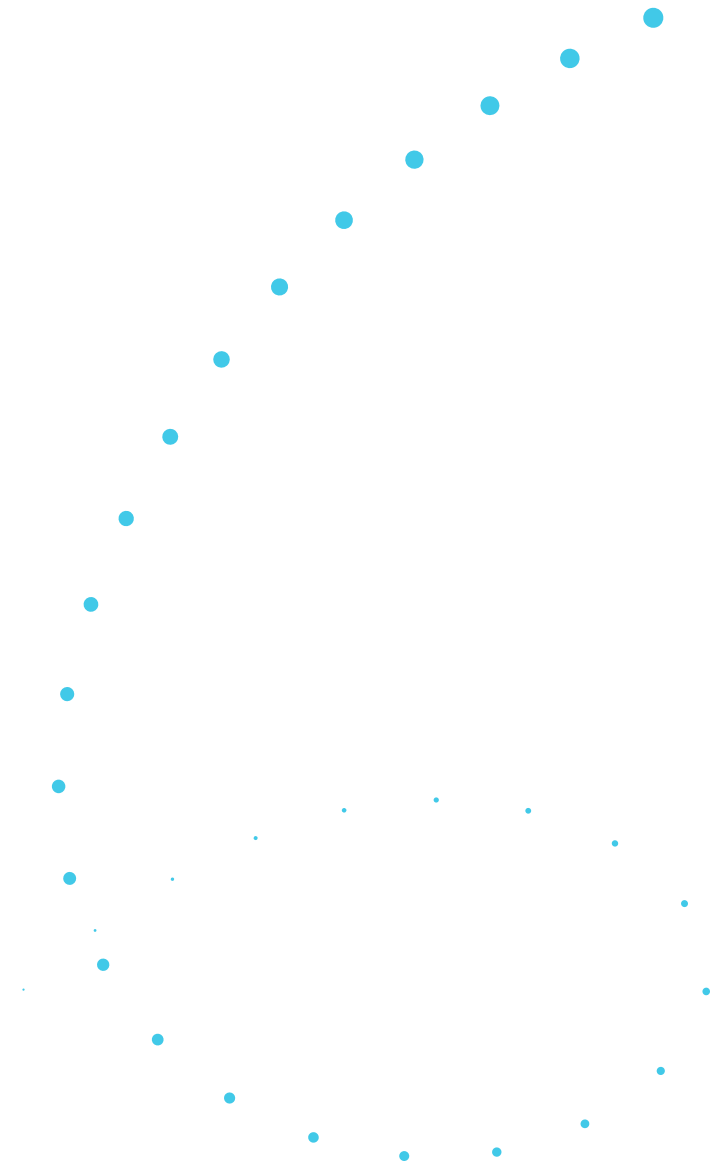


AssuranceSelect 7 Plus Renewal History

from MassMutual Ascend Life Insurance Company

A fixed-indexed annuity offers interest crediting strategies that help protect your savings from loss while providing the opportunity for growth. Strategy rates and caps are set at the start of each term and guaranteed for that term.

Here is a closer look at the renewal history for the AssuranceSelect 7 Plus for Fourth Quarter 2022-2025
(for purchase payments \$100,000 and over).



AssuranceSelect 7 Plus renewal history

| Start of First Term | Fixed Account (Declared Rate Strategy) | | | | | S&P 500® 1-year Point-to-Point (Indexed Strategy) | | | | | S&P 500® Risk Control 1-year Point-to-Point (Indexed Strategy) | | | | |
|---------------------|---|-------|-------|-------|-------|--|-------|--------|--------|--------|---|------|------|------|------|
| | Initial Rate | 2022 | 2023 | 2024 | 2025 | Initial Rate | 2022 | 2023 | 2024 | 2025 | Initial Rate | 2022 | 2023 | 2024 | 2025 |
| 10/6/21 | 1.95% | 1.95% | 1.95% | 1.95% | 1.95% | 4.35% | 4.35% | 4.35% | 4.35% | 4.35% | 50% | 50% | 50% | 50% | 50% |
| 10/20/21 | 1.95% | 1.95% | 1.95% | 1.95% | 1.95% | 4.35% | 4.35% | 4.35% | 4.35% | 4.35% | 50% | 50% | 50% | 50% | 50% |
| 11/6/21 | 1.95% | 1.95% | 1.95% | 1.95% | 1.95% | 4.35% | 4.35% | 4.35% | 4.35% | 4.35% | 50% | 50% | 50% | 50% | 50% |
| 11/20/21 | 1.95% | 1.95% | 1.95% | 1.95% | 1.95% | 4.35% | 4.35% | 4.35% | 4.35% | 4.35% | 50% | 50% | 50% | 50% | 50% |
| 12/6/21 | 1.95% | 1.95% | 1.95% | 1.95% | 1.95% | 4.35% | 4.35% | 4.35% | 4.35% | 4.35% | 50% | 50% | 50% | 50% | 50% |
| 12/20/21 | 1.95% | 1.95% | 1.95% | 1.95% | 1.95% | 4.35% | 4.35% | 4.35% | 4.35% | 4.35% | 50% | 50% | 50% | 50% | 50% |
| 10/6/22 | 4.80% | N/A | 4.80% | 4.80% | 4.80% | 11.00% | N/A | 11.00% | 11.00% | 11.00% | 85% | N/A | 85% | 85% | 85% |
| 10/20/22 | 4.80% | N/A | 4.80% | 4.80% | 4.80% | 11.00% | N/A | 11.00% | 11.00% | 11.00% | 85% | N/A | 85% | 85% | 85% |
| 11/6/22 | 4.80% | N/A | 4.80% | 4.80% | 4.80% | 11.00% | N/A | 11.00% | 11.00% | 11.00% | 85% | N/A | 85% | 85% | 85% |
| 11/20/22 | 4.80% | N/A | 4.80% | 4.80% | 4.80% | 11.00% | N/A | 11.00% | 11.00% | 11.00% | 85% | N/A | 85% | 85% | 85% |
| 12/6/22 | 4.80% | N/A | 4.80% | 4.80% | 4.80% | 11.00% | N/A | 11.00% | 11.00% | 11.00% | 85% | N/A | 85% | 85% | 85% |
| 12/20/22 | 4.80% | N/A | 4.80% | 4.80% | 4.80% | 11.00% | N/A | 11.00% | 11.00% | 11.00% | 85% | N/A | 85% | 85% | 85% |
| 10/6/23 | 5.05% | N/A | N/A | 5.05% | 5.05% | 11.50% | N/A | N/A | 11.50% | 11.50% | 75% | N/A | N/A | 75% | 75% |
| 10/20/23 | 5.15% | N/A | N/A | 5.15% | 5.15% | 11.75% | N/A | N/A | 11.75% | 11.75% | 75% | N/A | N/A | 75% | 75% |
| 11/6/23 | 5.15% | N/A | N/A | 5.15% | 5.15% | 11.75% | N/A | N/A | 11.75% | 11.75% | 75% | N/A | N/A | 75% | 75% |
| 11/20/23 | 5.35% | N/A | N/A | 5.35% | 5.35% | 11.75% | N/A | N/A | 11.75% | 11.75% | 80% | N/A | N/A | 80% | 80% |
| 12/6/23 | 5.35% | N/A | N/A | 5.35% | 5.35% | 11.75% | N/A | N/A | 11.75% | 11.75% | 80% | N/A | N/A | 80% | 80% |
| 12/20/23 | 4.85% | N/A | N/A | 4.85% | 4.85% | 9.75% | N/A | N/A | 9.75% | 9.75% | 70% | N/A | N/A | 70% | 70% |
| 10/6/24 | 3.90% | N/A | N/A | N/A | 3.90% | 9.00% | N/A | N/A | N/A | 9.00% | 65% | N/A | N/A | N/A | 65% |
| 10/20/24 | 3.90% | N/A | N/A | N/A | 3.90% | 9.00% | N/A | N/A | N/A | 9.00% | 65% | N/A | N/A | N/A | 65% |
| 11/6/24 | 3.90% | N/A | N/A | N/A | 3.90% | 9.00% | N/A | N/A | N/A | 9.00% | 65% | N/A | N/A | N/A | 65% |
| 11/20/24 | 3.90% | N/A | N/A | N/A | 3.90% | 9.00% | N/A | N/A | N/A | 9.00% | 65% | N/A | N/A | N/A | 65% |
| 12/6/24 | 3.90% | N/A | N/A | N/A | 3.90% | 9.00% | N/A | N/A | N/A | 9.00% | 65% | N/A | N/A | N/A | 65% |
| 12/20/24 | 3.90% | N/A | N/A | N/A | 3.90% | 9.00% | N/A | N/A | N/A | 9.00% | 65% | N/A | N/A | N/A | 65% |

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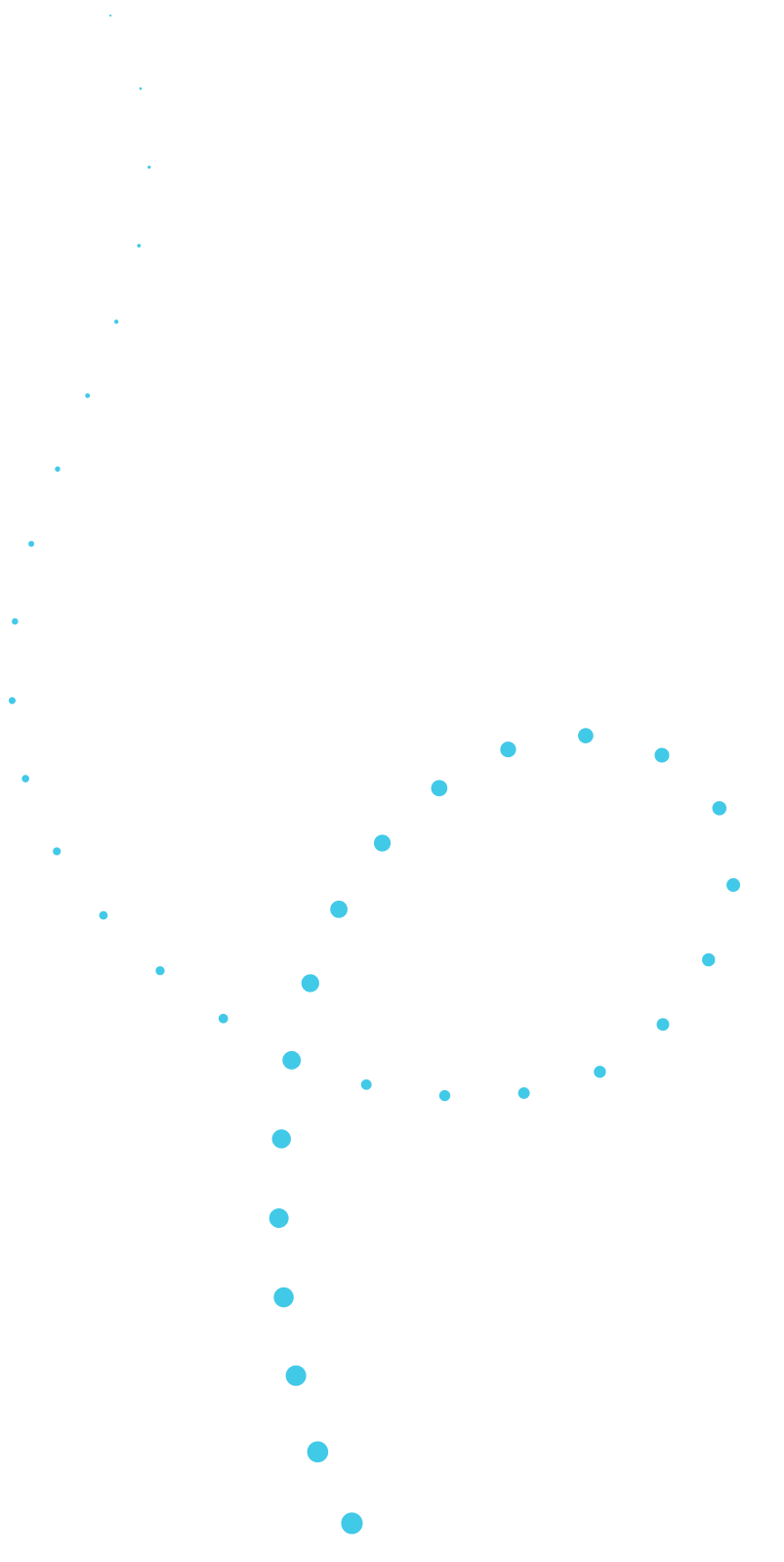
AssuranceSelect 7 Plus renewal history (cont.)

| Start of First Term | iShares® U.S. Real Estate 1-year Point-to-Point (Indexed Strategy) | | | | | S&P U.S. Retiree Spending 1-year Point-to-Point (Indexed Strategy) | | | | | SPDR Gold Shares 1-year Point-to-Point (Indexed Strategy) | | | | |
|---------------------|--|-------|--------|--------|--------|--|------|------|------|------|---|-------|--------|--------|--------|
| | Initial Rate | 2022 | 2023 | 2024 | 2025 | Initial Rate | 2022 | 2023 | 2024 | 2025 | Initial Rate | 2022 | 2023 | 2024 | 2025 |
| 10/6/21 | 5.00% | 5.00% | 5.00% | 5.00% | 5.00% | 75% | 75% | 75% | 75% | 75% | 5.75% | 5.75% | 5.75% | 5.75% | 5.75% |
| 10/20/21 | 5.00% | 5.00% | 5.00% | 5.00% | 5.00% | 75% | 75% | 75% | 75% | 75% | 5.75% | 5.75% | 5.75% | 5.75% | 5.75% |
| 11/6/21 | 5.00% | 5.00% | 5.00% | 5.00% | 5.00% | 75% | 75% | 75% | 75% | 75% | 5.75% | 5.75% | 5.75% | 5.75% | 5.75% |
| 11/20/21 | 5.00% | 5.00% | 5.00% | 5.00% | 5.00% | 75% | 75% | 75% | 75% | 75% | 5.75% | 5.75% | 5.75% | 5.75% | 5.75% |
| 12/6/21 | 5.00% | 5.00% | 5.00% | 5.00% | 5.00% | 75% | 75% | 75% | 75% | 75% | 5.75% | 5.75% | 5.75% | 5.75% | 5.75% |
| 12/20/21 | 5.00% | 5.00% | 5.00% | 5.00% | 5.00% | 75% | 75% | 75% | 75% | 75% | 5.75% | 5.75% | 5.75% | 5.75% | 5.75% |
| 10/6/22 | 12.50% | N/A | 12.50% | 12.50% | 12.50% | 85% | N/A | 85% | 85% | 85% | 13.00% | N/A | 13.00% | 13.00% | 13.00% |
| 10/20/22 | 12.50% | N/A | 12.50% | 12.50% | 12.50% | 85% | N/A | 85% | 85% | 85% | 13.00% | N/A | 13.00% | 13.00% | 13.00% |
| 11/6/22 | 12.50% | N/A | 12.50% | 12.50% | 12.50% | 85% | N/A | 85% | 85% | 85% | 13.00% | N/A | 13.00% | 13.00% | 13.00% |
| 11/20/22 | 12.50% | N/A | 12.50% | 12.50% | 12.50% | 85% | N/A | 85% | 85% | 85% | 13.00% | N/A | 13.00% | 13.00% | 13.00% |
| 12/6/22 | 12.50% | N/A | 12.50% | 12.50% | 12.50% | 85% | N/A | 85% | 85% | 85% | 13.00% | N/A | 13.00% | 13.00% | 13.00% |
| 12/20/22 | 12.50% | N/A | 12.50% | 12.50% | 12.50% | 85% | N/A | 85% | 85% | 85% | 13.00% | N/A | 13.00% | 13.00% | 13.00% |
| 10/6/23 | 11.10% | N/A | N/A | 11.10% | 11.10% | 80% | N/A | N/A | 80% | 80% | 12.50% | N/A | N/A | 12.50% | 12.50% |
| 10/20/23 | 11.60% | N/A | N/A | 11.60% | 11.60% | 80% | N/A | N/A | 80% | 80% | 12.50% | N/A | N/A | 12.50% | 12.50% |
| 11/6/23 | 11.60% | N/A | N/A | 11.60% | 11.60% | 80% | N/A | N/A | 80% | 80% | 12.50% | N/A | N/A | 12.50% | 12.50% |
| 11/20/23 | 11.60% | N/A | N/A | 11.60% | 11.60% | 85% | N/A | N/A | 85% | 85% | 13.00% | N/A | N/A | 13.00% | 13.00% |
| 12/6/23 | 11.60% | N/A | N/A | 11.60% | 11.60% | 85% | N/A | N/A | 85% | 85% | 13.00% | N/A | N/A | 13.00% | 13.00% |
| 12/20/23 | 10.60% | N/A | N/A | 10.60% | 10.60% | 75% | N/A | N/A | 75% | 75% | 11.00% | N/A | N/A | 11.00% | 11.00% |
| 10/6/24 | 10.10% | N/A | N/A | N/A | 10.10% | 75% | N/A | N/A | N/A | 75% | 10.50% | N/A | N/A | N/A | 10.50% |
| 10/20/24 | 10.10% | N/A | N/A | N/A | 10.10% | 75% | N/A | N/A | N/A | 75% | 10.50% | N/A | N/A | N/A | 10.50% |
| 11/6/24 | 10.10% | N/A | N/A | N/A | 10.10% | 75% | N/A | N/A | N/A | 75% | 10.50% | N/A | N/A | N/A | 10.50% |
| 11/20/24 | 10.10% | N/A | N/A | N/A | 10.10% | 75% | N/A | N/A | N/A | 75% | 10.50% | N/A | N/A | N/A | 10.50% |
| 12/6/24 | 10.10% | N/A | N/A | N/A | 10.10% | 75% | N/A | N/A | N/A | 75% | 10.50% | N/A | N/A | N/A | 10.50% |
| 12/20/24 | 10.10% | N/A | N/A | N/A | 10.10% | 75% | N/A | N/A | N/A | 75% | 10.50% | N/A | N/A | N/A | 10.50% |

Continued on next page

AssuranceSelect 7 Plus renewal history (cont.)

| Start of First Term | First Trust Barclays Edge Index PTP Strategy | | | | |
|---------------------|--|------|------|------|--------|
| | Initial Rate | 2022 | 2023 | 2024 | 2025 |
| 10/6/21 | N/A | N/A | N/A | N/A | N/A |
| 10/20/21 | N/A | N/A | N/A | N/A | N/A |
| 11/6/21 | N/A | N/A | N/A | N/A | N/A |
| 11/20/21 | N/A | N/A | N/A | N/A | N/A |
| 12/6/21 | N/A | N/A | N/A | N/A | N/A |
| 12/20/21 | N/A | N/A | N/A | N/A | N/A |
| 10/6/22 | N/A | N/A | N/A | N/A | N/A |
| 10/20/22 | N/A | N/A | N/A | N/A | N/A |
| 11/6/22 | N/A | N/A | N/A | N/A | N/A |
| 11/20/22 | N/A | N/A | N/A | N/A | N/A |
| 12/6/22 | N/A | N/A | N/A | N/A | N/A |
| 12/20/22 | N/A | N/A | N/A | N/A | N/A |
| 10/6/23 | N/A | N/A | N/A | N/A | N/A |
| 10/20/23 | N/A | N/A | N/A | N/A | N/A |
| 11/6/23 | N/A | N/A | N/A | N/A | N/A |
| 11/20/23 | N/A | N/A | N/A | N/A | N/A |
| 12/6/23 | N/A | N/A | N/A | N/A | N/A |
| 12/20/23 | N/A | N/A | N/A | N/A | N/A |
| 10/6/24 | 14.00% | N/A | N/A | N/A | 14.00% |
| 10/20/24 | 14.00% | N/A | N/A | N/A | 14.00% |
| 11/6/24 | 14.00% | N/A | N/A | N/A | 14.00% |
| 11/20/24 | 14.00% | N/A | N/A | N/A | 14.00% |
| 12/6/24 | 14.00% | N/A | N/A | N/A | 14.00% |
| 12/20/24 | 14.00% | N/A | N/A | N/A | 14.00% |



Charts show the initial declared rates and indexed strategy caps and participation rates for terms that started in the fourth quarter and on the 6th and 20th of each month in years 2021-2024 (Chart Terms) and the corresponding declared rates, caps and participation rates when the terms renewed in years 2022-2025. Although the charts show the caps/maximum indexed interest rate for each strategy for each Chart Term, they do not show the indexed interest rate for any strategy for any Chart Term, which may be less than the cap.

Information shown is not a guarantee or representation of future renewal declared rate, cap or participation rate decisions.

When the initial rates and caps we offer for new contracts decrease, our annuity rate lock procedure allows new contracts to receive the previous, higher rate if all required steps are completed within specified time frames. For new contracts in such situations, the initial declared rates, caps or participation rates would have been higher than the relevant figures listed in the AssuranceSelect 7 Plus Renewal History table.

For more information on the S&P 500, visit US.SPindices.com and search keyword S&P 500. 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. To learn more about the iShares U.S. Real Estate ETF, visit iShares.com and search ticker symbol IYR. SPDR Gold Shares refer to units of interest in an exchange traded fund that reflect the market value of gold bullion. For more information on the First Trust Barclays Edge Index, please visit ftindexingsolutions.com and search ticker symbol FTEDGE7.

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