

Performance Update

As of June 30, 2024

Strategic Group Variable
Universal Life ®
Variable Life Insurance

- **Not a bank or credit union deposit or obligation**
- **Not insured by any federal government agency**
- **Not FDIC or NCUA-insured**
- **Not guaranteed by any bank or credit union**
- **May go down in value**

Strategic Group Variable Universal Life®

Strategic Group Variable Universal Life® is a variable rider to a group flexible premium adjustable life insurance policy. The group policy allows individual owners to elect certificates offering participation in MassMutual's fixed account and to elect a rider to the certificate offering additional participation in a separate account of MassMutual. We refer to the certificates we issue to individuals who elect the variable rider as "policy" or "policies."

This report gives information only about the performance of the investment options available through the policy. It does not give, and should not be understood to give, information about the overall performance of any policy. **Before purchasing a Strategic Group Variable Universal Life policy, you should request a personalized illustration from your financial representative to see examples of how policy charges can impact the performance of your policy.** The illustration will reflect the deduction of mortality and expense risk charges, premium charges (i.e. sales load, state premium tax and DAC tax charges), surrender charges, the monthly administrative, face amount, and insurance charges, as well as any applicable rider charges specific to the policy. Additionally, if you currently own a policy, you can obtain current illustrations of policy values by contacting your personal financial representative, or by clicking on "contact us" on our web site, or by calling us at (800) 548-0073, Monday - Friday, 8 a.m. to 5 p.m. Eastern Time.

The investment performance figures in this report are based on actual historical performance of the investment options for the periods shown, including for those time periods that begin prior to this policy's availability date. In most states, the policy first became available on October 1, 1997. For periods of one year or less, the total return is not annualized. For periods greater than one year, the average annual total return for the time periods is shown.

Past performance is no indication of future results. This update contains the most recent month-end performance. Since performance changes daily, the current performance may be lower or higher than the performance reflected in this update. The investment return and principal value of an investment will fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original cost. For the most recent month-end performance information, visit our website at www.massmutual.com or call the MassMutual Customer Service Center at (800) 548-0073, Monday - Friday, 8 a.m. to 5 p.m. Eastern Time.

Investing involves risk, including the loss of principal. Each investment choice underlying the policy has broad risks that apply to all investment choices, such as market risk, as well as specific risks inherent in particular types of investment choices that may subject your policy to greater risk and volatility than the general market.

This material must be preceded or accompanied by the [current prospectuses for the Strategic Group Variable Universal Life insurance policy and the prospectuses \(or summary prospectuses, if available\) for its underlying investment choices](#). Before purchasing a policy, investors should carefully consider the investment objectives, risks, charges and expenses of the policy and its underlying investment choices. Please read the prospectuses carefully before investing or sending money.

Interest Rates - Guaranteed Principal Account

The following are effective annual rates used to credit interest on amounts in the Guaranteed Principal Account. These rates do not apply to any policy loan amounts. Effective annual rates used to credit interest on amounts in the Guaranteed Principal Account. These rates do not apply to any policy loan amounts. Current Interest Rate as of: 8/1/23 3.00%; 9/1/23 3.00%; 10/1/23 3.00%; 11/1/23 3.00%; 12/1/23 3.00%; 1/1/24 3.00%; 2/1/24 3.00%; 3/1/24 3.00%; 4/1/24 3.00%; 5/1/24 3.00%; 6/1/24 3.00%; 7/1/24 3.00%.

Market Indices as of June 30, 2024

| | YTD | 1 Year | 3 Years | 5 Years | 10 Years |
|-------------------------------------|--------|--------|---------|---------|----------|
| S&P 500 Index | 15.29% | 24.56% | 10.01% | 15.05% | 12.86% |
| MSCI ACWI Ex USA NR USD | 5.69% | 11.62% | 0.46% | 5.55% | 3.84% |
| Russell 2000 Total Return Index | 1.73% | 10.06% | -2.58% | 6.94% | 7.00% |
| Bloomberg U.S. Aggregate Bond Index | -0.71% | 2.63% | -3.02% | -0.23% | 1.35% |

Market indices have been provided for informational purposes only; they are unmanaged and reflect no fees or expenses. Individuals cannot invest directly in an index.

The Standard & Poor's 500 Index is an unmanaged measure of common stock total return performance in the U.S.

The Russell 2000 Total Return Index is a broad based, unmanaged index comprised of 2000 of the smallest U.S. domiciled company common stocks (on the basis of capitalization) that are traded in the United States on the New York Stock Exchange, the American Stock Exchange, and NASDAQ.

The Bloomberg U.S. Aggregate Bond Index is an unmanaged index of U.S. corporate bond issues, U.S. Government Securities and mortgage-backed securities.

Total Return Rates - Investment Funds

For the Period Ending: June 28, 2024

Total Returns for each fund are the actual historical rates and are net of all fund management fees and other operating expenses. These returns do not reflect the Separate Account Mortality and Expense Risk Charges or policy charges. Policy charges include: premium charges (i.e. sales load DAC tax charges) significantly lower.

| Separate Account Sub-account | Fund Inception Date | Endnotes | Cumulative | Average Annual | | | | Since Inception |
|---|---------------------|----------|------------|----------------|---------|---------|----------|-----------------|
| | | | YTD | 1 Year | 3 Years | 5 Years | 10 Years | |
| Money Market | | | | | | | | |
| Invesco V.I. U.S. Government Money 7-day yield 4.68% | 4/3/1985 | 1, 2 | 2.35% | 4.81% | 2.71% | 1.81% | 1.18% | * |
| Fixed Income | | | | | | | | |
| Invesco V.I. Core Plus Bond Fund - SERIES I | 5/5/1993 | | 0.52% | 4.81% | -3.10% | 0.47% | 2.11% | * |
| Invesco V.I. Global Strategic Income Fund - SERIES I | 5/3/1993 | 4 | -0.47% | 4.40% | -1.54% | -0.44% | 1.02% | * |
| MML II Managed Bond Fund - Initial | 12/16/1981 | | 0.79% | 5.61% | -2.86% | 0.40% | 1.65% | * |
| Asset Allocation | | | | | | | | |
| MML Aggressive Allocation Fund - Initial | 8/31/2007 | 5 | 7.32% | 13.88% | 3.61% | 8.68% | 7.59% | * |
| MML Balanced Allocation Fund - Initial | 8/31/2007 | 5 | 3.77% | 9.05% | 0.67% | 4.98% | 4.89% | * |
| MML Conservative Allocation Fund - Initial | 8/31/2007 | 5 | 3.00% | 8.15% | 0.09% | 4.12% | 4.26% | * |
| MML Growth Allocation Fund - Initial | 8/31/2007 | | 5.96% | 11.97% | 2.52% | 7.39% | 6.62% | * |
| MML Moderate Allocation Fund - Initial | 8/31/2007 | 5 | 4.60% | 10.28% | 1.47% | 5.79% | 5.51% | * |
| Large Cap Value | | | | | | | | |
| LVIP American Century Disciplined Core Value Fund - Standard Class II | 10/30/1997 | 14 | 7.12% | 14.63% | 2.55% | 8.84% | 8.17% | * |
| LVIP American Century Value Fund - Standard Class II | 5/1/1996 | 15 | 3.07% | 9.20% | 5.86% | 9.44% | 7.96% | * |
| MML II Equity Fund - Initial | 12/31/1973 | 9 | 9.94% | 17.86% | 7.28% | 10.95% | 8.59% | * |
| Large Cap Blend | | | | | | | | |
| Fidelity VIP 2 Contra Fund - Service | 11/3/1997 | 6 | 24.98% | 37.79% | 11.24% | 17.45% | 13.28% | * |
| Invesco V.I. Main Street Fund - SERIES I | 7/5/1995 | | 16.36% | 22.09% | 7.93% | 12.63% | 11.03% | * |
| MFS Research Series Fund | 7/26/1995 | | 11.92% | 21.27% | 7.28% | 12.58% | 11.51% | * |
| MML Equity Index Fund - II | 5/1/2000 | 10 | 15.12% | 24.21% | 9.69% | 14.76% | 12.56% | * |
| Large Cap Growth | | | | | | | | |
| Invesco V.I. Capital Appreciation Fund - SERIES I | 4/3/1985 | | 23.62% | 34.61% | 7.92% | 16.66% | 13.24% | * |
| MFS Growth Series Fund | 7/24/1995 | | 24.32% | 36.20% | 8.11% | 15.61% | 15.13% | * |
| MML Blue Chip Growth Fund - Initial | 5/1/2006 | 8 | 25.00% | 38.41% | 5.38% | 13.70% | 14.24% | * |
| T. Rowe Price All-Cap Opportunities Portfolio | 3/31/1994 | | 18.60% | 29.73% | 8.17% | 18.29% | 16.24% | * |
| Small/Mid Cap Growth | | | | | | | | |
| Invesco V.I. Discovery Mid Cap Growth Fund - SERIES I | 8/15/1986 | | 11.65% | 14.26% | -1.68% | 9.39% | 10.93% | * |
| MFS New Discovery Series Fund | 5/1/1998 | | 2.78% | 6.15% | -8.25% | 5.76% | 8.14% | * |
| T Rowe Mid-Cap Growth Portfolio Fund | 12/31/1996 | 11 | 3.44% | 9.96% | 0.20% | 7.63% | 10.20% | * |
| Small/Mid Cap Blend | | | | | | | | |
| Invesco V.I. Main Street Small Cap Fund - SERIES I | 5/1/1998 | | 2.75% | 10.99% | 2.02% | 10.39% | 8.75% | * |
| MML II Small Cap Equity Fund - Initial | 6/1/1998 | | 2.95% | 11.01% | 2.04% | 10.53% | 8.91% | * |
| International/Global | | | | | | | | |
| Invesco Oppenheimer V.I. International Growth Fund - SERIES I | 5/13/1992 | 3 | 2.97% | 7.95% | -2.15% | 5.88% | 3.86% | * |
| Invesco V.I. Global Fund - SERIES I | 11/12/1990 | | 14.00% | 24.56% | 2.71% | 10.88% | 9.41% | * |
| MML II Strategic Emerging Markets Fund - II | 5/1/2009 | 6, 12 | 2.81% | 2.93% | -10.53% | -0.50% | 0.84% | * |

Endnotes

- 1 You could lose money by investing in the Fund. Although the seeks to preserve the value of your investment at \$1.00 per share, it cannot guarantee it will do so. An investment in the is not a bank account and is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The Fund's sponsor is not required to reimburse the Fund for losses, and you should not expect that the sponsor will provide financial support to the at any time, including during periods of market stress. The yield quotation for this more closely reflects the current earnings of the than the total return quotation. It is an annualized rate based on results over the last seven days of the period, and is net of all recurring contract fees and charges.
- 2 Although the Oppenheimer Government Money Fund/VA commenced operations on April 3, 1985, the information necessary to calculate the returns is available only for the year 1987 and subsequent periods. Oppenheimer Government Money is not available as an investment choice for contracts issued after January 18, 2008.
- 3 The fund established a new class of shares, which is available with this contract, after it began its initial investment operations. The performance for the period prior to offering the new class shows the historical returns for the original class of shares, which were not subject to a 12b-1 fee. The performance shown from the inception date of the class available with this contract includes the fees and expenses of that share class, including a 12b-1 fee. A 12b-1 fee reduces a fund's performance.

- 4 Unavailable in contracts issued on or after May 1, 2009. For contracts issued prior to May 1, 2009, you may not allocate any new money to this fund via purchase payments or transfers.
- 5 Funds offered in a fund-of-funds structure may have higher expenses than a direct investment in the underlying funds because a fund-of-funds bears its own expenses and indirectly bears its proportionate share of expenses of the underlying funds in which it invests.
- 6 The fund established a new class of shares, which is available with this policy, after it began its initial investment operations. The performance for the period prior to offering the new class shows the historical returns for the original class of shares, which were not subject to a 12b-1 fee. The performance shown from the inception date of the class available with this policy includes the fees and expenses of that share class, including a 12b-1 fee. A 12b-1 fee reduces a fund's performance.
- 7 Unavailable in contracts issued on or after April 30, 2012. Due to ongoing market volatility, rates of return may be subject to substantial short-term fluctuations. Current rates of return may be lower than the rates of return shown. You will find updated rates of return published on a monthly basis at <http://www.massmutual.com/productssolutions/productperformance>.
- 8 The historical performance shown reflects a combination of the current underlying fund's performance, as well as the performance of a prior fund. The current fund's performance is reflected beginning on 5/1/06. The prior fund's performance covers the period between the date listed in the performance table and 4/30/06. This Allocation Fund does not make an investment in the underlying fund. The Fund's allocation is below 0.5%. When the fund has 10 years of performance history the Since Inception return is no longer shown.
- 9 Although the MML Equity Fund commenced operations on 9/15/1971, the information necessary to calculate returns is available only for 1974 and later years.
- 10 The fund established a new class of shares, which is available with this policy, after it began its initial investment operations. The performance for the period prior to May 1, 2000 shows the historical returns for Class I shares. Performance for periods after May 1, 2000 shows the historical returns for the share class available with this policy and reflects the fees and expenses of that share class.
- 11 T. Rowe Price Mid-Cap Growth is not available as an investment choice for policies issued on May 1, 2004 or later.
- 12 The fund established a new class of shares, which is available with this policy, after it began its initial investment operations. The performance for the period prior to May 1, 2009 shows the historical returns for Service Class I shares. Performance for periods after May 1, 2009 shows the historical returns for the share class available with this policy and reflects the fees and expenses of that share class.
- 13 Effective after the close of the New York Stock Exchange on April 26, 2024, the Invesco V.I. Conservative Balanced merged into the Invesco V.I. Equity and Income.
- 14 Formerly known as American Century VP Disciplined Core Value.
- 15 Formerly known as American Century VP Value.
- * When the fund has 10 years of performance history the Since Inception return is no longer shown.

Strategic GUL (Policy Form GULPM-9700 and GULCM-9700) is participating, group flexible premium adjustable life insurance. Strategic GVUL (GVULPM-9700 and GVULCM-9700) is participating, group flexible premium adjustable life insurance with a Variable Rider. In Maryland this product is issued as a Strategic GVUL certificate. Dividends are not expected to be paid. The GUL and GVUL policies and certificates are issued by Massachusetts Mutual Life Insurance Company, Springfield, MA 01111-0001.

Principal Underwriters:

MML Investors Services, LLC
MML Strategic Distributors, LLC

Subsidiaries of Massachusetts Mutual Life Insurance Company, 1295 State Street, Springfield, MA 01111-0001

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