Target-Date Fund Series Reports Methodology

Morningstar Target-Date Fund Series Reports

Target-date funds are designed to be a simple, all-in-one solution that is relatively easy for investors to use. However, these simplifying features can make target-date funds tricky to evaluate. Morningstar Target-Date Fund Series Reports ("the Reports") are designed to help individual investors, financial advisors, consultants, plan sponsors, and other interested fiduciaries make informed decisions when selecting a series of target-date funds.

Despite sharing a common target year in their name, target-date funds may vary significantly by provider and series. The different approaches to the strategic equity glide path, sub-asset-class exposures, and underlying holdings can lead to markedly different results for investors. The Reports intend to illuminate these differences, providing fiduciaries with the most relevant and insightful information when comparing series of target-date funds.

This document summarizes the methodology behind each data point presented in the Reports.

Key Features

The Key Features section of a Morningstar Target-Date Fund Series Report shows the following statistics for the target-date fund series:

Firm Total Target-Date Assets
This figure shows the corresponding firm’s total net assets in mutual funds across all target-date Morningstar Categories.

Total Series Assets
This figure shows the total net assets in the corresponding series of target-date funds.

Inception Date (Oldest Share Class)
This figure shows the oldest inception date for the corresponding series of target-date funds.

Glide Path Type
This description indicates whether a series’ funds continue to shift asset allocation after reaching their target date or remain static upon reaching their target date.
Through Retirement: The series' funds continue to shift after the target date.

To Retirement: The series' funds remain static upon reaching the target date.

**Landing Point (Years to Target)**

This figure shows the point on a series' strategic equity glide path when the funds stop shifting asset allocation. The figure reflects the number of years from the funds' target date when they reach that static asset allocation. For example, -15 YTT means that the series' funds continue to shift until 15 years after their target date.

**Strategic/Tactical**

This description indicates whether a series' portfolio managers opportunistically shift the portfolios away from the strategic equity glide path in an attempt to improve results. Morningstar's manager research analysts determine a series' classification.

- Strategic: The managers do not deviate from the strategic equity glide path.
- Tactical: The managers have the flexibility to opportunistically position the portfolios.

**Underlying Investments**

This description shows the type of holdings within the corresponding series of target-date funds, using the Direct data point "Detailed Holding Type" and excluding cash and money market investments.

- MF = Mutual Funds
- ETF = Exchange-Traded Funds
- Sec = Other Securities

**Active Exposure**

This figure shows the percentage of a series' assets in funds that aim to outperform their respective benchmark indexes. To determine the active exposure, Morningstar identifies which of the series' holdings — typically funds — are labeled as index funds in the Morningstar database. The figure reflects the sum of position market values in portfolio holdings where the Direct data point "Index Fund" equals "Yes," subtracts that sum from the total position market value for the series, and then divides the difference by the series' total net assets. Individual securities held within target-date funds are not classified as passively managed since they are not clearly tied to an index fund.

**Open Architecture**

This figure shows the percentage of a series' assets in underlying funds not managed by the series' parent firm or affiliates. To determine the open architecture exposure, Morningstar's manager research analysts identify which of the series' underlying holdings — typically funds — are run predominantly by an outside firm. The figure reflects the sum of position market values in those holdings divided by the
series' total net assets. Individual securities held within target-date funds are not classified as open architecture since they are not clearly tied to an outside firm.

**Target-Date Vehicles**
This description shows the available vehicles for the corresponding series. Morningstar's manager research analysts determine whether a collective investment trust version of a strategy adheres to the same approach as the mutual fund version.

- **MF** = Mutual Fund
- **CIT** = Collective Investment Trust

**Target-Date Year Ranges; Increments; Income/Retirement Fund**
These descriptions show the availability of funds within the series of target-date funds.

Target Date Year Ranges display the maximum and minimum values for the Direct data point "Target Date" for target-date funds within a series. This captures the range of availability of the series' funds.

Increments displays the gap, in years, between the funds within a series. Most series have increments of five years, though some may have increments of 10 years. The figure reflects the most common difference in years between adjacent funds.

Income/Retirement Funds displays if the series includes a fund in the target-date retirement Morningstar Category.

**Asset-Weighted Expense Ratio**
This figure displays the "typical" expense ratio paid by investors in a target-date series. The asset-weighted expense ratio weighs the net prospectus expense ratio for each share class of every fund in a target-date series based on the percentage of the series' assets in that share class.

**Strategic Equity Glide Path**
The strategic equity glide path of a target-date series refers to its asset allocation over time, based on the number of years to and beyond the target date. Funds tend to invest heavily in equities in the decades before retirement, and shift to higher allocations to fixed-income securities leading up to and into retirement. The Reports depict the strategic equity glide path in five-year increments based the years to the target date.

Morningstar collects target-date funds' strategic asset allocations from prospectuses and then breaks the allocations into four asset types: stock, bond, cash, and other. The stock type represents a fund series' strategic allocation to equity securities from the United States and other developed and emerging
countries. The bond type includes strategic allocation to fixed-income securities of various maturities, security types, and credit quality from the U.S. and other developed and emerging countries. The cash type represents strategic allocation to cash and cash-equivalent securities as well as ultrashort-term bonds. The other type denotes strategic allocation to other assets that do not fit into the first three types, such as real estate and commodities. The strategic equity glide path reflects the sum of the stock and other strategic allocations.

The Reports also show the peer average and the peer range of strategic equity glide paths in addition to the series' glide path, allowing investors to gauge how a target-date series' glide path compares with peers'. The peer group consists of all open-end target-date fund series available for sale in the U.S. The peer group is subdivided according to the funds' target date, creating a subset for each five-year increment. The peer average total equity exposure for a target date is the simple average of total equity exposure statistics of the subset of funds in the peer group with the same target date. Maximum and minimum total equity exposure figures also come from those funds' total equity exposure.

**Performance: Five-Year Return; Five-Year Rank**

This table presents the five-year annualized return and Morningstar Category rank through quarter-end for the representative share class of each fund in the target-date series. The representative share class shown is the share class of the fund with at least 10 years of live performance as of quarter-end. If multiple share classes of a fund have 10 years of live performance, the one with the lowest net prospectus expense ratio is selected. If multiple share classes meet both these filters, the share class with highest net assets at quarter-end is selected. If a fund doesn't have 10 years of live performance, the same filtering process is applied for five years, three years, one year, and three months.
Series Sub-Asset-Class Glide Path

This chart shows the target-date series’ asset allocation to 10 subasset classes at different points along the glide path. Unlike strategic equity glide paths collected from prospectuses, series’ sub-asset-class glide paths are built using portfolio holdings. Morningstar collects security-level holdings data for target-date series offered via open-end mutual funds and classifies each security into one of 10 subasset classes—five equity and five fixed income—listed below.

Equity
- U.S. Large-Cap Equity
- U.S. Mid/Small-Cap Equity
- Non-U.S. Developed Equity
- Emerging Market Equity
- Other Equity

Fixed Income
- Treasury Inflation-Protected Securities (TIPS)
- Core/Other Bonds
- U.S. High-Yield Bonds
- Foreign Bonds
- Cash

The sub-asset-class glide path incorporates 11 observations in five-year increments for each series, ranging from 2060 to 2010. Rules apply to fill any gaps caused by the availability of funds. For instance, if a series does not offer a 2060 fund, the 2055 fund’s portfolio extends to the 2060 fund. If a series does not have a 2015 or 2010 fund, the portfolio for a series’ retirement fund is used for those funds. For series that only offer funds in 10-year increments, midpoints between the existing funds fill the gaps to provide five-year increments for each series.

Equity Sub-Asset-Class Glide Path versus Peer Average

This chart shows how the equity exposure of a series’ sub-asset-class glide path compares with the peer average sub-asset-class glide path. Each colored line represents one of the 10 subasset classes. Lines above zero on the y-axis indicate that series held more of that subasset class than the peer average sub-asset-class glide path; lines below zero indicated that the series held less than the peer average. The sub-asset-class difference for each target year subtracts the peer average exposure to that subasset class from the series’ exposure to the same subasset class.

The peer average sub-asset-class glide path is constructed using the sub-asset-class glide paths for series offered via open-end mutual funds. Each series has an equal weight in the peer average sub-
asset-class glide path, but a series is excluded from the average calculation if it triggers any of the following issues for that period:

- A series' Cash value is less than negative 5% for three or more target years.
- A series' Cash value is greater than 20% for three or more target years.
- A series' Other Equity is greater than 20% for three or more target years.

The exclusion rules seek to remove sub-asset-class allocations that don't appear to accurately reflect a series' exposures.

**Fixed-Income Sub-Asset-Class Glide Path versus Peer Average**

This chart shows how the fixed-income exposure of a series' sub-asset-class glide path compares with the peer average sub-asset-class glide path. Each colored line represents one of the 10 subasset classes. Lines above zero on the y-axis indicate that series held more of that subasset class than the peer average sub-asset-class glide path; lines below zero indicated that the series held less than the peer average. The sub-asset-class difference for each target year subtracts the peer average exposure to that subasset class from the series' exposure to the same subasset class.

The peer average sub-asset-class glide path is constructed using the sub-asset-class glide paths for series offered via open-end mutual funds. Each series has an equal weight in the peer average sub-asset-class glide path, but a series is excluded from the average calculation if it triggers any of the following issues for that period:

- A series' Cash value is less than negative 5% for three or more target years.
- A series' Cash value is greater than 20% for three or more target years.
- A series' Other Equity is greater than 20% for three or more target years.

The exclusion rules seek to remove sub-asset-class allocations that don't appear to accurately reflect a series' exposures.
**Series' Average Portfolio Splits versus Peer Average**

This exhibit shows how a series' various sub-portfolios compare with the peer average, using the same portfolio holdings data that creates sub-asset-class glide paths. The calculations outlined below are performed for each target year — 2060 to 2010 — in series and the figure shown reflects the straight average of the series' calculations. The same calculation is performed for the peer average sub-asset-class glide path to determine the peer averages for the sub-portfolios.

**Equity**
- U.S. ÷ Total Equity = (U.S. Large-Cap + U.S. Mid/Small-Cap)/(U.S. Large-Cap + U.S. Mid/Small-Cap + Non-U.S. Developed + Emerging Markets + Other Equity)
- Mid & Small ÷ U.S. Equity = (U.S. Mid/Small-Cap)/(U.S. Large-Cap + U.S. Mid/Small-Cap)
- Emg Markets ÷ Non-U.S. Equity = (Emerging Markets)/(Non-U.S. Developed + Emerging Markets)

**Fixed Income**
- High-Yield ÷ Total Fixed Income = High-Yield/(TIPS + Core/Other + High-Yield + Foreign + Cash)
- Foreign ÷ Total Fixed Income = Foreign/(TIPS + Core/Other + High-Yield + Foreign + Cash)

**Portfolio Attributes**

**Total # Holdings**
This figure shows the total number of distinct holdings within the target-date series.

**% Portfolio in Top 10 Holdings**
This figure shows the percentage of the target-date series' assets in the 10 largest holdings.

**Average Morningstar Rating of Underlying Funds**
This figure shows the average Morningstar Rating of a target-date series' underlying holdings. The calculation weighs each holding by its percentage of series assets. If a holding does not have a Morningstar Rating, it is removed from the calculation and the percentage of series assets is rescaled to the amount of assets in holdings with a Morningstar Rating.

**Strategic/Tactical**
This description indicates whether a series' portfolio managers opportunistically shift the portfolios away from the strategic equity glide path in attempt to improve results. Morningstar's manager research analysts determine a series' classification.

- Strategic: The managers do not deviate from the strategic equity glide path.
- Tactical: The managers have the flexibility to opportunistically position the portfolios.
Underlying Investments
This description shows the type of holdings within the corresponding series of target-date funds, using the Direct data point "Detailed Holding Type" and excluding cash and money market investments.

- MF = Mutual Funds
- ETF = Exchange-Traded Funds
- Sec = Other Securities

Active Exposure
This figure shows the percentage of a series' assets in funds that aim to outperform their respective benchmark indexes. To determine the active exposure, Morningstar identifies which of the series' holdings—typically funds—are labeled as index funds in the Morningstar database. The figure reflects the sum of position market values in portfolio holdings where the Direct data point "Index Fund" equals "Yes," subtracts that sum from the total position market value for the series, and then divides the difference by the series' total net assets. Individual securities held within target-date funds are not classified as passively managed since they are not clearly tied to an index fund.

Open Architecture
This figure shows the percentage of a series' assets in underlying funds not managed by the series' parent firm or affiliates. To determine the open architecture exposure, Morningstar's manager research analysts identify which of the series' underlying holdings—typically funds—are run predominantly by an outside firm. The figure reflects the sum of position market values in those holdings divided by the series' total net assets. Individual securities held within target-date funds are not classified as open architecture since they are not clearly tied to an outside firm.

Underlying Funds' Morningstar Analyst Ratings
This exhibit shows the asset-weighted breakdown of a target-date series' underlying holdings by Morningstar Analyst Rating. The % Medalists is the sum of the percentage in Gold-, Silver-, and Bronze-rated holdings.

Top Investments
This table shows data for the 10 largest holdings in a target-date series, including its Morningstar Category, its percentage of series assets, annualized returns, and Morningstar Category ranks over the one-, three-, five-, and 10-year periods; Morningstar Analyst Rating; Morningstar Rating; and the first month that holding was added to a fund in the series. (The date of the most recent analysis is shown below the Morningstar Analyst Rating.)
Most Recent Underlying Additions/Removals

This table shows the 10 most recent underlying fund additions or removals for a target-date series determined by monthly reviews of each fund's holdings. The underlying funds are listed in chronological order from most recent to oldest addition or removal by the Morningstar data point: Fund Standard Name, as the methodology intentionally avoids flagging share-class changes of a fund. A green plus signifies an addition to the series' underlying fund lineup and a red minus signifies a removal. The date for an addition reflects the first month that a fund was held in the series and the date for a removal reflects the first month that a former holding was absent from the series.

Number of Underlying Funds History

This chart displays the number of distinct underlying funds held within a target-date series for the past 10 calendar years (as available) by reviewing each target-date fund's historical holdings. The chart also displays the number of holdings by five broad groupings: U.S. Equity, Non-U.S. Equity, Fixed Income, Alternatives, and Allocation. The broad groupings consist of funds that correspond with Morningstar U.S. Category Groups as follows:

- U.S. Equity = U.S. Equity, Sector Equity
- Non-U.S. Equity = International Equity
- Fixed Income = Taxable Bond, Money Market
- Alternatives = Alternatives
- Allocation = Allocation

Target-Date Series Management

This table identifies a target-date series' 10 most recent portfolio managers according to regulatory filings, listing first current managers by most recent start date and then past managers by most recent end date. The table shows the current managers' level of investment in the series' funds according to its Statement of Additional Information. If a manager invests in more than one fund in the series, the sum of the ranges defined in the Statement of Additional Information is displayed. The table also shows tenure (in years) of each current manager as well as the start dates and end dates of the 10 most recent current and past managers.
Target-Date Manager Tenure

Series’ Average
This figure shows the straight average of the manager tenure (in years) of a target-date series’ current portfolio managers. The manager tenure for a current manager reflects their tenure on a fund with the oldest inception date within a target-date series.

Series’ Longest
This figure shows the manager tenure (in years) of a target-date series' longest-tenured current portfolio manager. The manager tenure for a current manager reflects their tenure on a fund with the oldest inception date within a target-date series.

Target-Date Industry Average
This figure shows the straight average of each target-date series’ average tenure, including only those offered via open-end mutual funds.

Underlying Funds’ Manager Tenure

Series’ Average
This figure shows the average manager tenure (in years) of a series’ underlying funds. The manager tenure used for the underlying funds is the Direct data point: Manager Tenure (Longest), and each underlying fund is weighted according to its percentage of series assets.

Series’ Longest
This figure shows the longest manager tenure (in years) of an underlying fund within a target-date series' using the Direct data point: Manager Tenure (Longest).

Mutual Fund Industry Average
This figure shows the straight average of the Direct data point: Manager Tenure (Average), for all funds in the U.S. Open-End Fund universe and all ETFs in the U.S. Exchange-Traded Funds universe.
Underlying Funds' Management

Manager Tenure
This chart groups the percentage of a series' assets based on the underlying funds' manager tenure. The calculation uses the Direct data point: Manager Tenure (Longest) of an underlying fund's oldest share class to determine the appropriate grouping for the fund's assets.

Manager Investment
This chart groups the percentage of a series' assets based on the highest level of an underlying funds' manager ownership. The calculation uses an underlying fund's highest level of portfolio manager investment according to the Direct data point: Manager Ownership to determine the appropriate grouping for the fund's assets.

Target-Date Fund Performance

This table shows the one-, three-, five-, and 10-year annualized returns for a representative share class of each fund in the series and the category rank within its Morningstar Category over those periods. To account for return volatility, the table also shows the Morningstar Rating and 10-year Sharpe ratio for the share classes shown.

The representative share class shown is the share class of the fund with at least 10 years of live performance as of quarter-end. If multiple share classes of a fund have 10 years of live performance, the one with the lowest net prospectus expense ratio is selected. If multiple share classes meet both these filters, the share class with highest net assets at quarter-end is selected. If a fund doesn't have 10 years of live performance, the same filtering process is applied for five years, three years, one year, and three months.

One-Year Performance Attribution %

The attribution methodology attempts to identify the main drivers of a target-date fund's recent performance. The Reports include one-year performance attribution through quarter-end for a series' 2025 and 2045 funds.

Allocation Effect
This figure seeks to capture the difference in return attributable to divergences in asset-class exposures between a target-date fund and a peer average portfolio with the same target date. The calculation compares the respective target-date funds' exposure to 10 subasset classes with the corresponding portfolio of the peer average sub-asset-class glide path. A fund may be overweight or underweight in a subasset class relative to the peer average portfolio. An index serves as a proxy for each subasset class to determine whether that relative position helped or hurt performance. An overweight in a strong-
performing subasset class or an underweight in a poor-performing one shows positive, whereas an underweight to a strong-performing subasset class or an overweight to a poor-performing one shows negative. This process repeats each month and then links the monthly results to arrive at a one-year allocation effect while identifying the allocation effect for each subasset class. The following indexes serve as proxies for subasset classes:

- U.S. Large-Cap Equity = Russell 1000 Index
- U.S. Mid-/Small-Cap Equity = Russell 2500 Index
- Non-U.S. Developed Equity = MSCI EAFE Index
- Emerging-Markets Equity = MSCI EM Index
- Other Equity = FTSE NAREIT Equity REITs Index
- TIPS = Bloomberg Barclays U.S. Treasury U.S. TIPS Index
- Core/Other Bonds = Bloomberg Barclays U.S. Aggregate Bond Index
- U.S. High-Yield Bonds = Bloomberg Barclays U.S. Corporate High-Yield Index
- Foreign Bonds = Bloomberg Barclays Global Aggregate ex USD Index
- Cash = FTSE Treasury Bill Three-Month Index

Notably, the allocation effect does not discern between a fund’s long-term strategic allocations and tactical shifts that its portfolio managers may have in place over the shorter term.

**Selection Effect**

This reflects the difference in return between a target-date fund and the corresponding peer-average portfolio that’s not attributable to the allocation effect. The selection effect subtracts the return for the peer average portfolio using the previously mentioned proxy indexes from the return of a target-date fund’s representative share class, and then subtracts the allocation effect from that return differential. The selection effect is the remaining difference. This process repeats each month and then links the monthly results to arrive at a one-year selection effect. Unlike the allocation effect, the methodology does not calculate the selection effect for each subasset class because returns are not available for a target-date fund’s subasset classes.

Under this methodology, the selection effect has the potential to reflect a mismatch in exposures within the subasset classes in addition to the relative outperformance or underperformance from a target-date fund’s underlying active exposure. For example, if a target-date fund’s foreign bond exposure is emerging-markets debt exclusively, it would not align with the broad index used as a proxy for foreign bonds.

**Total Effect**

This reflects the overall difference in return between a target-date fund and the corresponding peer-average portfolio using proxy indexes to represent the peer-average portfolio’s subasset class returns.
The total effect is the sum of the allocation effect and selection effect. This process repeats each month and then links the monthly results to arrive at a one-year total effect.

**Biggest Allocation Contributors**

These figures reflect the amount of a target-date fund's outperformance (positive number) or underperformance (negative number) versus a peer average portfolio that is attributable to the allocation difference of a subasset class. The Reports display the three subasset classes with the highest absolute value for allocation effect over the one-year period.

**Asset-Weighted Expense Ratio versus Peer Average (%)**

**Asset-Weighted Expense Ratio**

This figure displays the "typical" expense ratio paid by investors in a target-date series. The asset-weighted expense ratio weighs the net prospectus expense ratio for each share class of every fund in a target-date series based on the percentage of the series' assets in that share class.

**Peer Average**

This figure reflects the average of asset-weighted expense ratios for all target-date series offered via open-end mutual funds. Each series has an equal weight in the average.

**Average Expense Ratio of Cheapest Share Class versus Percentage in Active Funds**

This exhibit plots a single point for each target-date series offered via open-end mutual funds based on the two data points described below.

**Average Expense Ratio of Cheapest Share Class**

This figure displays the straight average of the lowest value for the Direct data point: Net Prospectus Expense Ratio for each target date for a target-date series.

**Percentage in Active Funds**

This figure shows the percentage of a series' assets in funds that aim to outperform their respective benchmark index. To determine the active exposure, Morningstar identifies which of the series' holdings — typically funds — are labeled as index funds in the Morningstar database. The figure reflects the sum of position market values in portfolio holdings where the Direct data point "Index Fund" equals "Yes," subtracts that sum from the total position market value for the series, and then divides the difference by the series' total net assets. Individual securities held within target-date funds are not classified as passively managed since they are not clearly tied to an index fund.
### Expense Ratio Analysis by Distribution Group

This table seeks to provide insight into the competitiveness of the different share classes of target-date funds within a series according to its distribution channel.

#### Distribution Group

These eight broad distribution groups consist of granular distribution groups reflected in the Direct data point: Morningstar Fee Level Group — Distribution. The broad groups use the following mapping:

- **Deferred Load**
  - Retirement Income Deferred Load
  - Target Retirement 2000-2010 Deferred Load
  - Target Retirement 2011-2015 Deferred Load
  - Target Retirement 2016-2020 Deferred Load
  - Target Retirement 2021-2025 Deferred Load
  - Target Retirement 2026-2030 Deferred Load
  - Target Retirement 2031-2035 Deferred Load
  - Target Retirement 2036-2040 Deferred Load
  - Target Retirement 2041-2045 Deferred Load
  - Target Retirement 2046-2050 Deferred Load
  - Target Retirement 2051+ Deferred Load
  - Target Retirement 2061+ Deferred Load

- **Front Load**
  - Retirement Income Front Load
  - Target Retirement 2000-2010 Front Load
  - Target Retirement 2011-2015 Front Load
  - Target Retirement 2016-2020 Front Load
  - Target Retirement 2021-2025 Front Load
  - Target Retirement 2026-2030 Front Load
  - Target Retirement 2031-2035 Front Load
  - Target Retirement 2036-2040 Front Load
  - Target Retirement 2041-2045 Front Load
  - Target Retirement 2046-2050 Front Load
  - Target Retirement 2051+ Front Load
  - Target Retirement 2061+ Front Load
Institutional
- Retirement Income Institutional
- Target Retirement 2000-2010 Institutional
- Target Retirement 2011-2015 Institutional
- Target Retirement 2016-2020 Institutional
- Target Retirement 2021-2025 Institutional
- Target Retirement 2026-2030 Institutional
- Target Retirement 2031-2035 Institutional
- Target Retirement 2036-2040 Institutional
- Target Retirement 2041-2045 Institutional
- Target Retirement 2046-2050 Institutional
- Target Retirement 2051+ Institutional
- Target Retirement 2061+ Institutional

Level Load
- Retirement Income Level Load
- Target Retirement 2000-2010 Level Load
- Target Retirement 2011-2015 Level Load
- Target Retirement 2016-2020 Level Load
- Target Retirement 2021-2025 Level Load
- Target Retirement 2026-2030 Level Load
- Target Retirement 2031-2035 Level Load
- Target Retirement 2036-2040 Level Load
- Target Retirement 2041-2045 Level Load
- Target Retirement 2046-2050 Level Load
- Target Retirement 2051+ Level Load
- Target Retirement 2061+ Level Load

No Load
- Retirement Income No Load
- Target Retirement 2000-2010 No Load
- Target Retirement 2011-2015 No Load
- Target Retirement 2016-2020 No Load
- Target Retirement 2021-2025 No Load
- Target Retirement 2026-2030 No Load
Target Retirement 2031-2035 No Load
Target Retirement 2036-2040 No Load
Target Retirement 2041-2045 No Load
Target Retirement 2046-2050 No Load
Target Retirement 2051+ No Load
Target Retirement 2061+ No Load

Retirement Large
Retirement Income Retirement, Large
Target Retirement 2000-2010 Retirement, Large
Target Retirement 2011-2015 Retirement, Large
Target Retirement 2016-2020 Retirement, Large
Target Retirement 2021-2025 Retirement, Large
Target Retirement 2026-2030 Retirement, Large
Target Retirement 2031-2035 Retirement, Large
Target Retirement 2036-2040 Retirement, Large
Target Retirement 2041-2045 Retirement, Large
Target Retirement 2046-2050 Retirement, Large
Target Retirement 2051+ Retirement, Large
Target Retirement 2061+ Retirement, Large

Retirement Medium
Retirement Income Retirement, Medium
Target Retirement 2000-2010 Retirement, Medium
Target Retirement 2011-2015 Retirement, Medium
Target Retirement 2016-2020 Retirement, Medium
Target Retirement 2021-2025 Retirement, Medium
Target Retirement 2026-2030 Retirement, Medium
Target Retirement 2031-2035 Retirement, Medium
Target Retirement 2036-2040 Retirement, Medium
Target Retirement 2041-2045 Retirement, Medium
Target Retirement 2046-2050 Retirement, Medium
Target Retirement 2051+ Retirement, Medium
Target Retirement 2061+ Retirement, Medium
Retirement Small
- Retirement Income Retirement, Small
- Target Retirement 2000-2010 Retirement, Small
- Target Retirement 2011-2015 Retirement, Small
- Target Retirement 2016-2020 Retirement, Small
- Target Retirement 2021-2025 Retirement, Small
- Target Retirement 2026-2030 Retirement, Small
- Target Retirement 2031-2035 Retirement, Small
- Target Retirement 2036-2040 Retirement, Small
- Target Retirement 2041-2045 Retirement, Small
- Target Retirement 2046-2050 Retirement, Small
- Target Retirement 2051+ Retirement, Small
- Target Retirement 2061+ Retirement, Small

Share Class Type
This figure corresponds to the Direct data point: Share Class Type. It appears in the table when a target-date fund within the series offers that type of share class within the broad distribution group.

Net Assets
This figure reflects the sum of a target-date series' assets in the corresponding Share Class Type within the broad distribution group.

Average Fee Level Rank % — Distribution
This figure reflects the average rank for the target-date series' share class type within a broad distribution group using the Direct data point: Morningstar Fee Level % Rank — Distribution. Each share class receives an equal weight in the average calculation.

Average Expense Ratio %
This figure reflects the average expense ratio for the target-date series' share class type within a broad distribution group using the Direct data point: Net Prospectus Expense Ratio. Each share class receives an equal weight in the average calculation. This figure is also presented in the bar chart to the left of the table.
Peer Range
This bar marks the lowest to highest expense ratio for the corresponding share class type of a target-date fund within a broad distribution group.

Peer Average
This marker reflects the peer average expense ratio for the corresponding share class type of a target-date fund within a broad distribution group. Each share class receives an equal weight in the average calculation using the Direct data point: Net Prospectus Expense Ratio.

Firm and Target-Date Fund Assets

Total Firm Assets/Firm Fund Assets
Both these figures reflect the corresponding firm's total net assets by summing the Direct data point: Net Assets—Share Class for every share class of mutual fund and exchange-traded fund offered by the firm. The calculation excludes assets in money-market funds and funds of funds. The current year's figures reflect data of as the most recent quarter-end.

Total TDF Assets/TDF Assets
Both these figures reflect the corresponding firm's total net assets in target-date funds offered as open-end mutual funds by summing the Direct data point: Net Assets - Share Class for every share class of mutual fund that is included in one of the following Morningstar Categories:

- US Fund Target-Date Retirement
- US Fund Target-Date 2000-2010
- US Fund Target-Date 2015
- US Fund Target-Date 2020
- US Fund Target-Date 2025
- US Fund Target-Date 2030
- US Fund Target-Date 2035
- US Fund Target-Date 2040
- US Fund Target-Date 2045
- US Fund Target-Date 2050
- US Fund Target-Date 2055
- US Fund Target-Date 2060+

The current year's figures reflect data of as the most recent quarter-end.
**TDF Net Flows**

This figure reflects the corresponding firm's total net flows in target-date funds offered as open-end mutual funds by summing the Direct data point: Est Fund-Level Net Flow for every share class of mutual fund that is included in one the following Morningstar Categories:

- US Fund Target-Date Retirement
- US Fund Target-Date 2000-2010
- US Fund Target-Date 2015
- US Fund Target-Date 2020
- US Fund Target-Date 2025
- US Fund Target-Date 2030
- US Fund Target-Date 2035
- US Fund Target-Date 2040
- US Fund Target-Date 2045
- US Fund Target-Date 2050
- US Fund Target-Date 2055
- US Fund Target-Date 2060+

The current year's figures reflect data of as the most recent quarter-end.

**TDF Organic Growth Rate**

This figure reflects the estimated growth rate to the corresponding firm's target-date funds attributable to net flows from investors. The calculation divides the firm's net flows in target-date funds offered as open-end mutual funds for a given calendar year by the firm's total net assets in target-date funds at the end of the previous calendar year.

The current year's figures reflect data of as the most recent quarter-end.

**TDF Market Share**

This figure reflects the corresponding firm's market share of the universe of target-date mutual funds. The calculation divides each firm's total net assets in target-date funds offered as open-end mutual funds by the total amount of assets in the following Morningstar Categories:

- US Fund Target-Date Retirement
- US Fund Target-Date 2000-2010
- US Fund Target-Date 2015
- US Fund Target-Date 2020
- US Fund Target-Date 2025
- US Fund Target-Date 2030
- US Fund Target-Date 2035
Underlying Fund Assets From Target-Date Funds

This table presents the five underlying funds within the series of target-date funds that have the highest percentage of their assets coming from the series. The calculation divides each underlying holding's sum of market value positions in series by the respective underlying fund's total amount of assets to arrive at the percentage of assets from the target-date series. The table presents the underlying funds' total net assets, not limited to assets coming from the series of target-date funds.

Firm Asset-Class Breakdown

These figures represent the percentage of the corresponding firm's assets in mutual funds and exchange-traded funds in each respective broad asset class. The calculation excludes assets in money-market funds and funds of funds.

# Funds Available
This figure reflects the number of mutual funds and exchange-traded funds offered by firm, excluding funds in the following Morningstar Categories:

- US Fund Target-Date Retirement
- US Fund Target-Date 2000-2010
- US Fund Target-Date 2015
- US Fund Target-Date 2020
- US Fund Target-Date 2025
- US Fund Target-Date 2030
- US Fund Target-Date 2035
- US Fund Target-Date 2040
- US Fund Target-Date 2045
- US Fund Target-Date 2050
- US Fund Target-Date 2055
- US Fund Target-Date 2060+
**Trailing Returns (%) — Fund versus Benchmark and Category**

This table displays the Morningstar Rating and annualized returns, and Morningstar Category ranks, over the trailing one-, three-, five-, and 10-year trailing periods for a representative share for each fund in a target-date series.

The representative share class shown is the share class of the fund with at least 10 years of live performance as of quarter-end. If multiple share classes of a fund have 10 years of live performance, the one with the lowest net prospectus expense ratio is selected. If multiple share classes meet both these filters, the share class with highest net assets at quarter-end is selected. If a fund doesn't have 10 years of live performance, the same filtering process is applied for five years, three years, one year, and three months.

The color for trailing returns depends on how it compares to both the corresponding S&P Target-Date Index and the Morningstar Category average. If a return exceeds both, it displays as dark green. If it exceeds one of two, it displays as light green. If it comes in below both, it displays as red. Similarly, the color for the ranks depends on its relative standing. If a rank less than or equal to 50%, it displays as light green. If a rank exceeds 50%, it displays as red.

The average ranks for the target-date series' representative share class are displayed as the last row of the table. Each representative share class receives an equal weight in the calculation and periods without performance are excluded. The color for the average ranks follows the same scale as the fund ranks.

**Calendar-Year Returns (%) — Fund versus Benchmark and Category**

This table displays the calendar-year returns over the past 10 years and year to date through quarter-end for a representative share for each fund in a target-date series.

The representative share class shown is the share class of the fund with at least 10 years of live performance as of quarter-end. If multiple share classes of a fund have 10 years of live performance, the one with the lowest net prospectus expense ratio is selected. If multiple share classes meet both these filters, the share class with highest net assets at quarter-end is selected. If a fund doesn't have 10 years of live performance, the same filtering process is applied for five years, three years, one year, and three months.

The color for calendar-year returns depends on how it compares with both the corresponding S&P Target-Date Index and the Morningstar Category average. If a return exceeds both, it displays as dark green. If it exceeds one of two, it displays as light green. If it comes in below both, it displays as red.
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