Jul-16 (5)	Feb-16 - Jul-16 (6)	Feb-16 - Jul-16 (6)	Mar-16 - Jul-16 (5)

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

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# Performance as of the Most Recent Quarter End

As of Dec 31, 2017

American Funds Trgt Date Rtrmt %	2060	2055	2050	2045	2040	2035	2030	2025	2020	2015	2010
1 Year	22.54	22.52	22.56	22.29	21.92	21.06	18.34	15.22	12.86	11.17	10.31
3 Years	--	10.09	10.11	10.00	9.84	9.50	8.58	7.36	6.54	5.88	5.49
5 Years	--	12.54	12.57	12.51	12.37	12.09	11.44	10.30	8.88	7.92	7.10
10 Years	--	--	7.08	7.05	7.00	6.85	6.60	5.96	5.28	5.05	4.79
Since Inception	10.11	11.61	7.35	7.33	7.27	7.14	6.89	6.29	5.64	5.36	5.06
Inception Date	3/27/15	2/1/10	2/1/07	2/1/07	2/1/07	2/1/07	2/1/07	2/1/07	2/1/07	2/1/07	2/1/07

Fidelity Freedom Series	2060	2055	2050	2045	2040	2035	2030	2025	2020	2015	2010	2005	Income
1 Year	22.10	22.31	22.28	22.21	22.25	22.00	19.82	16.82	15.64	14.28	12.48	10.47	8.21
3 Years	9.79	9.84	9.84	9.83	9.84	9.77	8.96	7.82	7.36	6.83	6.08	5.26	4.27
5 Years	--	11.45	11.30	11.25	11.14	11.04	10.06	9.06	8.09	7.48	6.81	5.65	4.25
10 Years	--	--	5.31	5.53	5.52	5.59	5.24	5.25	4.86	4.93	4.77	3.99	3.91
Since Inception	9.51	9.17	6.20	6.36	4.29	7.26	7.16	6.74	6.96	6.12	6.63	5.08	4.90
Inception Date	8/5/14	6/1/11	6/1/06	6/1/06	9/6/00	11/6/03	10/17/96	11/6/03	10/17/96	11/6/03	10/17/96	11/6/03	10/17/96

Putnam Retirement Advantage	2060	2055	2050	2045	2040	2035	2030	2025	2020	Income
1 Year	21.96	21.86	21.21	20.50	19.72	18.56	16.12	12.83	9.24	9.26
3 Years	--	9.78	9.57	9.32	9.07	8.66	7.74	6.56	4.88	5.33
5 Years	--	13.67	13.42	12.98	12.50	11.89	10.91	9.55	7.42	6.74
10 Years	--	--	7.05	6.83	6.71	6.60	6.23	5.87	5.26	5.32
Since Inception	23.16	11.48	7.05	6.83	6.71	6.60	6.24	5.87	5.26	5.32
Inception Date	2/9/16	12/21/10	1/2/08	1/2/08	1/2/08	1/2/08	1/2/08	1/2/08	1/2/08	1/2/08

State Street Target Retirement Se	2060	2055	2050	2045	2040	2035	2030	2025	2020	2015	Income
1 Year	21.57	21.53	21.42	21.45	20.69	19.73	18.35	16.52	13.38	10.39	8.83
3 Years	8.89	8.92	8.91	9.02	8.75	8.46	7.93	7.33	6.23	5.16	4.48
5 Years	--	--	--	--	--	--	--	--	--	--	--
10 Years	--	--	--	--	--	--	--	--	--	--	--
Since Inception	8.91	8.94	8.93	9.04	8.78	8.51	8.02	7.40	6.29	5.06	4.35
Inception Date	9/30/14	9/30/14	9/30/14	9/30/14	9/30/14	9/30/14	9/30/14	9/30/14	9/30/14	9/30/14	9/30/14

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# Performance as of the Most Recent Quarter End

As of Dec 31, 2017

<b>T. Rowe Price Retirement Series</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>2005</b>
1 Year	22.29	22.33	22.38	22.41	22.02	20.88	19.45	17.68	15.74	13.34	11.66	10.67
3 Years	9.68	9.70	9.71	9.71	9.57	9.22	8.75	8.11	7.41	6.54	5.88	5.44
5 Years	--	12.02	12.04	12.03	11.96	11.53	10.92	10.06	9.09	7.97	6.88	6.14
10 Years	--	7.08	7.10	7.10	7.06	6.83	6.63	6.34	6.04	5.67	5.24	5.09
Since Inception	8.27	7.06	7.07	8.21	9.97	7.90	9.67	7.43	8.85	6.67	7.72	5.90
Inception Date	6/23/14	12/29/06	12/29/06	5/31/05	9/30/02	2/27/04	9/30/02	2/27/04	9/30/02	2/27/04	9/30/02	2/27/04

<b>Vanguard Target Retirement Serie</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>Income</b>
1 Year	21.36	21.38	21.39	21.42	20.71	19.12	17.52	15.94	14.08	11.50	8.47
3 Years	9.10	9.11	9.16	9.17	8.91	8.39	7.85	7.31	6.61	5.62	4.46
5 Years	11.59	11.60	11.63	11.64	11.47	10.90	10.13	9.36	8.50	7.25	4.95
10 Years	--	--	6.56	6.56	6.49	6.18	5.92	5.79	5.61	5.23	4.91
Since Inception	11.54	11.62	7.50	8.21	7.39	7.72	6.93	7.04	6.53	6.35	5.38
Inception Date	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	10/27/03

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# Performance as of the Most Recent Month End

As of Feb 28, 2018

American Funds Trgt Date Rtrmt %	2060	2055	2050	2045	2040	2035	2030	2025	2020	2015	2010
1 Year	18.56	18.60	18.63	18.37	17.93	17.00	14.37	11.63	9.25	7.60	6.77
3 Years	--	9.62	9.63	9.51	9.28	8.90	7.84	6.65	5.69	5.03	4.63
5 Years	--	11.97	12.00	11.92	11.77	11.43	10.70	9.51	8.17	7.23	6.47
10 Years	--	--	8.06	8.02	7.95	7.79	7.47	6.76	5.96	5.56	5.27
Since Inception	10.28	11.65	7.44	7.41	7.34	7.19	6.89	6.26	5.56	5.25	4.95
Inception Date	3/27/15	2/1/10	2/1/07	2/1/07	2/1/07	2/1/07	2/1/07	2/1/07	2/1/07	2/1/07	2/1/07

Fidelity Freedom Series	2060	2055	2050	2045	2040	2035	2030	2025	2020	2015	2010	2005	Income
1 Year	17.37	17.48	17.36	17.47	17.34	17.16	15.13	12.65	11.60	10.41	8.78	7.21	5.30
3 Years	8.82	8.86	8.83	8.85	8.83	8.77	7.92	6.82	6.39	5.88	5.13	4.39	3.49
5 Years	--	10.81	10.68	10.65	10.57	10.45	9.50	8.48	7.59	7.01	6.29	5.24	3.91
10 Years	--	--	6.44	6.61	6.58	6.62	6.20	6.04	5.57	5.48	5.19	4.41	3.95
Since Inception	9.43	9.13	6.22	6.39	4.31	7.26	7.14	6.70	6.92	6.06	6.57	5.01	4.84
Inception Date	8/5/14	6/1/11	6/1/06	6/1/06	9/6/00	11/6/03	10/17/96	11/6/03	10/17/96	11/6/03	10/17/96	11/6/03	10/17/96

Putnam Retirement Advantage	2060	2055	2050	2045	2040	2035	2030	2025	2020	Income
1 Year	16.78	16.62	16.06	15.33	14.66	13.50	11.22	8.38	5.43	5.30
3 Years	--	8.25	8.02	7.81	7.60	7.16	6.25	5.01	3.47	4.12
5 Years	--	12.39	12.13	11.74	11.31	10.75	9.77	8.48	6.48	5.97
10 Years	--	--	7.84	7.59	7.41	7.23	6.78	6.30	5.56	5.38
Since Inception	21.39	11.26	6.96	6.74	6.60	6.46	6.07	5.66	5.03	5.11
Inception Date	2/9/16	12/21/10	1/2/08	1/2/08	1/2/08	1/2/08	1/2/08	1/2/08	1/2/08	1/2/08

State Street Target Retirement Se	2060	2055	2050	2045	2040	2035	2030	2025	2020	2015	Income
1 Year	15.72	15.88	15.71	15.85	15.06	14.18	12.95	11.50	8.87	6.42	5.21
3 Years	7.68	7.78	7.71	7.79	7.42	7.15	6.64	6.03	4.95	3.95	3.42
5 Years	--	--	--	--	--	--	--	--	--	--	--
10 Years	--	--	--	--	--	--	--	--	--	--	--
Since Inception	8.48	8.55	8.49	8.62	8.32	8.04	7.52	6.91	5.76	4.56	3.89
Inception Date	9/30/14	9/30/14	9/30/14	9/30/14	9/30/14	9/30/14	9/30/14	9/30/14	9/30/14	9/30/14	9/30/14

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# Performance as of the Most Recent Month End

As of Feb 28, 2018

<b>T. Rowe Price Retirement Series</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>2005</b>
1 Year	17.51	17.45	17.49	17.50	16.99	16.02	14.80	13.16	11.50	9.48	7.99	7.18
3 Years	8.74	8.74	8.76	8.75	8.55	8.19	7.74	7.10	6.42	5.60	4.98	4.56
5 Years	--	11.34	11.35	11.36	11.24	10.80	10.19	9.36	8.42	7.33	6.30	5.61
10 Years	--	8.17	8.17	8.18	8.12	7.88	7.63	7.25	6.85	6.34	5.79	5.51
Since Inception	8.33	7.08	7.10	8.23	9.95	7.89	9.63	7.39	8.78	6.60	7.62	5.81
Inception Date	6/23/14	12/29/06	12/29/06	5/31/05	9/30/02	2/27/04	9/30/02	2/27/04	9/30/02	2/27/04	9/30/02	2/27/04

<b>Vanguard Target Retirement Serie</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>Income</b>
1 Year	16.30	16.31	16.30	16.26	15.71	14.36	13.04	11.70	10.22	8.01	5.69
3 Years	8.14	8.13	8.18	8.19	7.91	7.38	6.85	6.31	5.64	4.67	3.64
5 Years	10.71	10.70	10.73	10.73	10.56	9.99	9.28	8.57	7.77	6.58	4.54
10 Years	--	--	7.49	7.49	7.41	7.08	6.76	6.51	6.24	5.73	4.93
Since Inception	11.35	11.46	7.46	8.17	7.34	7.66	6.86	6.96	6.43	6.26	5.28
Inception Date	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	10/27/03

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# 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 February 28, 2018. Specific Target-Date Fund Strategy level holding and other information, provided by Morningstar, is as of the following dates: American Funds Trgt Date Rtrmt Series: 12/31/2017, Fidelity Freedom Series: 01/31/2018, Putnam Retirement Advantage: 12/31/2017, State Street Target Retirement Series: 12/31/2017, T. Rowe Price Retirement Series: 12/31/2017, Vanguard Target Retirement Series: 01/31/2018.

**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
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
2005	Target-Date 2000-2010	DJ US 2005 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
American Funds 2010 Trgt Date Retire R5	0.38	0.38				Contractual	0.10	11/01/2016
American Funds 2015 Trgt Date Retire R5	0.38	0.38				Contractual	0.10	11/01/2016
American Funds 2020 Trgt Date Retire R5	0.40	0.40				Contractual	0.10	11/01/2016
American Funds 2025 Trgt Date Retire R5	0.42	0.42				Contractual	0.10	11/01/2016
American Funds 2030 Trgt Date Retire R5	0.44	0.44				Contractual	0.10	11/01/2016
American Funds 2035 Trgt Date Retire R5	0.45	0.45				Contractual	0.10	11/01/2016
American Funds 2040 Trgt Date Retire R5	0.46	0.46				Contractual	0.10	11/01/2016
American Funds 2045 Trgt Date Retire R5	0.46	0.46				Contractual	0.10	11/01/2016
American Funds 2050 Trgt Date Retire R5	0.46	0.46				Contractual	0.10	11/01/2016
American Funds 2055 Trgt Date Retire R5	0.47	0.47				Contractual	0.10	11/01/2016
American Funds 2060 Trgt Date Retire R5	0.50	0.54						
Fidelity Freedom 2005	0.49	0.49						
Fidelity Freedom 2010	0.53	0.53						
Fidelity Freedom 2015	0.58	0.58						
Fidelity Freedom 2020	0.62	0.62						
Fidelity Freedom 2025	0.66	0.66						
Fidelity Freedom 2030	0.70	0.70						
Fidelity Freedom 2035	0.75	0.75						
Fidelity Freedom 2040	0.75	0.75						
Fidelity Freedom 2045	0.75	0.75						
Fidelity Freedom 2050	0.75	0.75						
Fidelity Freedom 2055	0.75	0.75						
Fidelity Freedom 2060	0.75	0.75						
Fidelity Freedom Income	0.47	0.47						
Putnam Retirement Advantage 2020: I	0.50	0.50						
Putnam Retirement Advantage 2025: I	0.50	0.50						
Putnam Retirement Advantage 2030: I	0.50	0.50						
Putnam Retirement Advantage 2035: I	0.50	0.50						
Putnam Retirement Advantage 2040: I	0.50	0.50						
Putnam Retirement Advantage 2045: I	0.50	0.50						
Putnam Retirement Advantage 2050: I	0.50	0.50						

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	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
Putnam Retirement Advantage 2055 I	0.50	0.50						
Putnam Retirement Advantage 2060 Class I	0.50	0.50						
Putnam Retirement Maturity Fund: I	0.50	0.50						
State Street Target Retirement 2015 K	0.13	0.74	Contractual	0.61	04/30/2018			
State Street Target Retirement 2020 K	0.13	0.35	Contractual	0.22	04/30/2018			
State Street Target Retirement 2025 K	0.13	0.37	Contractual	0.24	04/30/2018			
State Street Target Retirement 2030 K	0.13	0.33	Contractual	0.20	04/30/2018			
State Street Target Retirement 2035 K	0.13	0.39	Contractual	0.26	04/30/2018			
State Street Target Retirement 2040 K	0.13	0.38	Contractual	0.25	04/30/2018			
State Street Target Retirement 2045 K	0.13	0.63	Contractual	0.50	04/30/2018			
State Street Target Retirement 2050 K	0.13	0.96	Contractual	0.83	04/30/2018			
State Street Target Retirement 2055 K	0.13	2.15	Contractual	2.02	04/30/2018			
State Street Target Retirement 2060 K	0.13	11.42	Contractual	11.29	04/30/2018			
State Street Target Retirement K	0.13	0.81	Contractual	0.68	04/30/2018			
T. Rowe Price Retirement 2005	0.58	0.58						
T. Rowe Price Retirement 2010	0.57	0.57						
T. Rowe Price Retirement 2015	0.59	0.59						
T. Rowe Price Retirement 2020	0.63	0.63						
T. Rowe Price Retirement 2025	0.67	0.67						
T. Rowe Price Retirement 2030	0.69	0.69						
T. Rowe Price Retirement 2035	0.72	0.72						
T. Rowe Price Retirement 2040	0.74	0.74						
T. Rowe Price Retirement 2045	0.74	0.74						
T. Rowe Price Retirement 2050	0.74	0.74						
T. Rowe Price Retirement 2055	0.74	0.74						
T. Rowe Price Retirement 2060	0.74	0.74						
Vanguard Target Retirement 2015 Inv	0.13	0.13						
Vanguard Target Retirement 2020 Inv	0.13	0.13						
Vanguard Target Retirement 2025 Inv	0.14	0.14						
Vanguard Target Retirement 2030 Inv	0.14	0.14						
Vanguard Target Retirement 2035 Inv	0.14	0.14						

# 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
Vanguard Target Retirement 2040 Inv	0.15	0.15						
Vanguard Target Retirement 2045 Inv	0.15	0.15						
Vanguard Target Retirement 2050 Inv	0.15	0.15						
Vanguard Target Retirement 2055 Inv	0.15	0.15						
Vanguard Target Retirement 2060 Inv	0.15	0.15						
Vanguard Target Retirement Income Inv	0.13	0.13						