

## Understanding the market value adjustment (also known as interest adjustment or MVA)

This piece is designed to provide an important explanation of how the market value adjustment (MVA) affects your annuity contract with North American. *Please read carefully.*

### When is the market value adjustment applied?

The market value adjustment applies under the following conditions:

- Policy is within market value adjustment period (surrender charge period).
- Withdrawal exceeds penalty-free withdrawal amount. This includes full surrender of your policy.

The market value adjustment period will vary by product. See your annuity Contract or product brochure for details. Please understand annuity contracts have limited liquidity during the surrender charge period, so make sure the annuity selected meets your liquidity needs.

The market value adjustment is not applied to the death benefit and may not apply upon annuitization. The market value adjustment does not apply after the market value adjustment period.

### How does the market value adjustment work?

The market value adjustment affects the surrender value of your annuity contract. The surrender value is defined in your annuity contract and is also explained in each product brochure.

During the market value adjustment period, the market value adjustment formula will be applied at the time your annuity is surrendered or if more than your penalty-free partial surrender amount is withdrawn.

The market value adjustment may decrease or increase your surrender value depending on the change in the MVA reference rate since your annuity purchase. Due to the mechanics of a market value adjustment, surrender values generally decrease as the MVA reference rate rises or remains constant. When the MVA reference rate decreases enough over time, the surrender value generally increases.

The amount of market value adjustment may be limited based on the interest credited and/or surrender charge. Surrender value after surrender charge and market value adjustment is guaranteed to not be less than the minimum required by the laws of the state in which the contract is delivered. *Please see your Contract and/or the product disclosure for the MVA limit for your Contract and state.*

### Market value adjustment formula

The market value adjustment will be calculated by multiplying the portion of any full or partial surrender that exceeds any available penalty-free withdrawal amount, before the reduction for any surrender charge, by the formula\* described below.

#### How it works

$$(i_0 - i_t - \text{Adj}) \times (T)$$

MVA reference rates:

For Contracts with an MVA based on an external index:

- $i_0$  = The index value of the market value adjustment external index on the issue date of the annuity contract.
- $i_t$  = The index value of the market value adjustment external index at the time of partial or full surrender.

For Contracts with an MVA based on current interest rates:

- $i_0$  = The current interest rate, excluding any additional interest, when the contract was issued.
- $i_t$  = The current interest rate, excluding any additional interest, offered for new contracts at the time of partial or full surrender.

Adj = Interest rate adjustment ranges from 0.0000 to 0.0050 and varies by state. See your product disclosure for details.

T = Time in years as follows: number of days from the date of the partial surrender or full surrender to the end of the current contract year divided by 365; plus whole number of years remaining in the market value adjustment period.

\* Formula varies by state, see your Contract and product disclosure for details.

## Effect of future changes in the index value of the MVA reference rate on annuity surrender values<sup>1,2</sup>

The following examples assume \$100,000 single premium annuity with a 10-year surrender charge and MVA period allocated to a fixed account with 3 percent interest credited in all years, no withdrawals, an available penalty-free partial withdrawal allowance of 10 percent of accumulation value and the surrender charge percentages as shown in the table. The tables below demonstrate the effect of a market value adjustment on an annuity, assuming the value of the MVA reference rate increases or decreases by each amount shown.

MVA formula: $(i_0 - i_t - 0.005) \times (T)$ ; MVA limited to surrender charge and interest credited to the accumulation value:							
Contract year	Surrender charge percentage	2% decrease	1% decrease	0.5% decrease	No change	1% increase	2% increase
1	10%	\$3,000	\$3,000	–	(\$3,000)	(\$3,000)	(\$3,000)
2	9%	\$6,090	\$3,819	–	(\$3,819)	(\$6,090)	(\$6,090)
3	8%	\$7,868	\$3,442	–	(\$3,442)	(\$7,868)	(\$7,868)
4	7%	\$7,091	\$3,039	–	(\$3,039)	(\$7,091)	(\$7,091)
5	6%	\$6,260	\$2,608	–	(\$2,608)	(\$6,260)	(\$6,260)

### Sample calculation for contract year 5

Using the example above, \$100,000 single premium in the hypothetical contract grows to an accumulation value of \$115,927 in five years. Upon full surrender at the end of the fifth contract year, a market value adjustment would be applied. This hypothetical example assumes that the MVA reference rate on the issue date was 3 percent, a 10 percent penalty-free partial surrender of \$11,593 is available, no withdrawals have been taken since the contract was issued, and a 6 percent surrender charge would apply.

If the MVA reference rate changes from 3.00% to:		
MVA reference rate on the date of full or partial surrender	2.00%	4.00%
Market value adjustment formula	$(3.00\% - 2.00\% - 0.50\%) \times 5 = 2.50\%$	$(3.00\% - 4.00\% - 0.50\%) \times 5 = -7.50\%$
Accumulation value	\$115,927	\$115,927
10% penalty-free withdrawal amount	\$11,593	\$11,593
Surrender charge	\$6,260	\$6,260
Interest credited	\$15,927	\$15,927
<b>Market value adjustment</b>	<b><math>(\\$115,927 - \\$11,593) \times 2.50\% = \\$2,608^*</math></b> *limited to, positive or negative, surrender charge of \$6,260 or interest credited of \$15,927 <b>MVA = \$2,608</b>	<b><math>(\\$115,927 - \\$11,593) \times -7.50\% = -\\$7,825^*</math></b> *limited to, positive or negative, surrender charge of \$6,260 or interest credited of \$15,927 <b>MVA = -\$6,260</b>
Surrender value**	\$112,276	\$103,407

\*\* Surrender value after surrender charge and market value adjustment is guaranteed to not be less than the minimum required by the laws of the state in which the contract is delivered. The amount of the market value adjustment will not exceed the limit as defined in your annuity contract; your market value adjustment may differ from the values reflected in this hypothetical example.

Not FDIC/NCUA Insured	Not A Deposit Of A Bank	Not Bank Guaranteed
May Lose Value	Not Insured By Any Federal Government Agency	