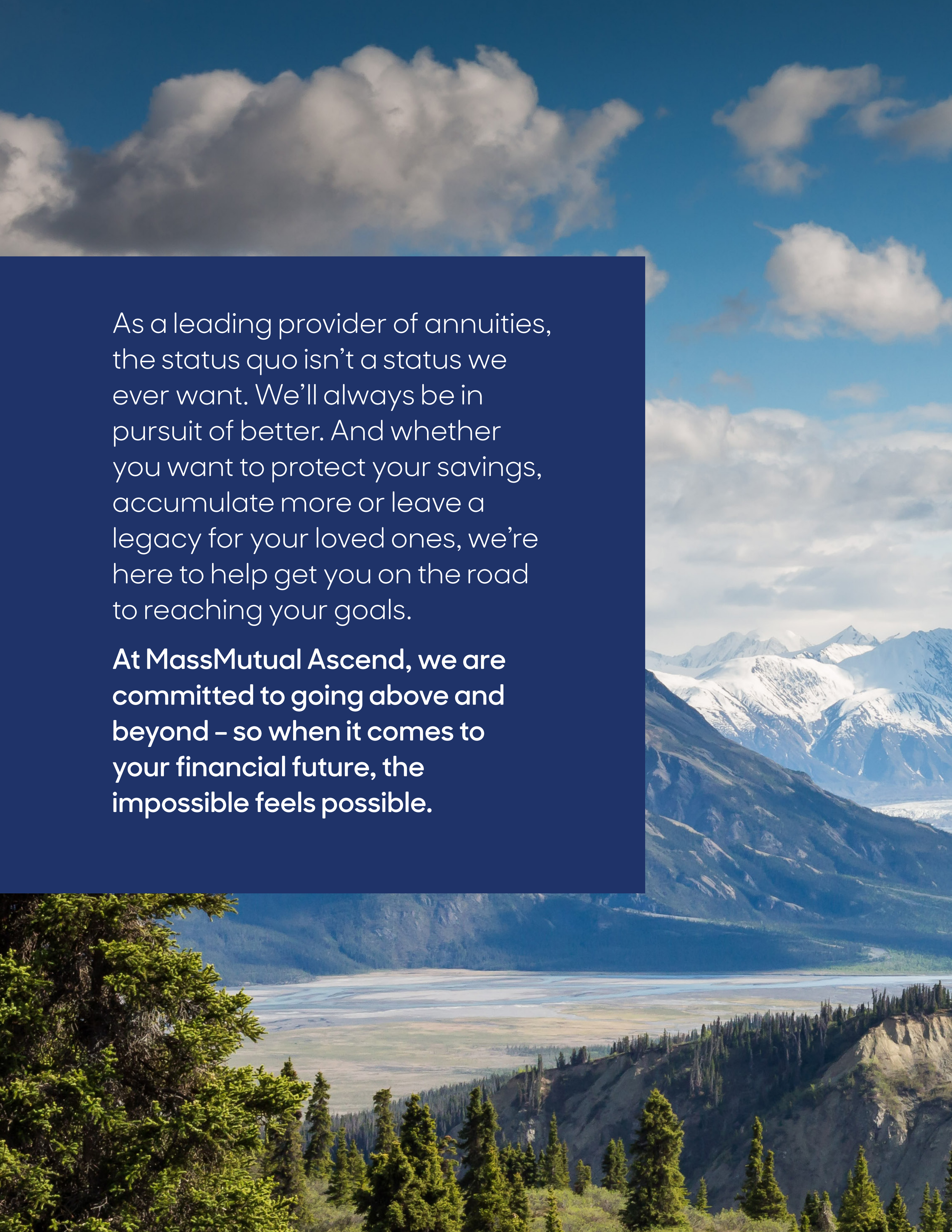
MassMutual Ascend
Life Insurance Company

MassMutual Ascend: Where insurance meets investing

Fee-based solutions designed with investors in mind

Not a bank or credit union deposit or obligation • Not FDIC or NCUA-Insured • Not insured by any federal government agency • May lose value • Not guaranteed by any bank or credit union



As a leading provider of annuities, the status quo isn't a status we ever want. We'll always be in pursuit of better. And whether you want to protect your savings, accumulate more or leave a legacy for your loved ones, we're here to help get you on the road to reaching your goals.

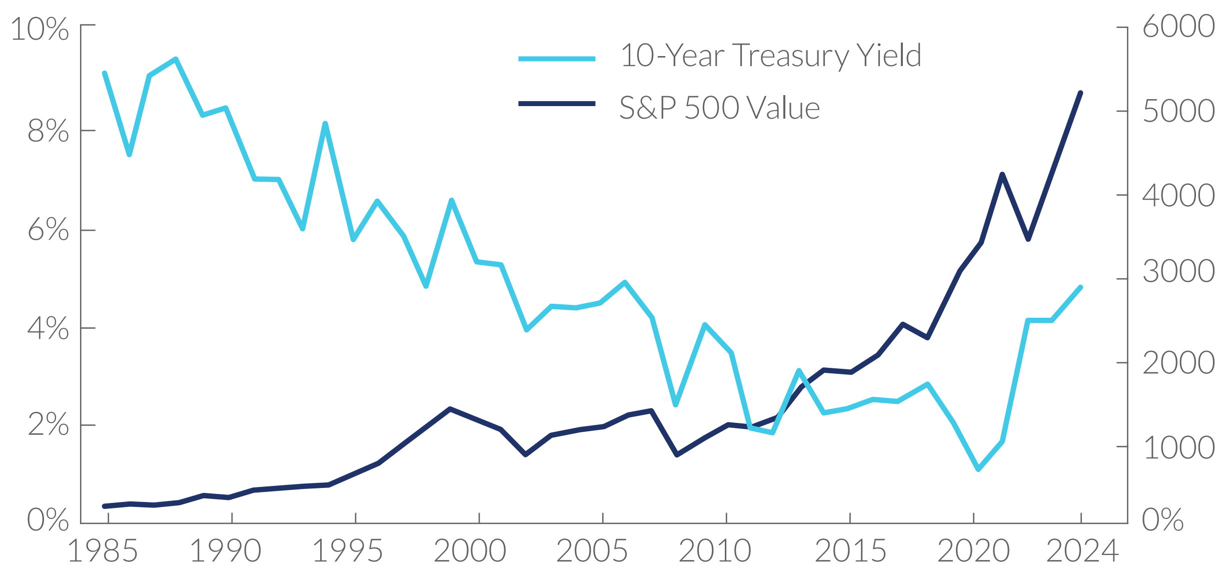
At MassMutual Ascend, we are committed to going above and beyond – so when it comes to your financial future, the impossible feels possible.

Fixed-indexed annuities offered by MassMutual Ascend are insurance products, not investments. MassMutual Ascend is not an investment advisor and the information provided in this document is not investment advice.

Are you receiving the protection and growth you need?

Unpredictable equity markets may make fixed income investments look like an attractive way to bring safety and stability to your portfolios. However, interest rates and yields have generally trended down over the last 35 years.

Equity investments offer growth potential, but may be too volatile for individuals with a shorter investment horizon, like those in or near retirement. While the S&P 500® is hovering near all-time highs, there is no knowing where it will go next.



Values as of December 31 of each year.

Sources: S&P Dow Jones Indices and https://fred.stlouisfed.org.
Data as of December 31, 2024.

Early 2020 marked the end of the longest-running bull market in modern history. Unfortunately, when long-run bull markets end, the decline can be dramatic. In fact, the average bear market return since 1929 is -40%.

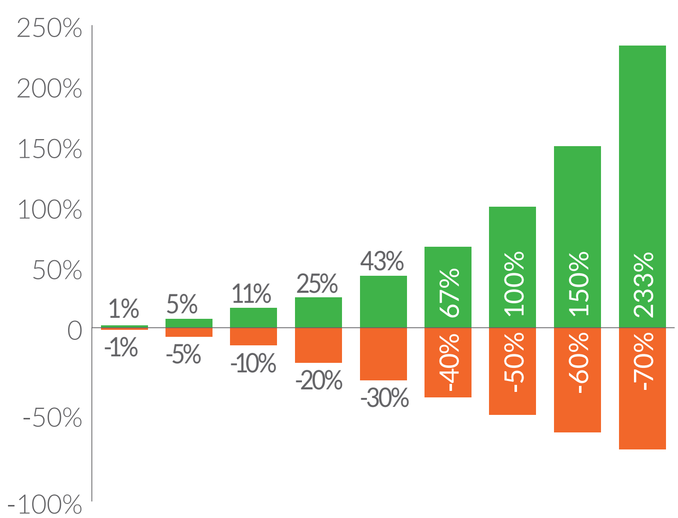
Historical Bear Markets	Decline from All-time High	Historical Bear Markets	Decline from All-time High
1929-1932	-86%	1973-1974	-48%
1937-1942	-60%	1980-1982	-27%
1946-1949	-30%	1987	-34%
1956-1957	-22%	2000-2002	-49%
1961-1962	-28%	2007-2009	-57%
1966	-22%	2020	-34%
1968-1970	-36%	2022	-25%

Average Bear Market Return (1929-2024): -40%

Sources: J.P. Morgan Asset Management, Guide to the Markets - U.S., Data as of December 31, 2024. (Average return is representative of bear markets from 1929-2024)

Plus, it can take a significant return to recover from loss.

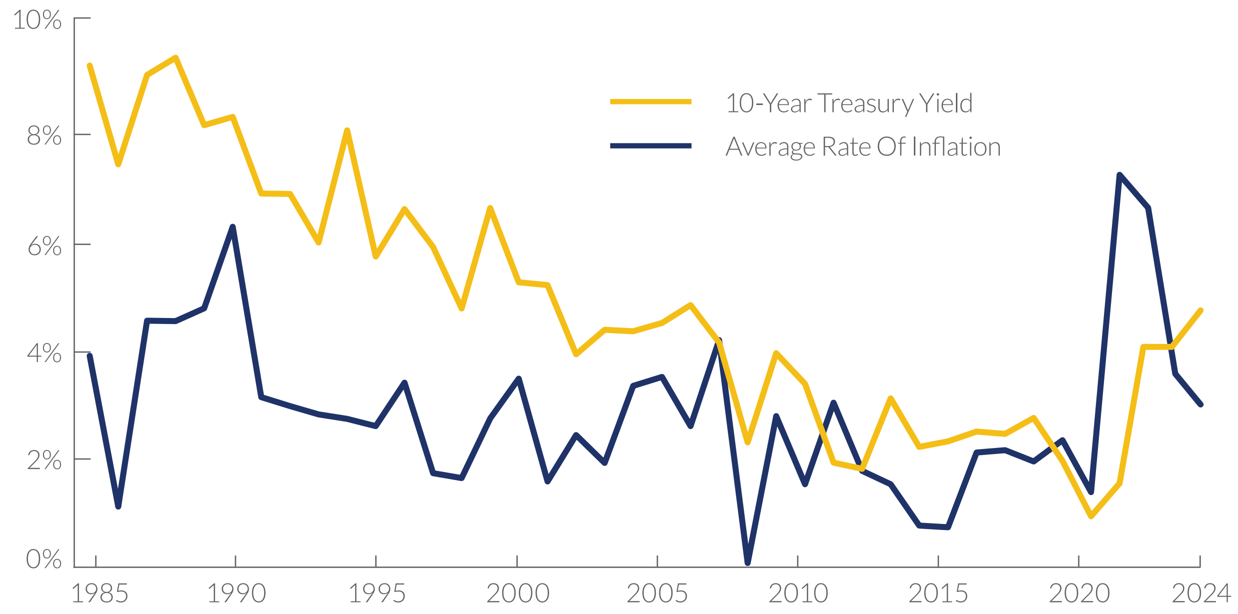
Gains Required to Recover from Losses



Low fixed income yields and unpredictable equity markets might have you looking for an alternative solution to help accumulate retirement assets.

Will you have enough retirement income?

With retirees living longer and healthier lives, developing a reliable lifetime income strategy is an important step that shouldn't be overlooked. Fixed income investments are commonly used as a source of retirement income. But when higher inflation rates reduce the value of a dollar, a portfolio paying a fixed interest rate may fall behind and ultimately generate less retirement income.



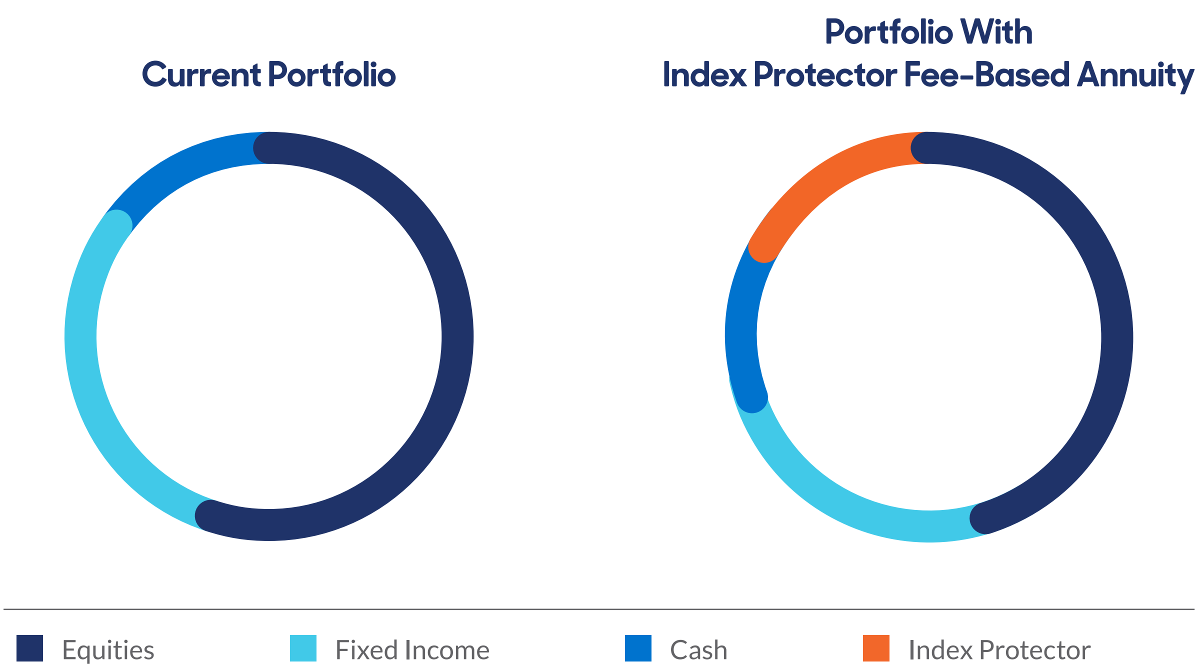
As of January 2025, Americans cite inflation as one of the top economic problems in our country.

Source: Gallup, January 2025

Alternative solutions designed for protection, growth and income

So how can you take advantage of positive market performance while limiting risk? Allocating a portion of your portfolio to an Index Protector fee-based fixed-indexed annuity may be the answer.

You may follow the traditional 60/40 allocation model, with 60% invested in equities and 40% in bonds. However, low bond yields may make this approach less appealing. Here's how an Index Protector could be incorporated into and help protect your portfolio:



Reallocating a portion of your portfolio to a fee-based annuity can help provide greater accumulation potential than other low-yielding fixed income investments, while also protecting your assets from market volatility.

Growth opportunity through indexed strategies

An Index Protector fee-based annuity can help grow your assets with strategies that earn interest based on the following indexes and ETFs:

- S&P 500® Index
- iShares MSCI EAFE ETF

The following analysis uses one-year rolling periods to analyze the performance of each strategy. Observations represent how each strategy would have performed if someone allocated money to it every business day and a term started every business day during the specified time frame.

	Maximum 1-Year Return	Average 1-Year Return
S&P 500® Index 1-year point-to-point strategy with 10% cap	10.00%	6.99%
iShares MSCI EAFE ETF 1-year point-to-point strategy with 11% cap	11.00%	5.11%

When you buy a fixed-indexed annuity, you own an insurance contract. You are not buying shares of any stock or index.

You cannot invest directly in an index.

Index returns are from December 31, 2014 to December 31, 2024 and are based on 2,349 observations.

Indexed interest rates for a strategy are based on index changes over one-year terms, which begin on the 6th and 20th of a month. The information presented above reflects hypothetical caps, which are not guaranteed rates. The actual caps that we might have applied during this period would have been different and might have been significantly lower.

Historical values of the S&P 500 are based on the S&P 500 Price Return Index (SPX). You cannot invest directly in an index.

Past performance does not guarantee future performance.

To learn more about the iShares MSCI EAFE ETF, visit iShares.com and search ticker symbol EFA.

Growth tied to market performance

When determining the right investment or savings product, it's important to look at the product as a whole, which includes fees, expenses or other constraints. While a market value adjustment may apply, the Index Protector 5 does not include annual administrative charges, rider fees or early withdrawal charges, which may mean you save on fees.

Money in an indexed strategy earns interest based on positive market performance. Interest is credited on the last day of each term year and is guaranteed to never be less than 0%.

The Index Protector 5 offers point-to-point indexed strategies. These strategies compare the closing value of an index — such as the S&P 500® — at the end of a term year to the closing value on the first day of the term year. If the result is positive, interest is credited. If the result is negative, the credited interest rate is 0%. The amount of interest credited at the end of the term year is limited by a cap. A cap is the maximum interest rate that will be credited for a term year.

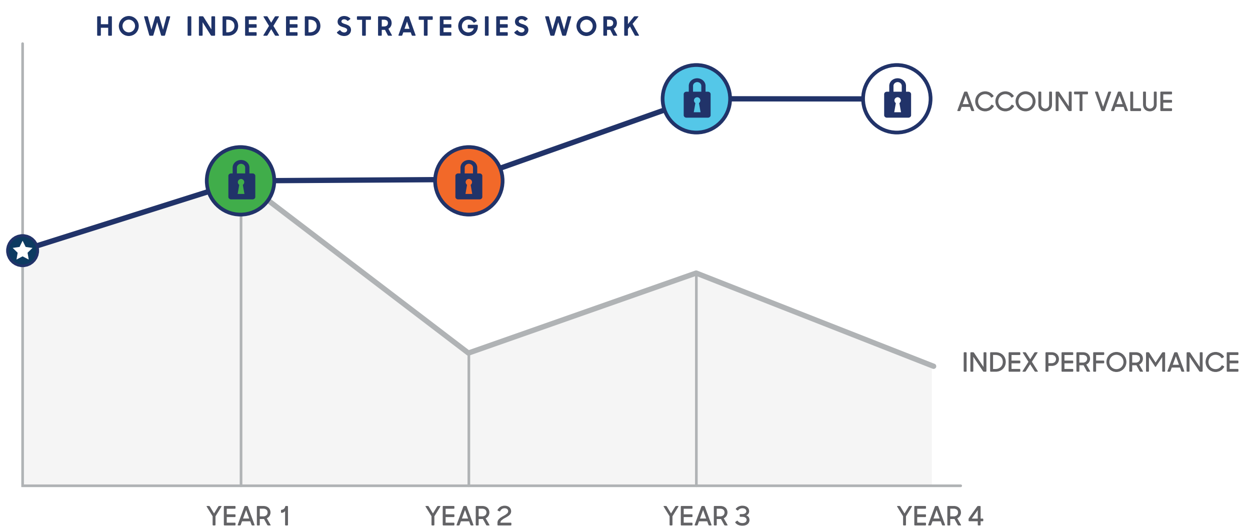
The Index Protector 5 offers a bailout feature that allows you to withdraw your money from an indexed strategy without any negative market value adjustment if its cap falls below its bailout rate.

Indexed strategies in action

Not only do indexed strategies provide the opportunity to earn interest based on market growth, but they keep your money protected in the event of market declines.

When index performance is positive, interest is credited and locked in. This means the annuity cannot lose value due to future market performance.

On the other hand, if index performance is negative, the annuity won't lose money – but can still earn interest during future terms. Let's take a look at how it works.



YEAR 1

Index performance is positive.

The annuity earns interest that is locked in and protected from future index declines.

YEAR 2

Index performance is negative.

The principal and earnings remain protected, leaving the account value unchanged.

YEAR 3

The index begins to recover.

The annuity earns interest, even though the index has not made up its previous loss.

The example above is for illustrative purposes only. It does not reflect actual index performance.

Index Protector 5 product details

ISSUE AGES	• Qualified & Non-qualified: 0-89 • Inherited IRA & Inherited Non-qualified: 0-75
PURCHASE PAYMENTS	You can purchase this annuity with an initial purchase payment of $50,000 or more. You can add to your annuity during the first two contract months with additional purchase payments of at least $25,000.
RETURN OF PREMIUM FEATURE	None
FREE WITHDRAWALS	10% free withdrawals beginning first contract year
EARLY WITHDRAWAL CHARGES	None
MARKET VALUE ADJUSTMENTS	A market value adjustment (MVA) will apply if you surrender your contract during the first five years. The MVA is calculated by comparing the interest rate environment when you purchase your contract to the environment when you choose to surrender your contract. Depending on how interest rates have moved, this can result in an increase or a decrease to your surrender value. The MVA will also apply to withdrawals in excess of the 10% MVA-free withdrawal allowance during the first five contract years and may increase or decrease your contract value.
INTEREST CREDITING STRATEGIES	• 1-year declared rate • 5-year declared rate • S&P 500® 1-year point-to-point with cap • iShares MSCI EAFE 1-year point-to-point with cap Available strategies may vary by state and by distribution.
TERM	• The five-year declared rate strategy has a five-year term. The rate is locked in for the entire five-year term. This strategy may only be selected during the first contract year. • All other strategies have a one-year term. • With all indexed strategies, interest is credited annually on the last day of each term year. • You can change your strategy allocations at the end of each one-year term At the end of the term, funds held in the five-year declared rate strategy will automatically reallocate to the one-year declared rate strategy, unless you select otherwise.
PAYOUT OPTIONS	• **Fixed period:** You receive income benefit payments for a fixed period of time that you select. • **Life or life with a minimum fixed period:** You receive income benefit payments for life. If you select a minimum fixed period of time and pass away before the end of the period, the remaining income benefit payments are paid to the person you designate. • **Joint and one-half survivor:** Income benefit payments are guaranteed for your life and the life of a designated joint annuitant. If you are survived by the joint annuitant, he or she will receive 50% of the income benefit payment for life.

For advice tailored to your specific circumstances, contact your financial professional.

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Please note, this is a general description of the product. Please read your contract, including the endorsements and riders, for definitions and complete terms and conditions, as this is a summary of the annuity's features. For use with contract forms P1146620NW, P1146620OR and P1146620ID, rider forms R6062619NW and R6062719NW (not available in Massachusetts) and R6062619OR and R6062719OR, and endorsement forms E6044817NW, E6044817OR, E6063720NW, E6063720ID, E1140319OR, E6043517OR, E6043517NW and ICC21-E6067321NW. Contract, rider and endorsement form numbers may vary by state. Products and features may vary by state, and may not be available in all states. See specific product disclosure document for details.

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