Index Summit 6

A registered index-linked annuity from MassMutual Ascend Life Insurance Company

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

Confidently plan for your future with the Index Summit 6

When you envision a future that fulfills you, maybe you see yourself traveling, cooking, spending time with family or discovering a new hobby. Whatever it is, our goal is to help you navigate your future with confidence.

THE INDEX SUMMIT 6 REGISTERED INDEX-LINKED ANNUITY OFFERS:

Growth opportunity

You can allocate your money to indexed strategies that may help you accumulate additional savings without investing directly in the market.

Tax treatment that allows faster growth

Your money may grow at a faster rate since taxes are deferred until you take a withdrawal or annuitize your contract.

Partial protection from loss

Each indexed strategy limits your risk exposure with a floor, buffer or downside participation rate.

No fees

There are no upfront or recurring charges, meaning all of your money goes to work for you. A charge will apply if you take a withdrawal in excess of the penalty-free withdrawal amount during the early withdrawal charge period.

A legacy for your loved ones

In the event of your passing, your beneficiaries will receive the greater of your annuity's current account value or your initial purchase payments reduced proportionally for withdrawals.

Guaranteed income

Unlike equity and fixed income investments, the Index Summit 6® provides the opportunity to turn the money you've accumulated in your annuity into a guaranteed stream of income that can last for the rest of your life.

The Index Summit 6 has a 6-year early withdrawal charge schedule.

The Index Summit 6 is a security that can only be sold through a Broker/Dealer that is contracted with MassMutual Ascend Life Insurance Company℠. This material must be preceded or accompanied by a prospectus. To obtain a copy of the prospectus, visit MassMutualAscend.com/RILArates.

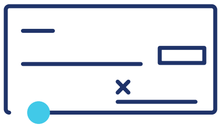
Annuity basics

An annuity is a financial product that's typically designed to provide complete or partial downside protection, growth potential and a stream of guaranteed income.

HERE'S HOW IT WORKS:

You purchase an annuity by making a payment to an insurance company.

Your annuity can grow in value over time.



When you're ready to start receiving income, your annuity can be turned into a steady stream of payments.

Other than pensions, annuities are the only products that provide guaranteed lifetime income.

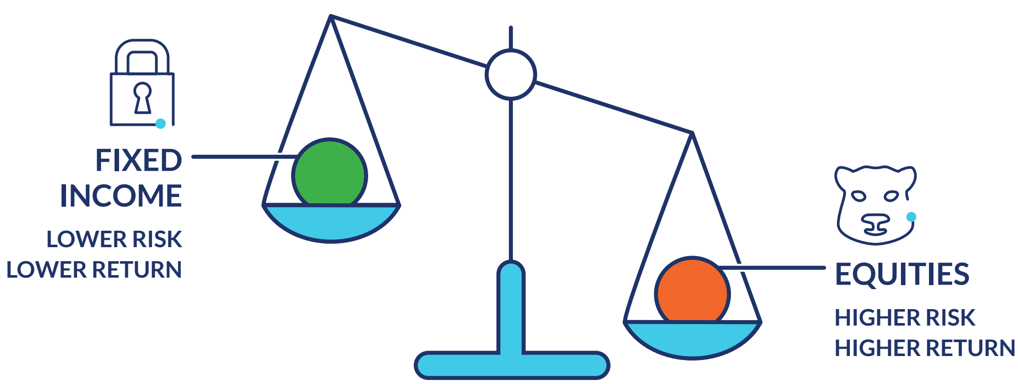
Finding the right balance with the Index Summit 6

There's no one-size-fits-all approach to financial planning, and it's important to consider the possible outcomes of different investment options.

Investing in equities can be a lucrative way to grow your savings, but with no protection against loss of principal, a market downturn could wipe out years of savings.

Fixed income investments, such as money market or bond funds, can provide some protection against market downturns. However, such investments could provide little in return, jeopardizing your future plans.

Balancing risk and return



Fortunately, there's a solution that can help bring balance to your portfolio. The Index Summit 6 registered index-linked annuity lets you participate in market-linked growth, reduces downside exposure and allows assets to grow tax-deferred.

Indexed strategies offer easier recovery from loss

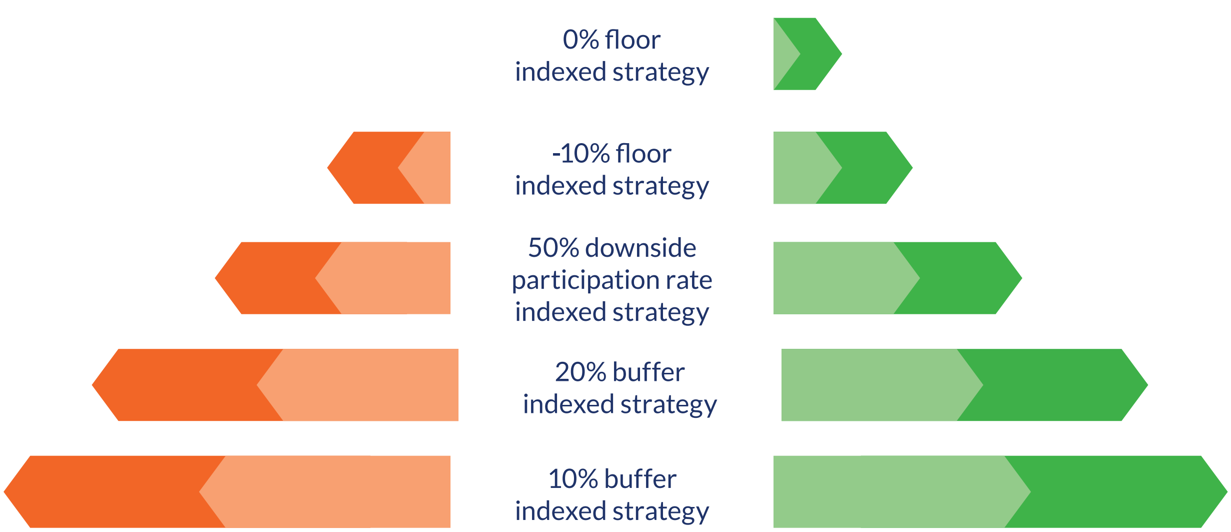
When market volatility hits, it can take a significant return to recover from loss. Take a look at the returns that would be required to break even after various market downturns.

Market Loss	Required Return
-10%	11%
-20%	25%
-30%	43%
-40%	67%
-50%	100%
-60%	150%
-70%	233%

When you purchase an Index Summit 6 annuity, you choose from indexed strategies that are linked to the values of external indexes or exchange traded funds. The Index Summit 6 offers indexed strategies with several types of downside protection: 0% floor, -10% floor, 50% downside participation rate, 20% buffer and 10% buffer. All types of indexed strategies provide market-linked growth potential and partial to complete downside protection, which can make it easier to recover from market downturns.

Managing risk and reward with indexed strategies

Like with most investments, with greater risk comes greater opportunity for reward. With several types of downside protection to choose from, you can align your strategy allocations to your risk tolerance.



The graphic above is a generalized representation of upside potential in exchange for downside risk – upside potential rates are subject to many factors and may vary.

TYPES OF DOWNSIDE PROTECTION:

0% and -10% floor strategies

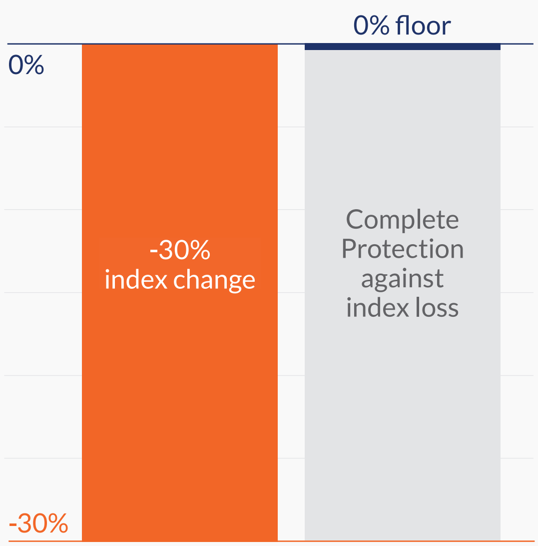
Indexed strategies with a 0% floor provide complete protection against index losses. Regardless of the negative index change, the strategy value will not decrease.

Indexed strategies with a -10% floor protect against index losses in excess of -10% each term. If the negative index change is between 0% and -10%, the strategy value will decrease by the negative index change. If the negative index change is greater than -10%, the strategy value decrease is limited to -10%.

Let's take a look at how 0% floor and -10% floor strategies would have performed in the event of a -30% index change.

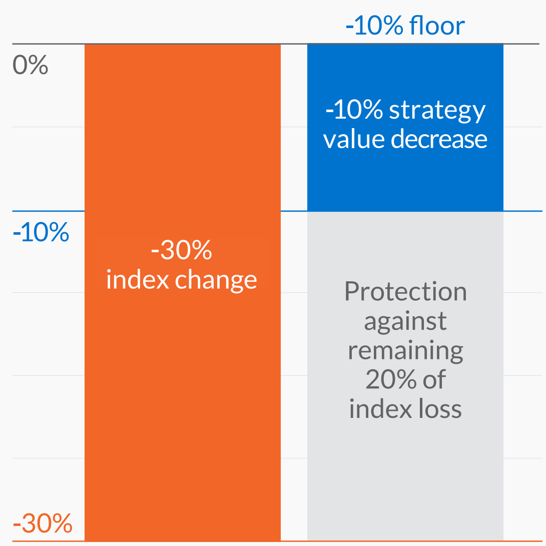
0% floor, -30% index change

The example shows how a -30% index change would not impact the strategy value, because 0% floor strategies provide complete protection against index loss.



-10% floor, -30% index change

The example shows how a -30% index change would result in strategy value loss. The -10% floor limited losses to -10%.



The tables below shows alternative index changes and their resulting strategy value changes.

Index Change	Strategy Value
-5%	0%
-10%	0%
-15%	0%
-20%	0%
-25%	0%
-30%	0%

Index Change	Strategy Value
-5%	-5%
-10%	-10%
-15%	-10%
-20%	-10%
-25%	-10%
-30%	-10%

TYPES OF DOWNSIDE PROTECTION:

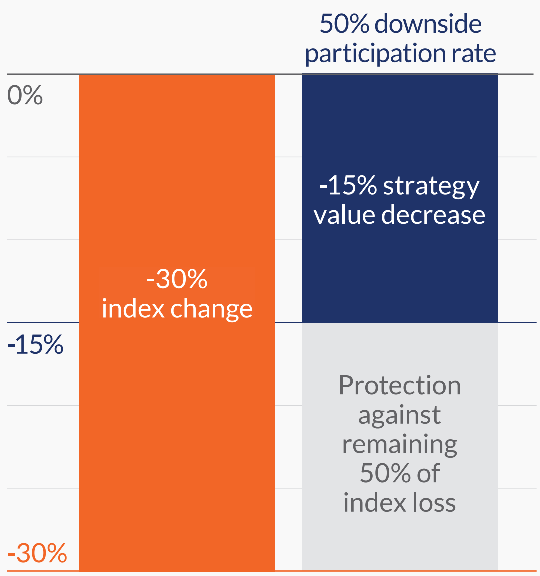
50% downside participation rate strategies

Indexed strategies with a 50% downside participation rate protect against half of index losses with a 50% downside participation rate each term. If the index change is negative at the end of a term, the strategy value decreases, limited by the 50% downside participation rate.

Let's take a look at how a 50% downside participation rate strategy would have performed in the event of a -30% index change.

50% downside participation rate, -30% index change

The example shows how a -30% index change would result in strategy value loss, limited by the 50% downside participation rate (-30% index change x 50% downside participation rate).



The table below shows alternative index changes and their resulting strategy value changes.

Index Change	Strategy Value
-5%	-2.5%
-10%	-5%
-15%	-7.5%
-20%	-10%
-25%	-12.5%
-30%	-15%

TYPES OF DOWNSIDE PROTECTION:

10% and 20% buffer strategies

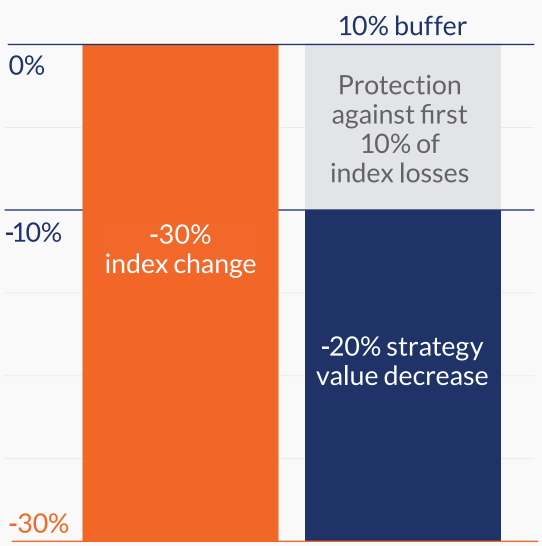
Indexed strategies with a 10% buffer protect against the first 10% of index losses each term. If the negative index change is between 0 and -10%, the strategy value will not decrease. If the negative index change is greater than -10%, the strategy value will decrease by the remaining loss in excess of -10%.

Indexed strategies with a 20% buffer protect against the first 20% of index losses each term. If the negative index change is between 0% and -20%, the strategy value will not decrease. If the negative index change is greater than -20%, the strategy value will decrease by the remaining loss in excess of -20%.

Let's take a look at how 10% buffer and 20% buffer strategies would have performed in the event of a -30% index change.

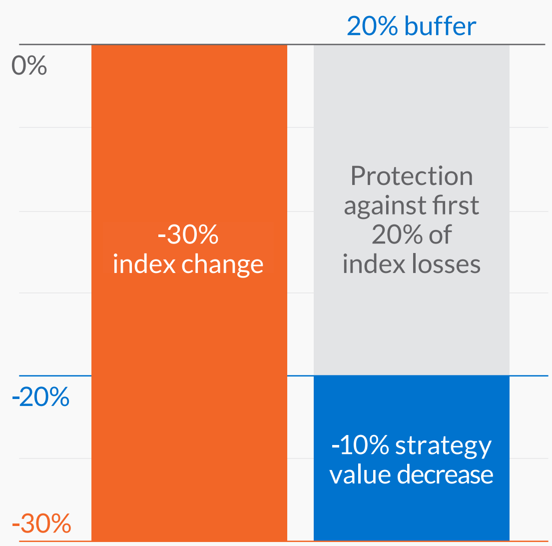
10% buffer strategy, -30% index change

The example shows how a -30% index change would result in strategy value loss. The buffer protected against the first 10% of the loss, and the strategy value decreased by the remaining 20%.



20% buffer strategy, -30% index change

The example shows how a -30% index change would result in strategy value loss. The buffer protected against the first 20% of the loss, and the strategy value decreased by the remaining 10%.



The tables below shows alternative index changes and their resulting strategy value changes.

Index Change	Strategy Value
-5%	0%
-10%	0%
-15%	-5%
-20%	-10%
-25%	-15%
-30%	-20%

Index Change	Strategy Value
-5%	0%
-10%	0%
-15%	0%
-20%	0%
-25%	-5%
-30%	-10%

TYPES OF UPSIDE POTENTIAL:

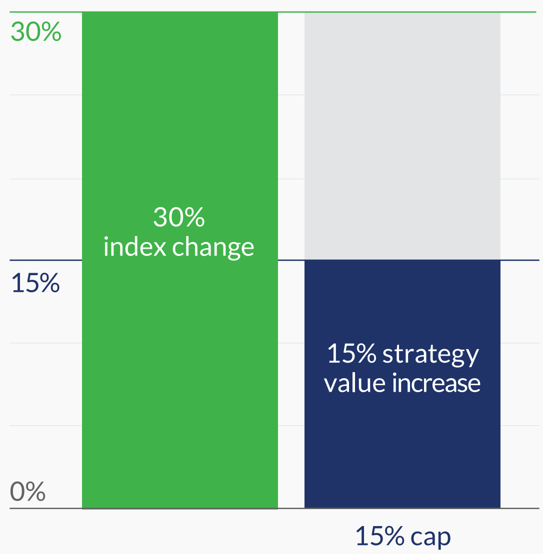
Cap strategies

Indexed strategies with a cap offer earning potential up to the cap that is set for each term. If the index change is positive at the end of a term, the strategy value grows, up to the cap.

Let's take a look at how a cap strategy with a hypothetical 15% cap would have performed in the event of a 30% index change.

15% cap, 30% index change

The example shows how a 30% index change would result in strategy value growth, up to the 15% cap.



The table below shows alternative index changes and their resulting strategy value changes.

Index Change	Strategy Value
30%	15%
25%	15%
20%	15%
15%	15%
10%	10%
5%	5%
0%	0%

TYPES OF UPSIDE POTENTIAL:

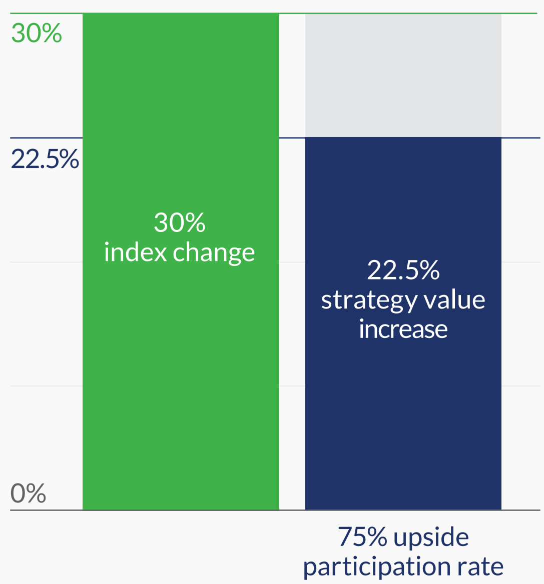
Upside participation rate strategies

Indexed strategies with an upside participation rate offer earning potential limited by an upside participation rate that is set for each term. If the index change is positive at the end of a term, the strategy value grows, limited by the upside participation rate.

Let's take a look at how an upside participation rate strategy with a hypothetical 75% upside participation rate would have performed in the event of a 30% index change.

75% upside participation rate, 30% index change

The example shows how a 30% index change would result in strategy value growth, limited by the 75% upside participation rate (30% index change x 75% upside participation rate).



The table below shows alternative index changes and their resulting strategy value changes.

Index Change	Strategy Value
30%	22.5%
25%	18.75%
20%	15%
15%	11.25%
10%	7.5%
5%	3.75%
0%	0%

Trigger rate strategies

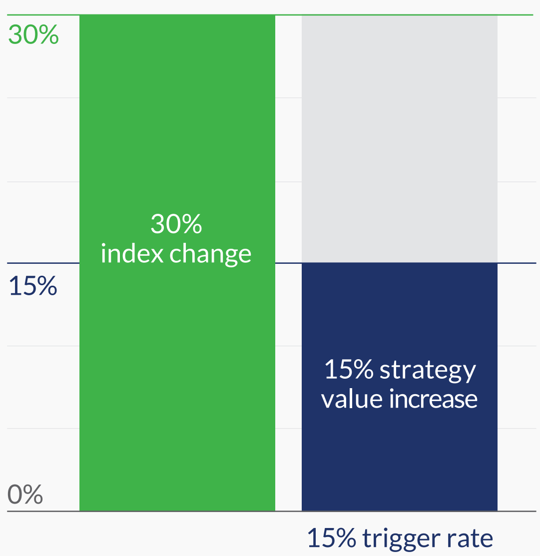
Indexed strategies with a trigger rate offer earning potential up to the trigger rate that is set for each term. There are two types of trigger rate strategies – performance trigger and dual performance trigger.

PERFORMANCE TRIGGER

For strategies with a performance trigger, the trigger rate is credited when index performance is positive or level. Let's take a look at how a performance trigger strategy with a hypothetical 15% trigger rate would have performed in the event of different index changes.

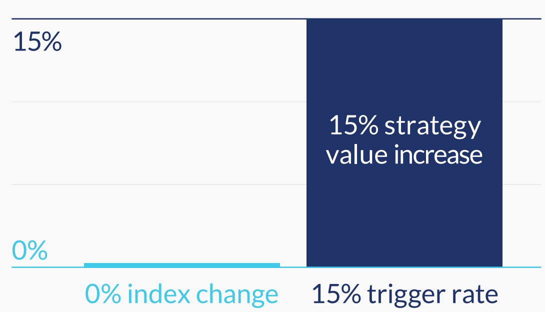
15% trigger rate, 30% index change

The example shows how a positive index change of 30% would result in a 15% strategy value increase, based on the 15% trigger rate.



15% trigger rate, 0% index change

The example shows how a level index change of 0% would result in a 15% strategy value increase, based on the 15% trigger rate.



The table below shows alternative index changes and their resulting strategy value changes.

Index Change	Strategy Value
30%	15%
25%	15%
20%	15%
15%	15%
10%	15%
5%	15%
0%	15%

TYPES OF UPSIDE POTENTIAL:

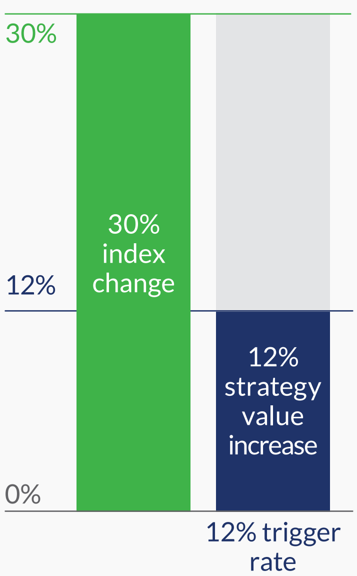
Trigger rate strategies continued

DUAL PERFORMANCE TRIGGER

For strategies with a dual performance trigger, the trigger rate is credited when index performance is positive, level, or when the index loss does not exceed the buffer, which is 10% on this strategy type. Let's take a look at how a performance trigger strategy with a hypothetical 12% trigger rate would have performed in the event of different index changes.

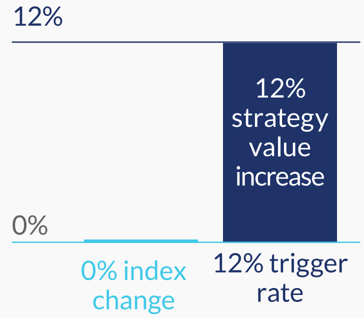
12% trigger rate, 30% index change

The example shows how a positive index change of 30% would result in a 12% strategy value increase, based on the 12% trigger rate.



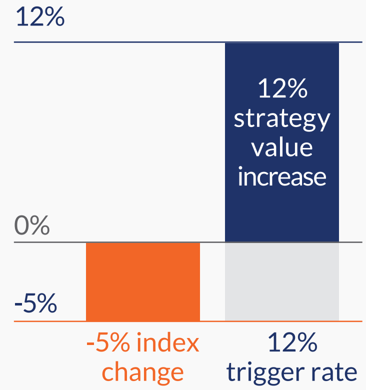
12% trigger rate, 0% index change

The example shows how a level index change of 0% would result in a 12% strategy value increase, based on the 12% trigger rate.



12% trigger rate, -5% index change

The example shows how a negative index change of -5% would result in a 12% strategy value increase, based on the 12% trigger rate.



The table below shows alternative index changes and their resulting strategy value changes.

Index Change	Strategy Value
30%	12%
25%	12%
20%	12%
15%	12%
10%	12%

Index Change	Strategy Value
5%	12%
0%	12%
-5%	12%
-10%	12%
-15%	-5%

Diversify your earning potential

Now that you know how caps, floors, buffers, participation rates and trigger rates are applied within indexed strategies, let's take a look at the underlying index and exchange traded funds (ETFs) that these indexed strategies are linked to:

- **S&P 500® Index:** Includes stocks issued by 500 of the top companies in leading industries of the U.S. economy
- **Russell 2000:** Measures the performance of about 2,000 small-cap U.S. equities
- **iShares MSCI EAFE ETF:** Seeks to track the investment results of an index composed of developed market equities, including those in Europe, Australia, Asia and the Far East, but excluding the U.S. and Canada
- **iShares U.S. Real Estate ETF:** Seeks to track the performance of the Dow Jones U.S. Real Estate Index, which is composed primarily of U.S. equities in the real estate sector and real estate investment trusts (REITs)
- **SPDR Gold Shares ETF:** Designed to reflect the market value of gold bullion
- **First Trust Barclays Edge Index:** Seeks to provide equity and fixed income exposure through a blend of the Capital Strength Index™ and Value Line Dividend Index™ and Barclays' US 2-year Treasury Futures, 5-year Treasury Futures and 10-year Note Futures Indexes while aiming to control risk by maintaining a volatility target at or below 7%. Since the index is on an excess return basis (i.e., it returns the index performance in excess of risk-free rates), the risk free return is deducted from the equity underliers. The risk free rate used in this calculation is the U.S. Fed Funds Rate published by the Federal Reserve of New York (ticker: FEDL01) for each day divided by 360. No such adjustment is needed to the US Treasury futures indexes as these securities returns are naturally on an excess return basis.

By allocating your money among the various strategies, you can diversify your earning potential.

Daily value information for the underlying indexes and ETFs is readily available from reliable and credible sources.

Strategies linked to the S&P 500® Index (SPX), the Russell 2000 Index (RTY), the iShares MSCI EAFE ETF (EFA), the iShares U.S. Real Estate ETF (IYR), and the SPDR Gold Shares ETF (GLD) provide returns based, in part, on the change in the price of the Index or ETF. The price change does not include dividends that might be paid on the underlying investments of the Index or ETF.

Strategies linked to the First Trust Barclays Edge Index (FTEDGE7) provide returns based, in part, on the change in net asset value of the underlying investments of the Index. The net asset value change includes dividends that might be paid on the underlying investments of the Index.

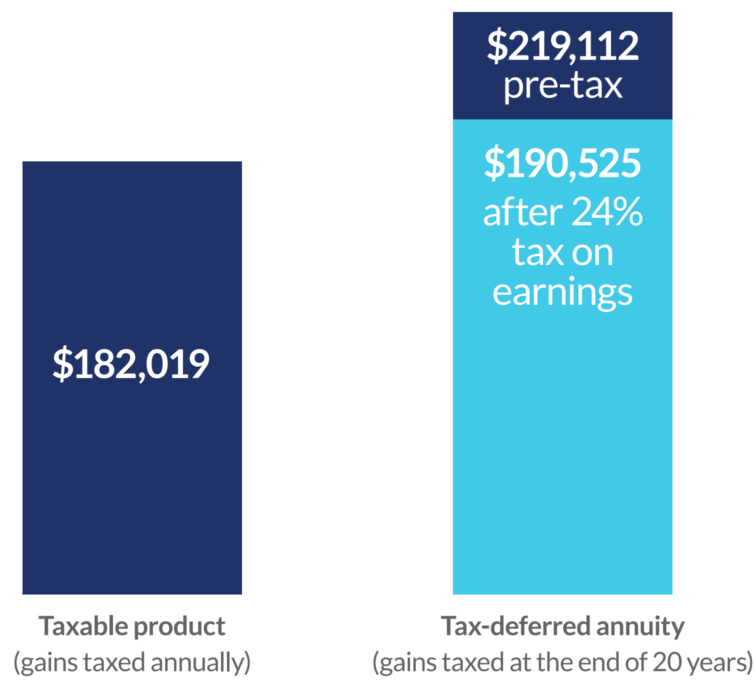
Not all strategies available with all indexes and ETFs. See pages 18-19 for list of available strategies.

The power of tax deferral

Many investments are subject to income tax on an annual basis. With an Index Summit 6, you can defer paying taxes until you take a withdrawal, allowing your money to grow at a faster rate.

The following chart shows how a purchase payment of $100,000 grows in a tax-deferred annuity compared to a taxable product over the course of 20 years.

After paying a 24% tax on its earnings, the tax-deferred annuity outgrew the taxable product by more than $8,000. This increased growth can help you accumulate more income for your retirement years.



This graph assumes the taxable product and the tax-deferred annuity grow at an annual rate of 4%. This is a hypothetical scenario for illustration purposes only, and does not reflect interest rates of any specific annuity offered by MassMutual Ascend. For the taxable product, the graph also assumes the amount needed to pay taxes is deducted annually and no other withdrawals are taken during the 20-year period. For the tax-deferred annuity, it assumes no withdrawals are taken during the 20-year period. The rate of return presented does not represent a guaranteed rate.

This graph assumes the investing party has a marginal tax bracket of 24%. In 2024, the 24% tax bracket for a married couple applies to taxable income over $201,050 and not over $383,900. Capital gains and dividend tax rates may be lower than the 24% illustrated rate and change the comparison results. Consider your current and anticipated tax brackets in making your investment decisions, as they may also impact comparison results. This graph compares a $100,000 taxable investment to a $100,000 tax-deferred investment, such as a non-qualified annuity. Certain qualified investments, such as a traditional IRA, offer an upfront tax deduction or exclusion for contributions. Other qualified investments, such as a Roth IRA, offer a tax exclusion for earnings. The value of these additional benefits is not illustrated. If you are under age 59½, the taxable amount withdrawn from a qualified or non-qualified annuity is generally subject to a 10% federal penalty tax.

This information is not intended or written to be used as legal or tax advice. It was written solely to provide general information and support the sale of annuity products. You should seek advice on legal or tax questions based on your particular circumstances from an attorney or tax advisor.

All guarantees subject to the claims-paying ability of MassMutual Ascend. Registered index-linked annuities involve risk and may not be suitable for all investors. Any sales solicitation must be accompanied or preceded by a prospectus.

It's important to consider your liquidity needs

The Index Summit 6 is intended to be a long-term product. However, you will have access to a portion of your money each year without charges.

During the first contract year, you may withdraw up to 10% of your purchase payments without an early withdrawal charge. After the first contract year, 10% of the account value as of the most recent contract anniversary may be withdrawn without an early withdrawal charge.

It's important to note withdrawals in excess of this amount will be subject to early withdrawal charges. Early withdrawal charges end after six years.

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If you withdraw money from an indexed strategy before the end of a term, it will affect your return for that term and may have a significant negative effect.

For annuity contracts, income earned on the contract is subject to income tax as ordinary income when withdrawn. If you are under age 59½, the taxable amount may also be subject to a 10% federal penalty tax. Generally income tax rates on ordinary income are higher than capital gains tax rates on long-term capital gains and qualified dividend income.

MassMutual Ascend

Taking financial futures above and beyond

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

As a leading provider of annuities, the status quo isn't a status we ever want. We'll always be in pursuit of better.

Our "A++" rating by AM Best follows more than 40 consecutive years of an "A" or higher rating. This means you can have confidence knowing we'll be here when you need us. We are a wholly owned subsidiary of MassMutual, one of the largest life insurance companies in the U.S., founded in 1851.

And finally, everything we do is rooted in a culture of service. From our people to our technology, we strive to always provide you with what you need, when you need it so you can navigate your future with confidence.

Learn more at MassMutualAscend.com.

Index Summit 6
features

ISSUE AGES	**Qualified:** 0–80 **Inherited IRA:** 0–75 **Non-qualified:** 0–80 **Inherited non-qualified:** 0–75
PURCHASE PAYMENTS	You can purchase this annuity with an initial purchase payment of $25,000 or more. You can add to your annuity during the first two contract months with additional purchase payments of at least $10,000.
FEES	There are no upfront or recurring charges.
PENALTY-FREE WITHDRAWALS	During the first contract year, you may withdraw up to 10% of your purchase payments. After the first contract year, 10% of the account value as of the most recent contract anniversary may be withdrawn. Amounts withdrawn in excess of the penalty-free withdrawal allowance may be subject to early withdrawal charges.
EARLY WITHDRAWAL CHARGE	During the first six contract years, an early withdrawal charge is applied to surrenders and withdrawals that exceed the penalty-free withdrawal allowance. All charges end after six years.

Contract year	1	2	3	4	5	6	7+
Early withdrawal charge rate	8%	7%	6%	5%	4%	3%	0%

CREDITING STRATEGIES

Declared rate

S&P 500®

- 1-Year 50% Downside Participation Rate with Cap*
- 1-Year 50% Downside Participation Rate with Upside Participation Rate*
- 1-Year 10% Buffer with Cap*
- 1-Year 10% Buffer with Performance Trigger
- 1-Year 10% Buffer with Dual Performance Trigger
- 1-Year 20% Buffer with Cap*
- 1-Year 20% Buffer with Performance Trigger
- 1-Year -10% Floor with Cap*
- 1-Year 0% Floor with Cap
- 2-Year 50% Downside Participation Rate with Cap*
- 2-Year 50% Downside Participation Rate with Upside Participation Rate*
- 3-Year 10% Buffer with Upside Participation Rate*
- 3-Year 20% Buffer with Upside Participation Rate*
- 6-Year 10% Buffer with Upside Participation Rate*
- 6-Year 20% Buffer with Upside Participation Rate*

Russell 2000

- 6-Year 10% Buffer with Upside Participation Rate
- 6-Year 20% Buffer with Upside Participation Rate

iShares MSCI EAFE ETF

- 1-Year 50% Downside Participation Rate with Upside Participation Rate
- 1-Year -10% Floor with Cap

CREDITING STRATEGIES	**iShares U.S. Real Estate ETF** • 1-Year 50% Downside Participation Rate with Upside Participation Rate • 1-Year -10% Floor with Cap **SPDR® Gold Shares ETF** • 1-Year -10% Floor with Cap **First Trust Barclays Edge Index** • 1-Year 50% Downside Participation Rate with Upside Participation Rate* • 1-Year 10% Buffer with Upside Participation Rate* **Performance lock available. See performance lock section for more information.* *The declared rate will never be less than the minimum set out in the strategy endorsement, which will be at least 1%. A cap will never be lower than 1%, a trigger rate will never be lower than 1% and an upside participation rate will never be lower than 5%.* *The following strategies are only available for a term that starts in the first contract year: S&P 500 6-Year 10% Buffer with Upside Participation Rate, S&P 500 6-Year 20% Buffer with Upside Participation Rate, Russell 2000 6-Year 10% Buffer with Upside Participation Rate and Russell 2000 6-Year 20% Buffer with Upside Participation Rate.* *The following strategies are only available for a term that starts in the first four contract years: S&P 500 3-Year 10% Buffer with Upside Participation Rate and S&P 500 3-Year 20% Buffer with Upside Participation Rate.* *Strategy availability and strategy feature availability may vary by state and by distribution. Please consult with your financial professional about strategy availability. Declared rate strategy not available in Missouri.*
PERFORMANCE LOCK	Performance lock is a feature that allows you to lock in indexed strategy gains and limit further losses for a term. Performance lock is an election to lock in the daily value percentage for the remainder of a term. The daily value percentage is used to determine the value of an indexed strategy prior to the end of a term using option values related to the positive and negative return factors of the indexed strategy. A performance lock election for a term is effective on the second market close following our receipt of a request in good order. Once we receive a request in good order, a performance lock election for a term cannot be revoked or changed and you will not be able to reallocate a performance locked one-year strategy until the end of the term. If you make a performance lock election for an S&P 500 2-year, 3-year, or 6-year strategy, the term will always end on the next anniversary of the term start date even if it otherwise would have continued for one or more additional years. Performance lock is only available on select strategies.
INDEXED STRATEGY VALUES	The value of an indexed strategy changes from day to day throughout each term. The method used to calculate the strategy value depends on whether the value is being calculated at the end of a term or during a term. For all strategies except the trigger strategies, at the end of a term, the value of an indexed strategy is increased (subject to the cap or upside participation rate) for any rise in the applicable index/ETF over the term, or decreased (subject to the floor, buffer or downside participation rate) for any fall in the applicable index/ETF over the term. For strategies with a performance trigger, the trigger rate is credited when index performance is positive or level over the term, or decreased (subject to the buffer) for any fall in the applicable index/ETF over the term. For strategies with a dual performance trigger, the trigger rate is credited when index performance is positive, level, or when the index loss does not exceed the buffer over the term, or decreased when the index loss exceeds the buffer over the term. **Before the end of a term, the value of an indexed strategy is increased or decreased by the daily value percentage. The daily value percentage is not tied directly to the underlying index, but is based on the prices of hypothetical options related to the index, adjusted for the costs of acquiring and exiting such options.** The prospectus that preceded or accompanies this brochure contains more information about the risks of investing in this contract, how withdrawals affect strategy values, a more detailed explanation of how strategy values are calculated and examples of such calculations.

Index Summit 6
features (Cont.)

EXTENDED CARE WAIVER RIDER	After the first contract year, if you are confined to a hospital, nursing home or long-term care facility for at least 90 consecutive days, you have the option to withdraw up to 100% of the account value without incurring an early withdrawal charge. To qualify under this rider, a hospital, nursing home or long-term care facility must provide nursing services 24 hours a day and the confinement must be prescribed by a physician and be medically necessary, and comply with other terms and conditions set out in the rider. *Not available in Massachusetts. In California, the Extended Care Waiver Rider has been replaced with the Waiver of Early Withdrawal Charges for Facility Care or Home Care or Community-Based Services Rider, which provides for a waiver of early withdrawal charges under an expanded variety of circumstances.*
TERMINAL ILLNESS WAIVER RIDER	After the first contract year, if you are diagnosed by a physician as having a terminal illness, you have the option to withdraw up to 100% of the account value without incurring an early withdrawal charge. A terminal illness is defined as having a prognosis of survival of 12 months or less, or a longer period as required by state law. *This waiver may be used only once. Not available in Massachusetts.*
PAYOUT OPTIONS	The following payout options are available following the first contract year: **Fixed period:** You receive payments for a fixed period of time that you select. **Life:** You receive payments for life. **Life with payments for fixed period:** You receive payments for life. If you pass away before the end of the minimum fixed period you select, the remaining payments are paid to the person you designate. **Joint and one-half survivor:** 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 payment for life.
DEATH BENEFIT VALUE	The death benefit amount is the greater of the account value or the amount of your purchase payments reduced proportionately for all withdrawals, but not including amounts applied to pay early withdrawal charges. It is reduced by premium tax or other taxes not previously deducted. A death benefit is payable if you die before the annuity benefit payout begins and before the contract is surrendered.

Annuities are intended to be long-term products and may not be suitable for all investors. Withdrawals from an annuity contract may have tax consequences.

The information in this brochure is not intended or written to be used as legal or tax advice. It was written solely to provide general information and support the sale of annuity products. You should seek advice on legal or tax questions based on your particular circumstances from an attorney or tax advisor.

For qualified contracts, amounts withdrawn are generally subject to income tax. For other contracts, only the gains are subject to income tax. If you are under age 59½, the taxable amount is also generally subject to a 10% federal penalty tax.

Buying an annuity within a tax-deferred retirement plan does not provide any extra tax benefits.

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