Index Protector 7
A fixed-indexed annuity
Photo submitted by Laura from Minnesota, valued annuity customer since 2017.
Diversify your portfolio with the Index Protector 7

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 PROTECTOR 7 FIXED-INDEXED ANNUITY OFFERS:

**Growth opportunity**
You can allocate your money to interest strategies that may help you accumulate additional savings.

**Protection from stock market loss**
Regardless of market conditions, you won’t lose the money you contribute to your annuity unless you take a withdrawal or surrender your annuity during its early withdrawal charge period.

**Guaranteed income**
When you’re ready to turn the money you’ve accumulated in your annuity into guaranteed income, you can select from a variety of options, including payments that will last for the rest of your life.
Why consider an annuity?

Investing in the stock market can be a lucrative way to grow your savings. However, with no protection against loss, market downturns could cause your nest egg to take a significant hit. To avoid losses, you may turn to fixed income investments, but mitigating your risk could mean getting little in return. If you are looking to supplement your portfolio with greater growth opportunity and no market risk, the Index Protector 7SM fixed-indexed annuity might be the answer.

What is an annuity?

An annuity is a financial product that’s designed to protect and grow your money, and then provide 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.
Diversify your portfolio

A traditional investment portfolio typically consists of 40 percent fixed income investments, such as bonds and CDs, and 60 percent equities. This approach may no longer be enough to help you reach your goals. By allocating a portion of your portfolio to the Index Protector 7, you could benefit from:

- Greater earning potential
- Principal protection
- Guaranteed lifetime income

HYPOTHETICAL EXAMPLE

Equities  Fixed Income  Index Protector 7  Cash
Choose how you want your money to grow

Fixed-indexed annuities offer multiple interest strategies to help you build your savings.

- **A declared rate strategy** allows you to grow your money at a fixed interest rate that is set at the beginning of each term.

- **Indexed strategies** offer you the unique opportunity to earn interest based, in part, on market performance without the risk of market loss.

You have the flexibility to choose the strategies that are right for you. We know your needs may change over time, so you can revisit your strategy selections at the end of each term.
# Index Protector 7 strategy options

<table>
<thead>
<tr>
<th>STRATEGY TYPES</th>
<th>HOW OFTEN IS INTEREST CREDITED?</th>
<th>HOW LONG IS THE RATE GUARANTEED?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Declared Rate</td>
<td>Daily</td>
<td>Fixed interest rate is set at beginning of each one-year term and guaranteed for that term year</td>
</tr>
</tbody>
</table>

## Indexed Strategies

<table>
<thead>
<tr>
<th>Indexed Strategies</th>
<th>How Often is Interest Credited?</th>
<th>How Long is the Rate Guaranteed?</th>
</tr>
</thead>
<tbody>
<tr>
<td>One-year point-to-point</td>
<td>Annually, on the last day of the one-year term</td>
<td>Cap or participation rate is set at beginning of each one-year term and guaranteed for that term year</td>
</tr>
<tr>
<td>Seven-year cap lock annual point-to-point</td>
<td>Annually, on the last day of each term year</td>
<td>Cap is set at beginning of the seven-year term and guaranteed for the entire seven-year term</td>
</tr>
</tbody>
</table>

See the next page for more information on how the indexed strategies work.
Indexed strategies offer growth opportunity that’s tied to market performance

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 7 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 either a cap or a participation rate.

- A **cap** is the maximum interest rate that will be credited for a term year.

- A **participation rate** is the percentage of a positive index change that will be credited for a term year.

Any interest credited to your account value is locked in at the end of each term year and cannot be lost due to future market performance.
Indexed strategies also keep your money protected from market declines

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 to your annuity and it’s locked in. This means, your annuity cannot lose value due to future market performance.

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

YEAR 1
Index performance is positive.
Your annuity earns interest that is locked in and protected from future index declines.

YEAR 2
Index performance is negative.
Your principal and earnings remain protected, leaving your account value unchanged.

YEAR 3
The index begins to recover.
Your 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.
But wait, there’s more

The Index Protector 7 offers these additional benefits to help you confidently navigate your future.

Tax treatment that allows faster growth
You don’t pay taxes on the interest your annuity earns until you start receiving payments or take a withdrawal. That means your money can grow at a faster rate than it would in a taxable product.

Leave a legacy for your loved ones
As you’re planning for the future, you probably want to know what will happen to your money when you’re gone. With the Index Protector 7, any death benefit is paid directly to your beneficiaries, which allows them to receive your financial legacy without the cost and delays of probate.

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.

For qualified contracts, the full amount withdrawn is 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.
It’s important to consider your liquidity needs.

The Index Protector 7 is intended to be a long-term product. However, you will have access to a portion of your money each year with 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 on the most recent contract anniversary may be withdrawn.

It’s important to note withdrawals in excess of this amount may be subject to early withdrawal charges and a market value adjustment. Early withdrawal charges and market value adjustments end after seven years.

For additional peace of mind, the Index Protector 7 offers a return of premium guarantee after contract year three.
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, we see our products as more than just contracts. Our annuities are transparent and easier to understand, so you always know what to expect.

We have a long history of financial strength and stability. We’ve received an “A” or higher rating by AM Best for more than 40 years, so 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.

The status quo isn’t a status we ever want. At MassMutual Ascend, we’ll always be in pursuit of better – so you can navigate your future with confidence.

Learn more at MassMutualAscend.com.
# Index Protector 7 features

<table>
<thead>
<tr>
<th>ISSUE AGES</th>
<th>Qualified: 0–85</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Non-qualified: 0–85</td>
</tr>
<tr>
<td></td>
<td>Inherited IRA: 0–75</td>
</tr>
<tr>
<td></td>
<td>Inherited non-qualified: 0–75</td>
</tr>
</tbody>
</table>

| PURCHASE PAYMENTS | You can purchase this annuity with an initial purchase payment of $100,000 or more. You can add to your annuity during the first two contract months with additional purchase payments of at least $25,000. |

| FEES | There are no upfront charges. All your money goes to work for you. Keep in mind you will pay a fee to your investment advisor for the services he or she provides, but you will not pay administrative fees to MassMutual Ascend. |

<table>
<thead>
<tr>
<th>INTEREST CREDITING STRATEGIES</th>
<th>• Declared rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>S&amp;P 500® 1-year point-to-point with cap</td>
</tr>
<tr>
<td></td>
<td>S&amp;P 500® 7-year cap lock annual point-to-point</td>
</tr>
<tr>
<td></td>
<td>S&amp;P 500 1-year point-to-point with participation rate</td>
</tr>
<tr>
<td></td>
<td>S&amp;P 500 U.S. Retiree Spending 1-year point-to-point with participation rate</td>
</tr>
<tr>
<td></td>
<td>iShares U.S. Real Estate 1-year point-to-point with cap</td>
</tr>
<tr>
<td></td>
<td>iShares MSCI EAFE 1-year point-to-point with cap</td>
</tr>
<tr>
<td></td>
<td>Available strategies may vary by state and by distribution.</td>
</tr>
</tbody>
</table>

| TERM | • The seven-year cap lock strategy has a seven-year term. The cap is locked in for the entire seven-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 or seven-year term. Funds held in the seven-year strategy will automatically reallocate to the S&P 500® 1-year strategy, unless you elect otherwise. |

| 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 on 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 and a market value adjustment. |

| EARLY WITHDRAWAL CHARGES | During the first seven contract years, an early withdrawal charge starting at 7% is applied to surrenders and withdrawals that exceed the 10% penalty-free amount. All charges end after seven years. |

<table>
<thead>
<tr>
<th>Contract year</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early withdrawal charge</td>
<td>7%</td>
<td>7%</td>
<td>7%</td>
<td>6%</td>
<td>5%</td>
<td>4%</td>
<td>3%</td>
<td>0%</td>
</tr>
</tbody>
</table>
## Market Value Adjustment

A market value adjustment (MVA) will apply if you surrender your contract during the first seven 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. This can result in an increase to your surrender value during a period of decreasing rates, or a decrease to your surrender value during a period of increasing or steady rates. The MVA will also apply to withdrawals in excess of the 10% free-withdrawal allowance during the first seven contract years.

## Guaranteed Minimum Surrender Value

The amount payable to you if you surrender your contract will never be less than the Guaranteed Minimum Surrender Value (GMSV). The GMSV is based on 87.5% of your purchase payments, plus interest credited daily at a minimum guaranteed rate. Ask your financial professional for the rate that will apply to your contract.

This means, in certain situations when your contract earns no interest due to flat or declining index performance, the amount payable upon surrender may still be greater than the amount of money you contributed to your annuity. It’s important to remember the GMSV is reduced by prior withdrawals.

The GMSV will not be less than the minimum values required by the state in which your annuity is issued.

## Return of Premium Guarantee

If the unexpected occurs, you can surrender your annuity and receive your purchase payments, less the sum of prior withdrawals and applicable rider charges. This guarantee applies after three contract years.

## Income 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.

## Included Waiver Riders

- **Extended care waiver rider:** After the first contract year, if you are confined to a 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.

- **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.

Extended care and terminal illness waiver riders are 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.
The S&P 500 Risk Control 10% Index refers to the S&P 500 Average Daily Risk Control 10% USD Price Return Index. For more information, visit US.SPIndices.com and search keyword SPXAV10P. For more information on the S&P U.S. Retiree Spending Index, visit US.SPIndices.com and search keyword SPRETIRE. For more information on the iShares U.S. Real Estate ETF, visit iShares.com and search ticker symbol IYR. For more information on the iShares MSCI EAFE ETF, visit iShares.com and search ticker symbol EFA. The launch date of the S&P 500 Risk Control 10% Index was April 4, 2013, and the launch date of the S&P U.S. Retiree Spending Index was September 26, 2016.

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All guarantees based on the claims-paying ability of MassMutual Ascend.

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