

Please Read - Important Notice

This illustration is provided to help you understand how the features and crediting strategies within this contract work. **The values set out in the illustration are not a promise of future returns or results.**

Any performance shown is hypothetical and is based on actual or back-tested performance of the selected index(es). It is not indicative of any future earnings, gains, or contract values.

Certain factors may lead to illustrations with higher earnings, gains, and contract values than should be expected:

- **Lookback Period** - Performance in the equity and bond markets during the last 10 years has generally been higher than the long-term average. Because our illustrations look at the performance of the indexes for the last 10 years, the index gains shown are higher than their long-term averages. The past performance of an index is not a guarantee of the index's future performance.
- **Higher Interest Rates** - Higher interest rates mean that we can invest your premiums at a higher rate of interest. This may allow us to offer higher caps and upside participation rates, which can magnify the impact of a favorable lookback period. The illustration assumes current caps and upside participation rates did not change at any time during the illustrated period. Caps and upside participation rates can increase or decrease each term throughout the life of your annuity contract, which will impact the contract's value.

Please work with your financial professional to determine which crediting strategy allocations to select. You should not assume that the historical performance of the indexes shown in this illustration will happen in the future.

Personalized annuity illustration

American Legend[®] 7

Prepared for
Valued Client

Date prepared
January 15, 2026

Prepared by
My Annuity Store
Massachusetts

State of
Colorado

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Why choose MassMutual Ascend?

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.

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ILLUSTRATION SUMMARY

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CUSTOMER PROFILE

Prepared for	Valued Client	Purchase payment	\$100,000.00
Prepared by	My Annuity Store	Age on contract effective date	60
Prepared on	January 15, 2026	State of	Colorado
Tax Qualification	Non-Qualified		

We do not accept non-qualified business when a full distribution must be made prior to the fifth anniversary of the decedent's death. Full distribution is required before that fifth anniversary unless the inherited NQ owner begins distributions based on his or her unrecalculated life expectancy no later than the first anniversary of the decedent's death. The distributions must be paid at least as often as annually. Therefore, if the date of contract issue is after the first anniversary of the decedent's death, this illustration is only valid if those distributions began prior to that first anniversary.

The **American Legend 7** is a fixed indexed annuity. It offers indexed strategies that earn interest at a rate determined in part by the change over a term year in the value of a market index or the share price of an exchange-traded fund (index).

This is a hypothetical illustration. The benefits and values set out in this illustration are **not** guaranteed, except for those items clearly labeled guaranteed.

The assumptions on which this illustration is based are subject to change. The guaranteed and nonguaranteed (current) elements used in this illustration are as of the date this illustration is prepared. These elements may change before we issue your contract.

This illustration assumes sample index performance will repeat and the nonguaranteed (current) elements of the contract, such as caps, participation rates, and declared rates will not change. It is likely that such performance will not repeat, the nonguaranteed elements will change, and actual values will be higher or lower than those in this illustration but will not be less than the minimum guarantees. The values in this illustration are not guarantees or even estimates of the amounts you can expect from your annuity. Please review the entire Disclosure Document and Buyer's Guides provided with your contract for more detailed information.

In some states, illustrations will include an indexed strategy only if the applicable index has been in existence for at least 10 calendar years.

ASSUMPTIONS

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Basic Assumptions These basic assumptions apply to both the Guaranteed Values table and the Sample Values tables.

Age on contract effective date	60
Purchase payment	\$100,000.00

Strategy	Allocation
S&P 500 1-Year Point-to-Point with Cap	50%
S&P 500 7-Year Cap Lock Annual Point-to-Point *	0%
iShares U.S. Real Estate 1-Year Point-to-Point with Cap	0%
SPDR Gold Shares 1-Year Point-to-Point with Cap	50%
Declared Rate	0%

* This strategy has one seven-year term during which interest is credited annually on each term anniversary at an annual rate calculated for that term year. The cap for this strategy is locked for the entire seven-year term. This strategy may only be selected during the first contract year.

Assumptions for the Guaranteed Values Table For the Guaranteed Values Table, we assumed:

- each indexed strategy earned the guaranteed indexed interest rate of 0% each term year; and
- the declared rate strategy earned the guaranteed declared interest rate of 2.40% each term year.

Assumptions for the Sample Values Tables For the Sample Values Table, we assumed:

- the current caps and declared interest rate set out below applied.

Strategy	Current Caps and Rates	
S&P 500 1-Year Point-to-Point with Cap	Cap	9.25%
S&P 500 7-Year Cap Lock Annual Point-to-Point	Cap (7 Yr Lock)	7.25%
iShares U.S. Real Estate 1-Year Point-to-Point with Cap	Cap	12%
SPDR Gold Shares 1-Year Point-to-Point with Cap	Cap	12%
Declared Rate	Declared Interest Rate	4.15%

In the Sample Values Tables, the indexed strategy values are based on the applicable index values set out below. If a table includes values for more than 10 years, the index values are repeated over and over until age 95.

- Values for the S&P 500 indexed strategies are based on the historical values of the S&P 500 Index. The S&P 500 Index includes stocks issued by 500 of the top companies in leading industries of the U.S. economy and is designed to reflect the large-cap sector of the U.S. equity market. Due to its composition, it also represents the U.S. equity market in general.

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- Values for the SPDR® Gold Shares indexed strategy are based on the historical values of the SPDR Gold Shares. The SPDR Gold Shares ETF represents units of beneficial interest in, and ownership of, the SPDR Gold Trust, an exchange traded fund that holds gold bullion. The investment objective of the Trust is for the shares to reflect the performance of the price of gold bullion, less the Trust's expenses. For more information, visit www.spdrgoldshares.com.
- Values for the iShares Real Estate ETF indexed strategy are based on the historical values of the iShares US Real Estate ETF. The iShares U.S. Real Estate ETF is an exchange traded fund that 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). For more information, visit www.iShares.com and search ticker symbol IYR.

GUARANTEED VALUES

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This table shows the guaranteed contract values at the end of each contract year until age 95.

Contract Values						
Contract Year	Age	Purchase Payment	Withdrawals	Account Value	Surrender Value	Guaranteed Value
1	60	\$100,000	\$0	\$100,000	\$89,600	\$89,600
2	61	\$0	\$0	\$100,000	\$91,750	\$91,750
3	62	\$0	\$0	\$100,000	\$93,952	\$93,952
4	63	\$0	\$0	\$100,000	\$96,207	\$96,207
5	64	\$0	\$0	\$100,000	\$98,516	\$98,516
6	65	\$0	\$0	\$100,000	\$100,881	\$100,881
7	66	\$0	\$0	\$100,000	\$103,302	\$103,302
8	67	\$0	\$0	\$100,000	\$105,781	\$105,781
9	68	\$0	\$0	\$100,000	\$108,320	\$108,320
10	69	\$0	\$0	\$100,000	\$110,919	\$110,919
11	70	\$0	\$0	\$100,000	\$113,581	\$113,581
12	71	\$0	\$0	\$100,000	\$116,307	\$116,307
13	72	\$0	\$0	\$100,000	\$119,099	\$119,099
14	73	\$0	\$0	\$100,000	\$121,957	\$121,957
15	74	\$0	\$0	\$100,000	\$124,884	\$124,884
16	75	\$0	\$0	\$100,000	\$127,881	\$127,881
17	76	\$0	\$0	\$100,000	\$130,951	\$130,951
18	77	\$0	\$0	\$100,000	\$134,093	\$134,093
19	78	\$0	\$0	\$100,000	\$137,312	\$137,312
20	79	\$0	\$0	\$100,000	\$140,607	\$140,607
21	80	\$0	\$0	\$100,000	\$143,982	\$143,982
22	81	\$0	\$0	\$100,000	\$147,437	\$147,437
23	82	\$0	\$0	\$100,000	\$150,976	\$150,976
24	83	\$0	\$0	\$100,000	\$154,599	\$154,599
25	84	\$0	\$0	\$100,000	\$158,310	\$158,310
26	85	\$0	\$0	\$100,000	\$162,109	\$162,109
27	86	\$0	\$0	\$100,000	\$166,000	\$166,000
28	87	\$0	\$0	\$100,000	\$169,984	\$169,984
29	88	\$0	\$0	\$100,000	\$174,063	\$174,063
30	89	\$0	\$0	\$100,000	\$178,241	\$178,241
31	90	\$0	\$0	\$100,000	\$182,518	\$182,518
32	91	\$0	\$0	\$100,000	\$186,899	\$186,899
33	92	\$0	\$0	\$100,000	\$191,384	\$191,384
34	93	\$0	\$0	\$100,000	\$195,978	\$195,978
35	94	\$0	\$0	\$100,000	\$200,681	\$200,681
36	95	\$0	\$0	\$100,000	\$205,497	\$205,497
		\$100,000	\$0			

Values in this table reflect the application of the largest possible negative market value adjustment (MVA) that might apply to a withdrawal or surrender during the first 7 contract years. See page 12 for information about the MVA and its potential effect.

Withdrawal column reflects withdrawals taken by you and applicable early withdrawal charges (EWCs) and market value adjustments (MVAs).

The amount payable upon a surrender of this Contract, applied upon annuitization, or payable as a death benefit will never be less than the guaranteed value as of the applicable date.

See Key Terms on page 13 for more information about contract values.

SAMPLE VALUES MOST RECENT 10-YEAR PERIOD

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This table shows sample contract values calculated using current caps, participation rates, and declared rate, which we assumed did not change at any time during the illustrated period.

The values in this table are NOT guaranteed. See page 5 for guaranteed values based on guaranteed elements.

Contract Values						
Contract Year	Age	Purchase Payment	Withdrawals	Interest Earned	Account Value	Surrender Value
1	60	\$100,000	\$0	\$8,640	\$108,640	\$99,762
2	61	\$0	\$0	\$11,535	\$120,175	\$111,430
3	62	\$0	\$0	\$0	\$120,175	\$112,604
4	63	\$0	\$0	\$12,780	\$132,954	\$125,698
5	64	\$0	\$0	\$14,162	\$147,116	\$140,425
6	65	\$0	\$0	\$6,589	\$153,705	\$148,145
7	66	\$0	\$0	\$0	\$153,705	\$149,555
8	67	\$0	\$0	\$16,305	\$170,009	\$170,009
9	68	\$0	\$0	\$18,063	\$188,072	\$188,072
10	69	\$0	\$0	\$20,015	\$208,087	\$208,087
11	70	\$0	\$0	\$17,947	\$226,034	\$226,034
12	71	\$0	\$0	\$24,076	\$250,110	\$250,110
13	72	\$0	\$0	\$0	\$250,110	\$250,110
14	73	\$0	\$0	\$26,683	\$276,792	\$276,792
15	74	\$0	\$0	\$29,576	\$306,369	\$306,369
16	75	\$0	\$0	\$13,371	\$319,740	\$319,740
17	76	\$0	\$0	\$0	\$319,740	\$319,740
18	77	\$0	\$0	\$34,026	\$353,766	\$353,766
19	78	\$0	\$0	\$37,707	\$391,473	\$391,473
20	79	\$0	\$0	\$41,793	\$433,266	\$433,266
21	80	\$0	\$0	\$37,304	\$470,570	\$470,570
22	81	\$0	\$0	\$50,282	\$520,852	\$520,852
23	82	\$0	\$0	\$0	\$520,852	\$520,852
24	83	\$0	\$0	\$55,743	\$576,595	\$576,595
25	84	\$0	\$0	\$61,807	\$638,402	\$638,402
26	85	\$0	\$0	\$27,136	\$665,538	\$665,538
27	86	\$0	\$0	\$0	\$665,538	\$665,538
28	87	\$0	\$0	\$71,051	\$736,588	\$736,588
29	88	\$0	\$0	\$78,762	\$815,350	\$815,350
30	89	\$0	\$0	\$87,323	\$902,673	\$902,673
31	90	\$0	\$0	\$77,583	\$980,256	\$980,256
32	91	\$0	\$0	\$105,075	\$1,085,331	\$1,085,331
33	92	\$0	\$0	\$0	\$1,085,331	\$1,085,331
34	93	\$0	\$0	\$116,523	\$1,201,854	\$1,201,854
35	94	\$0	\$0	\$129,237	\$1,331,090	\$1,331,090
36	95	\$0	\$0	\$55,070	\$1,386,160	\$1,386,160
		\$100,000	\$0			

Values in this table assume that no Market Value Adjustment (MVA) applies to any withdrawal or surrender during the first 7 contract years. See page 12 for information about the MVA and its potential effect.

Withdrawal column reflects withdrawals taken by you and applicable early withdrawal charges (EWCs).

Interest earned column represents total interest earned by all strategies to which you allocated funds. See next table for details.

See Key Terms on page 13 for more information about contract values.

SAMPLE VALUES FOR STRATEGIES MOST RECENT 10-YEAR PERIOD

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This table provides more detail about the amounts included in the Interest Earned column in the previous table.

The values in this table are NOT guaranteed. See page 5 for guaranteed values based on guaranteed elements.

Contract Year	Age	S&P 500 1-Year Point-to-Point With Cap Strategy		SPDR Gold Shares 1-Year Point-to-Point With Cap Strategy		Account Value
		Interest Rate	Interest Earned	Interest Rate	Interest Earned	
1	60	9.25%	\$4,625	8.03%	\$4,015	\$108,640
2	61	9.25%	\$5,053	12.00%	\$6,482	\$120,175
3	62	0.00%	\$0	0.00%	\$0	\$120,175
4	63	9.25%	\$5,520	12.00%	\$7,260	\$132,954
5	64	9.25%	\$6,031	12.00%	\$8,131	\$147,116
6	65	9.25%	\$6,589	0.00%	\$0	\$153,705
7	66	0.00%	\$0	0.00%	\$0	\$153,705
8	67	9.25%	\$7,198	12.00%	\$9,106	\$170,009
9	68	9.25%	\$7,864	12.00%	\$10,199	\$188,072
10	69	9.25%	\$8,591	12.00%	\$11,423	\$208,087
11	70	9.25%	\$9,386	8.03%	\$8,561	\$226,034
12	71	9.25%	\$10,254	12.00%	\$13,821	\$250,110
13	72	0.00%	\$0	0.00%	\$0	\$250,110
14	73	9.25%	\$11,203	12.00%	\$15,480	\$276,792
15	74	9.25%	\$12,239	12.00%	\$17,337	\$306,369
16	75	9.25%	\$13,371	0.00%	\$0	\$319,740
17	76	0.00%	\$0	0.00%	\$0	\$319,740
18	77	9.25%	\$14,608	12.00%	\$19,418	\$353,766
19	78	9.25%	\$15,959	12.00%	\$21,748	\$391,473
20	79	9.25%	\$17,435	12.00%	\$24,358	\$433,266
21	80	9.25%	\$19,048	8.03%	\$18,255	\$470,570
22	81	9.25%	\$20,810	12.00%	\$29,471	\$520,852
23	82	0.00%	\$0	0.00%	\$0	\$520,852
24	83	9.25%	\$22,735	12.00%	\$33,008	\$576,595
25	84	9.25%	\$24,838	12.00%	\$36,969	\$638,402
26	85	9.25%	\$27,136	0.00%	\$0	\$665,538
27	86	0.00%	\$0	0.00%	\$0	\$665,538
28	87	9.25%	\$29,646	12.00%	\$41,405	\$736,588
29	88	9.25%	\$32,388	12.00%	\$46,374	\$815,350
30	89	9.25%	\$35,384	12.00%	\$51,939	\$902,673
31	90	9.25%	\$38,657	8.03%	\$38,926	\$980,256
32	91	9.25%	\$42,233	12.00%	\$62,842	\$1,085,331
33	92	0.00%	\$0	0.00%	\$0	\$1,085,331
34	93	9.25%	\$46,139	12.00%	\$70,384	\$1,201,854
35	94	9.25%	\$50,407	12.00%	\$78,830	\$1,331,090

		S&P 500 1-Year Point-to-Point With Cap Strategy		SPDR Gold Shares 1-Year Point-to-Point With Cap Strategy		
Contract Year	Age	Interest Rate	Interest Earned	Interest Rate	Interest Earned	Account Value
36	95	9.25%	\$55,070	0.00%	\$0	\$1,386,160

COMPARISON OF PERFORMANCE IN THREE DIFFERENT 10-YEAR PERIODS

American Legend 7

These examples show how the indexed strategies would have operated in three different 10-year periods. These values were calculated using the current caps and rates, which we assumed did not change at any time during the illustrated period.

To make the comparisons for each strategy easier to understand, we assumed:

- You allocated your purchase payment to each indexed strategy.
- You did not take any withdrawals from your annuity, which means the examples do not illustrate the impact of applicable early withdrawal charges and market value adjustments.

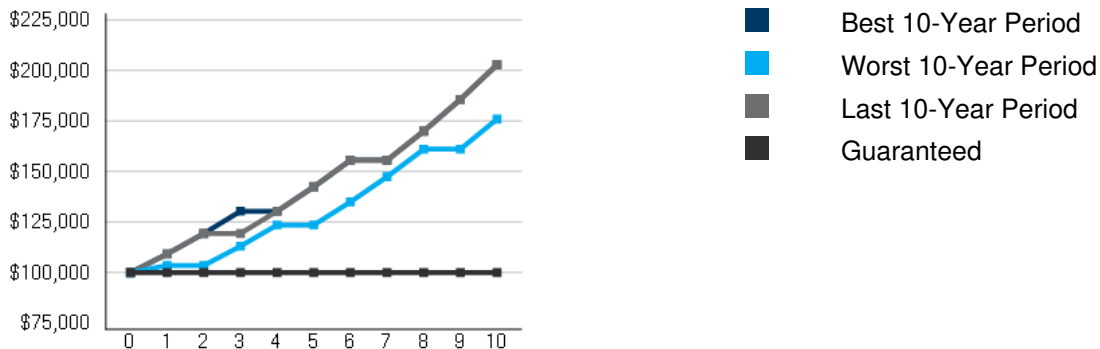
Note: The Best 10-Year Period represents the 10-year period during the last 20 years that resulted in the most growth in the index value. This is not necessarily the 10-year period during the last 20 years when the largest amount of indexed interest would have been credited to the strategy. Likewise, the Worst 10-Year Period represents the 10-year period during the last 20 years that resulted in the least growth in the index value. Again, this is not necessarily the 10-year period during the last 20 years when the smallest amount of indexed interest would have been credited to the strategy. Such discrepancies reflect the impact of caps and the guaranteed 0% indexed interest rate.

The values in these examples are **NOT guaranteed**. See page 5 for guaranteed values based on guaranteed elements.

S&P 500 1-Year Point-to-Point with Cap Strategy - 9.25% Cap

The values set out below were calculated using historical performance information of the S&P 500 Index.

Best 10-Year Period				Worst 10-Year Period				Last 10-Year Period			
Geometric mean annual effective rate 7.33%				Geometric mean annual effective rate 5.82%				Geometric mean annual effective rate 7.33%			
Year	S&P 500 Index Change	Interest Rate	Value	Year	S&P 500 Index Change	Interest Rate	Value	Year	S&P 500 Index Change	Interest Rate	Value
2012	13.40%	9.25%	\$109,250	2007	3.52%	3.52%	\$103,520	2016	9.53%	9.25%	\$109,250
2013	29.60%	9.25%	\$119,356	2008	-38.48%	0.00%	\$103,520	2017	19.41%	9.25%	\$119,356
2014	11.39%	9.25%	\$130,396	2009	23.45%	9.25%	\$113,096	2018	-6.23%	0.00%	\$119,356
2015	-0.72%	0.00%	\$130,396	2010	12.78%	9.25%	\$123,557	2019	28.87%	9.25%	\$130,396
2016	9.53%	9.25%	\$142,458	2011	0.00%	0.00%	\$123,557	2020	16.25%	9.25%	\$142,458
2017	19.41%	9.25%	\$155,635	2012	13.40%	9.25%	\$134,986	2021	26.89%	9.25%	\$155,635
2018	-6.23%	0.00%	\$155,635	2013	29.60%	9.25%	\$147,472	2022	-19.44%	0.00%	\$155,635
2019	28.87%	9.25%	\$170,031	2014	11.39%	9.25%	\$161,113	2023	24.23%	9.25%	\$170,031
2020	16.25%	9.25%	\$185,759	2015	-0.72%	0.00%	\$161,113	2024	23.30%	9.25%	\$185,759
2021	26.89%	9.25%	\$202,942	2016	9.53%	9.25%	\$176,016	2025	16.38%	9.25%	\$202,942



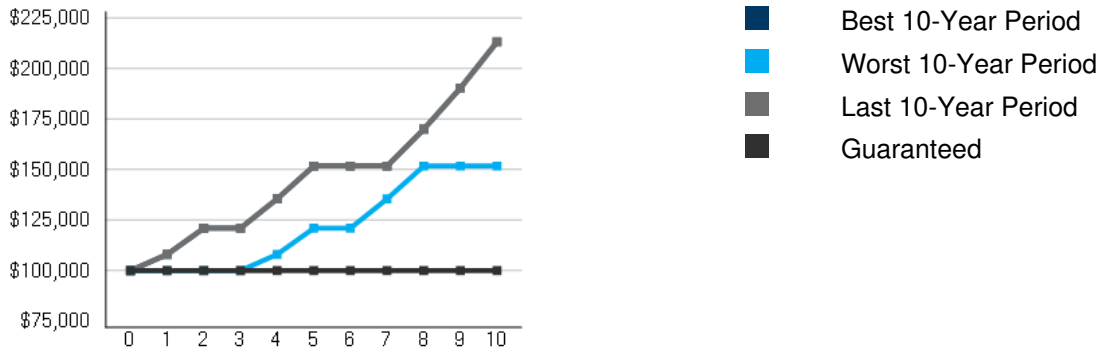
COMPARISON OF PERFORMANCE IN THREE DIFFERENT 10-YEAR PERIODS

American Legend 7

SPDR Gold Shares 1-Year Point-to-Point with Cap Strategy - 12% Cap

The values set out below were calculated using historical performance information of the SPDR Gold Shares, which trades under the ticker symbol GLD.

Best 10-Year Period Geometric mean annual effective rate 7.87%				Worst 10-Year Period Geometric mean annual effective rate 4.26%				Last 10-Year Period Geometric mean annual effective rate 7.87%			
Year	GLD Change	Interest Rate	Value	Year	GLD Change	Interest Rate	Value	Year	GLD Change	Interest Rate	Value
2016	8.03%	8.03%	\$108,030	2013	-28.32%	0.00%	\$100,000	2016	8.03%	8.03%	\$108,030
2017	12.80%	12.00%	\$120,994	2014	-2.18%	0.00%	\$100,000	2017	12.80%	12.00%	\$120,994
2018	-1.94%	0.00%	\$120,994	2015	-10.67%	0.00%	\$100,000	2018	-1.94%	0.00%	\$120,994
2019	17.85%	12.00%	\$135,513	2016	8.03%	8.03%	\$108,030	2019	17.85%	12.00%	\$135,513
2020	24.81%	12.00%	\$151,774	2017	12.80%	12.00%	\$120,994	2020	24.81%	12.00%	\$151,774
2021	-4.14%	0.00%	\$151,774	2018	-1.94%	0.00%	\$120,994	2021	-4.14%	0.00%	\$151,774
2022	-0.77%	0.00%	\$151,774	2019	17.85%	12.00%	\$135,513	2022	-0.77%	0.00%	\$151,774
2023	12.69%	12.00%	\$169,987	2020	24.81%	12.00%	\$151,774	2023	12.69%	12.00%	\$169,987
2024	26.65%	12.00%	\$190,386	2021	-4.14%	0.00%	\$151,774	2024	26.65%	12.00%	\$190,386
2025	63.67%	12.00%	\$213,232	2022	-0.77%	0.00%	\$151,774	2025	63.67%	12.00%	\$213,232



PAYOUT OPTIONS

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You can get income from your annuity through the annuity payout benefit, which is a series of periodic payments made under the payout option. The amount to be used to provide payments is based on the account value on the annuity payout initiation date. It will be reduced by premium tax or other taxes not previously deducted. It will never be less than the guaranteed value on that date.

When you buy your annuity, we set the annuity payout initiation date (the beginning of the payment period). This date is set out on your contract specifications page. You may choose a different date, subject to the limitations set out in your contract.

You choose how the payments will be made—the payout option. Your choices include:

- **Fixed period payout.** Pays income for the fixed period of time you select.
- **Life payout.** Pays income for the life of the annuitant.

- **Life payout with payments for at least a fixed period.** Guarantees income for the life of the annuitant. If you select a minimum fixed period of time and the annuitant dies before the end of that period, your annuity pays income for the rest of that period.
- **Joint and one-half survivor payout.** Guarantees income for the life of the annuitant. If the joint annuitant you designate survives the annuitant, your annuity then pays 50% of the periodic payment amount for as long as the joint annuitant lives.

Periodic payments for a fixed period are affected by the length of the fixed period you select. Periodic payments for a lifetime are affected by the age and life expectancy of the annuitant (the person on whose life payments are based) on the annuity payout initiation date. Periodic payments are also affected by the frequency of the payment interval.

Payout Option Example

Annuitant:	Valued Client
Payout Option:	Life income with payments for at least 10 years
Payment Frequency:	Monthly
Timing of Payment:	End of month
Account Value on	
Annuity Payout Initiation Date:	\$100,000

Age	Guaranteed Monthly Payment Rate	Guaranteed Monthly Payment
60	\$3.24 per \$1,000	\$324
70	\$4.32 per \$1,000	\$432
95	\$8.63 per \$1,000	\$863

MARKET VALUE ADJUSTMENT

American Legend 7

During the first 7 contract years, a market value adjustment (MVA) may apply if you surrender your contract or take a withdrawal in excess of your free withdrawal allowance.

The MVA depends on changes in interest rates as reflected in the MVA index identified on your contract specifications page.

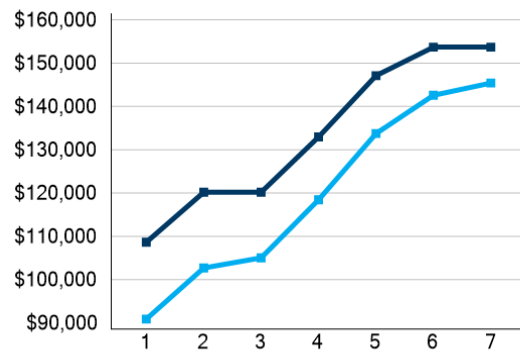
- If an MVA applies and the MVA index has gone up, then the MVA will decrease your contract values. A negative MVA, together with the early withdrawal charge, may at most reduce the account value by an amount equal to two times the early withdrawal charge.
- If an MVA applies and the MVA index has gone down, then the MVA will increase your contract values. A positive MVA may at most increase the account value by the amount needed to pay the early withdrawal charge that applies to the withdrawal or surrender. This means that, if the largest possible positive MVA applies, then the surrender value equals the account value.

The table and graph below show how the MVA might impact the surrender value of your annuity. To illustrate the range of possibilities, the table and graph show the highest and lowest surrender values that are possible.

Maximum surrender value: Values in this column reflect a **decrease in the MVA index** and the application of the largest possible **positive MVA**.

Minimum surrender value: Values in this column reflect an **increase in the MVA index** and the application of the largest possible **negative MVA**.

End of Contract Year	Age	Purchase Payment	Account Value	Maximum Surrender Value	Minimum Surrender Value
1	60	\$100,000	\$108,640	\$108,640	\$90,885
2	61	\$0	\$120,175	\$120,175	\$102,685
3	62	\$0	\$120,175	\$120,175	\$105,033
4	63	\$0	\$132,954	\$132,954	\$118,442
5	64	\$0	\$147,116	\$147,116	\$133,734
6	65	\$0	\$153,705	\$153,705	\$142,585
7	66	\$0	\$153,705	\$153,705	\$145,405



For Account Value calculation, see Sample Values table.

- Maximum surrender value if rates go down
- Minimum surrender value if rates go up

KEY TERMS

American Legend 7

Contract Year Measured from the contract effective date.

Age Your age at the end of the contract year.

Purchase Payments We assume all purchase payments are made at the beginning of the applicable contract year.

Withdrawals We assume withdrawals you take from your annuity are taken at the end of the contract year.

CONTRACT VALUES

Contract values are shown as of the end of the contract year unless otherwise indicated.

Account Value At any time, the account value is equal to the sum of the value of the purchase payment account and the values of each interest strategy. When we receive a purchase payment, we put it in the purchase payment account. When the next term begins, we move the purchase payments account value to the strategies.

Interest Strategy Value The value of an interest strategy is equal to the amount applied to that interest strategy for the current term year; minus the amount needed to pay for each withdrawal taken from that interest strategy during the current term year; and plus interest, if any, earned on that interest strategy for the current term year. The amount needed to pay for a withdrawal includes the amount needed to pay any applicable early withdrawal charge. It also takes into account any market value adjustment.

Surrender Value The surrender value is the amount that can be taken as a cash benefit under this contract. It is the greater of: (1) the account value adjusted for any market value adjustment that would apply on a surrender of this contract, minus the early withdrawal charge that would apply on a surrender of this contract; or (2) the guaranteed minimum surrender value.

Guaranteed Value The guaranteed value is the greater of the contractual Guaranteed Minimum Surrender Value described below, which is determined using the cash value test (CVT) under the standard nonforfeiture law of the state in which the contract is issued.

Guaranteed Minimum Surrender Value The GMSV is equal to: (1) the sum of the purchase payments multiplied by the GMSV factor that is set out on the contract specifications page; minus (2) the sum of all withdrawals from this contract, not including amounts applied to pay an early withdrawal charge or a negative market value adjustment; and plus (3) interest earned daily at the GMSV rate that is set out on the contract specifications page. The GMSV will not be less than the minimum values required by NAIC Standard Nonforfeiture Law for Individual Deferred Annuities, model #805.

Annuity Payout Value The annuity payout value is the amount that can be applied to the annuity payout benefit under this contract. It is the greater of: (1) the account value on the annuity payout initiation date, reduced by premium tax or other taxes not previously deducted; or (2) the guaranteed minimum surrender value on the annuity payout initiation date.

Death Benefit Value The death benefit value is the amount that is available as a death benefit under this contract. It is the greater of: (1) the account value on the date that the death benefit value is determined, reduced by premium tax or other taxes not previously deducted; or (2) the guaranteed minimum surrender value on the date the death benefit value is determined.

Interest Earned Your annuity lets you allocate money to different types of interest strategies for each term. A term begins on the 6th and 20th of a month.

The **indexed strategies** earn interest at a rate determined in part by the change over a term year in the value of a market index or the share price of an exchange-traded fund. Indexed interest is credited only on the last day of the term year. We guarantee that the indexed interest rate for a term year will never be less than 0%.

- For a **point-to-point strategy with a cap**, the indexed interest rate for a term year is the positive index change over that term year, but never higher than the cap for that term year. The cap for a term year will never be lower than the minimum set out in the strategy endorsement.

The **declared rate strategy** earns interest at a fixed rate. Before each term starts, we declare the fixed rate for that term. Declared rate interest is credited daily. The declared interest rate will never be lower than the guaranteed minimum interest rate set out in the strategy endorsement.

OTHER INFORMATION

American Legend 7

Early Withdrawal Charge During the first 7 contract years, an early withdrawal charge (surrender charge) applies if you surrender your contract or take a withdrawal in excess of your free withdrawal allowance. The charge is equal to the early withdrawal charge rate multiplied by the amount subject to the charge. The amount subject to the charge includes the amount you withdraw or surrender, after the MVA is applied, and any amount needed to pay the early withdrawal charge. If an early withdrawal charge applies, we will deduct the charge from your account value.

The early withdrawal charge rate depends on how long you own your annuity. The rate schedule is set out below.

Contract Year	1	2	3	4	5	6	7	8+
Early Withdrawal Charge Rate	9%	8%	7%	6%	5%	4%	3%	0%

Free Withdrawal Allowance For the first contract year, the free withdrawal allowance is 10% of the total purchase payments received. For each subsequent contract year, the free withdrawal allowance is 10% of the account value as of the most recent contract anniversary

Required Minimum Distributions If your annuity is a tax-qualified contract, it must comply with the required minimum distribution rules set out in the tax qualification endorsement. Those rules generally require certain distributions to be made beginning at age 73 (or at an earlier age if you were born before 1951, or at age 75 if you were born after 1959). This requirement may be satisfied by starting payments under the annuity payout benefit at that time; taking money out of your annuity as a withdrawal; or in some cases, taking money out of another annuity or tax-qualified account. This requirement doesn't apply during your life if your annuity is a Roth IRA.

In the case of an Inherited IRA, certain minimum distributions are required each year.

You can select an option in the illustration software that will demonstrate how the values set out in the illustration are affected if withdrawals are taken to satisfy required minimum distributions.

If required minimum distributions (RMDs) are included in your illustration, we have calculated the RMD amount based on the illustrated account value.

Taxes An annuity owned by a natural person is tax deferred, which means you don't pay taxes on the interest it earns until the money is paid to you. You will pay ordinary income taxes on the earned interest when you receive annuity benefit payments, you surrender your annuity, or you take a withdrawal. If your annuity is a Roth IRA, earned interest is not subject to tax so long as the payment is a qualified distribution. If your annuity is part of a retirement plan that received pre-tax or tax-deductible contributions, you will pay ordinary income taxes on those contributions when they are paid out. Tax deferral for an annuity that is not a tax-qualified contract may be limited if the owner is a company, partnership or, in some cases, an irrevocable trust.

You may pay a 10% federal penalty tax on the taxable amount of any payment that you receive before age 59½. If your annuity is a SIMPLE IRA, the federal penalty tax is increased to 25% when the distribution is made during the first two years of participation.

You should consult a tax professional for more information about taxes on distributions from your annuity and penalty taxes that may apply.

Premium Taxes If a state premium tax applies to your annuity, it will be deducted from your account value at the time it is imposed. In this illustration we assume that no state premium tax applies.

State Variations We may refer to this annuity as an equity-indexed annuity or a fixed-indexed annuity to comply with state regulations. In some states, the term "spouse" will include domestic partners and/or civil union partners.

Most Recent 10-Year Period January 1, 2016 to December 31, 2025.

LEGAL NOTICES

This illustration is not intended as a complete discussion of the features of your contract. It is not part of your contract with MassMutual Ascend. Read your contract, including your contract specifications page, endorsements and riders, for a full description of your annuity.

You can use an annuity to save money for retirement and to receive retirement income for life. An annuity is not meant to be used to meet short-term financial goals.

This annuity doesn't participate directly in any stock, debt or other investments. If you buy this annuity, you aren't investing directly in an index or the stocks included in the index or its underlying indexes, companies or debt instruments; or in an investment fund or the investments held by the fund. Dividends and interest attributable to such stocks, companies, debt instruments or investments won't directly increase your account value.

The returns of each index do not reflect the reinvestment of dividends.

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