work. save. live. retire.

Prepared for:

Stanislaus County Deferred Compensation Plan

Rev Jan-2018
Stanislaus County is pleased to offer you a retirement plan as a benefit to help you save and invest for retirement. It’s one way to thank you for your contribution to the organization’s success.

This booklet walks you through the basics of the Stanislaus County Deferred Compensation Plan and how to get started. You’ll also find information to help you make a plan for your life in the future that works for your life right now.

Please review the enclosed information carefully to get started as soon as you can.

If you have questions or for more information, please visit www.massmutual.com/serve, contact your benefits administrator or:

Sherri Panttaja
Retirement Education Specialist
Phone: 559.254.3152
Fax: 877-526-2531
spanttaja@massmutual.com

We hope you’ll take full advantage of this important benefit.
EASY ACCESS to your account

Two easy ways to monitor and manage your account.

1. ONLINE
Log into our website at www.massmutual.com/serve. Here you can access powerful retirement planning tools and calculators, and manage your account — anytime, from virtually anywhere.
You’ll be able to:
• Obtain current account balances
• Change your investment options
• Perform account transactions
• Transfer (exchange) balances between investment options*
• Check current investment prices and performance
• View and download your quarterly electronic statements
• Reset/enable your PIN and user ID
If you are having trouble accessing your account for the first time, please contact your Participant Service Center at 1-800-528-9009 for assistance.

2. BY PHONE
1-800-528-9009

With our voice-activated telephone system, you control the call to get the information you need from any telephone, at any time, simply by speaking.

Please provide your user ID and PIN when prompted. This will help expedite your call should you need to speak with a MassMutual customer service representative.

The system will ask you to state the reason for your call. Simply speak clearly and the system will respond accordingly.

Do you prefer receiving your retirement account information in a language other than English? Access to the Language Line is available in over 140 languages through a Customer Service Representative during normal business hours.

* You are allowed to submit a total of 20 transfer requests each calendar year for your participant account by any permitted means. Once these 20 transfers have been requested, you may submit any additional transfer requests only in writing by U.S. mail. Transfers as a result of dollar-cost averaging (if applicable) do not count toward the 20-transfer limit. Each calendar year, MassMutual resets your transfers to allow 20 new transfers by all approved methods.

QUICK LINK TIP
Want quick access to your account?
2. Click Login at the top right of the screen.
3. Log in to view or manage your account.
Enrollment Form 457(b) Governmental

MassMutual, PO Box 1583, Hartford, CT 06144-1583  Fax No.:877-526-2531 or 800-678-8645

A. CONTRIBUTIONS

<table>
<thead>
<tr>
<th>Employee</th>
<th>$ or % Amount</th>
<th>Frequency*</th>
<th>Annual Contribution</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>* Roth After Tax</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Current Annual Salary

* Frequency

- Monthly = 12
- Bi-Weekly = 26
- Semi-Monthly = 24
- Weekly = 52
- Other

B. SIGNATURES

I understand that once an amount is contributed, its designation as a Roth contribution may not be changed.

I am utilizing the plan’s age 50+ catch-up provision. If you are utilizing the plan’s pre-retirement catch-up provision, contact a MassMutual representative to request a form.

C. INVESTMENT ELECTION

I elect to have all future contributions invested among the investment options I have selected below. I understand that this Enrollment Form is to be used to record my initial investment option election and may not be used for investment option transfers or investment option allocation changes. To make investment changes please call 1-800-528-9009 or visit massmutual.com/serve.

SECTION 1

Selections must be in whole percentages totaling 100%.

- % SX American Century Equity Income
- % SY American Funds The Growth Fund of America R5
- % DC Bank of the West Insured Deposit Option I
- % 1N Calvert VP SRI Balanced Portfolio
- % 41 General Account
- % 1H Hartford Capital Appreciation HLS IA
- % TC Hartford Dividend and Growth HLS IA
- % 3P Hartford Global Growth HLS IA
- % 4E Hartford Healthcare HLS IA
- % 1M Hartford International Opportunities HLS IA
- % 2Q Hartford MidCap HLS IA
- % 1B Hartford Total Return Bond HLS IA
- % JA Hood River Small Cap Growth Ret
- % BW Invesco Equity and Income Y
- % JR Invesco Real Estate R5
- % IU JPMorgan SmartRetirement 2020 A
- % IT JPMorgan SmartRetirement 2025 A
- % IU JPMorgan SmartRetirement 2030 A
- % IV JPMorgan SmartRetirement 2035 A
- % IX JPMorgan SmartRetirement 2040 A
- % IY JPMorgan SmartRetirement 2045 A
- % IZ JPMorgan SmartRetirement Income A
- % SU MFS Utilities R4
- % 4U Oppenheimer Global A
- % 2T Putnam High Yield Y
- % RK State Street Intl Index Sec Lend Series T
- % RJ State Street Russell Sml Cp Index Sec Lend A
- % RH State Street S&P MC Index Non-Lend Series A
- % LA Vanguard Institutional Index Inst
- % V8 Vanguard Total Bond Market Index Admiral
- % XR Westwood SmallCap Value Inst

All investment options may not be available in all jurisdictions. Please consult your Plan Sponsor to determine which are available.

TO BE COMPLETED BY THE REGISTERED REPRESENTATIVE
(For Home Office Administration Purposes Only)

Printed Name of Registered Representative
Registered Representative Signature

Registered Representative Tax ID/Producer Code

Selling Firm Name
Selling Firm Tax ID
# Fraud Warning Statements

The following states require insurance applicants to acknowledge a fraud warning statement specific to that state. Please refer to the specific fraud warning statement for your state as indicated below. If your state is not separately listed, please refer to the NAIC Model Fraud Statement below.

<table>
<thead>
<tr>
<th>State</th>
<th>Fraud Warning Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NAIC Model Fraud Statement</strong></td>
<td>Any person who knowingly presents a false or fraudulent claim for payment of a loss or benefit or knowingly presents false information in an application for insurance is guilty of a crime and may be subject to fines and confinement in prison.</td>
</tr>
<tr>
<td><strong>Alabama</strong></td>
<td>Any person who knowingly presents a false or fraudulent claim for payment of a loss or benefit or who knowingly presents false information in an application for insurance is guilty of a crime and may be subject to fines and confinement in prison.</td>
</tr>
<tr>
<td><strong>Arkansas and West Virginia</strong></td>
<td>Any person who knowingly presents a false or fraudulent claim for payment of a loss or benefit or knowingly presents false information in an application for insurance is guilty of a crime and may be subject to fines and confinement in prison.</td>
</tr>
<tr>
<td><strong>Colorado</strong></td>
<td>It is unlawful to knowingly provide false, incomplete, or misleading facts or information to an insurance company for the purpose of defrauding or attempting to defraud the company. Penalties may include imprisonment, fines, denial of insurance, and civil damages. Any insurance company or agent of an insurance company who knowingly provides false, incomplete, or misleading facts or information to a policyholder or claimant for the purpose of defrauding or attempting to defraud the policyholder or claimant with regard to settlement or award payable from insurance proceeds shall be reported to the Colorado Division of Insurance within the Department of Regulatory Services.</td>
</tr>
<tr>
<td><strong>District of Columbia</strong></td>
<td>Warning: It is a crime to provide false or misleading information to an insurer or any other person. Penalties include imprisonment, and/or fines. In addition, an insurer may deny insurance benefits if false information materially related to a claim was provided by the applicant.</td>
</tr>
<tr>
<td><strong>Florida</strong></td>
<td>Any person who knowingly and with intent to injure, defraud, or deceive any insurer files a statement of claim or an application containing any false, incomplete, or misleading information is guilty of a felony of the third degree.</td>
</tr>
<tr>
<td><strong>Kentucky</strong></td>
<td>Any person who knowingly and with intent to defraud any insurance company or other person files an application for insurance containing any materially false information or conceals, for the purpose of misleading, information concerning any fact material thereto, commits a fraudulent insurance act, which is a crime.</td>
</tr>
<tr>
<td><strong>Maine</strong></td>
<td>It is a crime to knowingly provide false, incomplete or misleading information to an insurance company for the purpose of defrauding the company. Penalties may include imprisonment, fines or a denial of insurance benefits.</td>
</tr>
<tr>
<td><strong>Maryland</strong></td>
<td>Any person who knowingly or willfully presents a false or fraudulent claim for payment of a loss or benefit or who knowingly or willfully presents false information in an application for insurance is guilty of a crime and may be subject to fines and confinement in prison.</td>
</tr>
<tr>
<td><strong>New Jersey</strong></td>
<td>Any person who knowingly includes any false or misleading information on an application for an insurance policy, or files a statement of claim containing any false or misleading information, is subject to criminal and civil penalties.</td>
</tr>
<tr>
<td><strong>New Mexico</strong></td>
<td>False information in an application for insurance is guilty of a crime and may be subject to fines and confinement in prison.</td>
</tr>
<tr>
<td><strong>New York</strong></td>
<td>Any person who knowingly and with intent to defraud any insurance company or other person files an application for insurance or statement of claim containing any materially false information, or conceals for the purpose of misleading, information concerning any fact material thereto, commits a fraudulent insurance act, which is a crime, and shall also be subject to a civil penalty not to exceed five thousand dollars and the stated value of the claim for each such violation.</td>
</tr>
<tr>
<td><strong>Ohio</strong></td>
<td>Any person who, with intent to defraud or knowing that he is facilitating a fraud against an insurer, submits an application or files a claim containing a false or deceptive statement, is guilty of insurance fraud.</td>
</tr>
<tr>
<td><strong>Oklahoma</strong></td>
<td>Warning: Any person who knowingly, and with intent to injure, defraud or deceive any insurer, makes any claim for the proceeds of an insurance policy containing any false, incomplete or misleading information is guilty of a felony.</td>
</tr>
<tr>
<td><strong>Oregon</strong></td>
<td>Any person who knowingly, and with intent to defraud any insurance company or other person files an application for insurance or statement of claim containing any materially false information or conceals, for the purpose of misleading, information concerning any fact material thereto, commits a fraudulent insurance act, which is a crime and subjects such person to criminal and civil penalties.</td>
</tr>
<tr>
<td><strong>Pennsylvania</strong></td>
<td>Any person who knowingly and with intent to defraud any insurance company or other person files an application for insurance or statement of claim containing any materially false information or conceals, for the purpose of misleading, information concerning any fact material thereto, commits a fraudulent insurance act, which is a crime and subjects such person to criminal and civil penalties.</td>
</tr>
<tr>
<td><strong>Tennessee</strong></td>
<td>It is a crime to knowingly provide false, incomplete or misleading information to an insurance company for the purpose of defrauding the company. Penalties include imprisonment, fines and denial of insurance benefits.</td>
</tr>
<tr>
<td><strong>Virginia and Washington</strong></td>
<td>It is a crime to knowingly provide false, incomplete or misleading information to an insurance company for the purpose of defrauding the company. Penalties include imprisonment, fines and denial of insurance benefits.</td>
</tr>
</tbody>
</table>
MassMutual

Beneficiary Designation/ Name & Address Change - 457(b) and 401(a)

MassMutual, PO Box 1583, Hartford, CT 06144-1583
Fax Number: 877-526-2531 or 800-678-8645

Group Number: 150163
Social Security Number: 
Employer: Stanislaus County

Employee Name: Last, First, M.I.

Name Change? Please provide documentation

Mailing Address:
New?

City:
Daytime Phone:
State:
Zip:

For your mailing address, provide either a street address or P.O. Box, not both. If you provide both, MassMutual will follow USPS Guidelines and use the PO Box as your mailing address.

**Date of the execution of the trust agreement or a copy of the trust agreement must be provided.

Primary Beneficiary(ies) name, address and phone no. | Social Security No. | Date of Birth | Relationship | %

Contingent Beneficiary(ies) name, address and phone no. | Social Security No. | Date of Birth | Relationship | %

PRIMARY TOTAL: 100%

CONTINGENT TOTAL: 100%

The execution and the delivery of this form to the offices of MassMutual revokes all prior beneficiary designations that I have made. I understand that this beneficiary designation will not take effect until it has been received in good order by MassMutual.

Mail this Beneficiary Designation to MassMutual at the address above. Keep a copy for your records.

Please provide a copy of this Beneficiary Designation to your Employer.

Employee Signature

Date
(This page intentionally left blank)
Stanislaus County offers a 457 deferred compensation plan.

The following is a brief overview of important features of your workplace retirement plan. For more information call your Participant Service Center at 1-800-528-9009 or contact your benefits administrator.

Who is eligible to participate in the plan?
You are eligible to participate in the plan immediately upon employment.

Participation in the plan will occur immediately.

How can I contribute?

Catch-up contributions
If you are 50 years of age or older during the calendar year, you may be able to contribute up to an additional $6,000 in 2018 into your plan as a “catch-up” contribution.

Your contributions are always 100% vested.

What are my investment choices?
The contract offers a wide variety of investment options to meet your needs, including a General (Declared Rate) Account which provides a credited rate of interest. You can direct your contributions into one or more of the available investment options. See the investment section of this booklet for more information.

Competing investment option restrictions
You have the flexibility to transfer amounts from one investment option to another. The transfer of assets presently held in the General (Declared Rate) Account, or which were held in the General (Declared Rate) Account at any time during the preceding three months, to any account that we determine is a competing investment option, is prohibited.

Self directed brokerage account
The Self Directed Brokerage Account (SDBA) is a separate and unique investment vehicle available in tandem with your MassMutual retirement program. This SDBA provides a direct link to Charles Schwab & Co.’s** Personal Choice Retirement Account™ (PCRA). The SDBA gives you the opportunity to select and manage investments from a much larger universe of investment alternatives. Unlike the Core Accounts, with the SDBA, you will be responsible for the ongoing research, trading, and risk management associated with your specific investment choices.

For more information about the SDBA and to obtain enrollment information, please call your Participant Service Center at 1-800-528-9009 or see your plan administrator.

**Offered through Charles Schwab & Co. at an additional cost. Charles Schwab & Co. is not an affiliate or subsidiary of MassMutual. This option is intended for the knowledgeable investor. The level of risk will vary depending on the investment choices a participant makes. Investment limitations apply.
What are the fees and charges associated with this plan?
There are costs associated with the underlying investment options offered under MassMutual's program. For a complete listing of these fees and charges, please refer to the Investment Option Fee Schedule in the investment section of this booklet.

Your account may be subject to a one time loan set-up fee in the amount of $50 as well as a $50 annual loan administration fee applicable for the life of the loan.

There may be other administrative fees that apply, all of which are outlined in this booklet.

Can I take money out of my account?
Your account assets may generally be withdrawn from your 457 plan under the following qualifying circumstances:
- Attainment of age 70½
- Retirement
- Separation from service
- Unforeseeable emergency ("hardship") withdrawal (your plan may limit to a portion of your account)
- Death of participant
- Cash out provision (for certain participants)
- Loan

Withdrawals are subject to the authorization of your employer. However, you must begin liquidating your account balances no later than April 1st of the calendar year following the year in which you attain the age of 70½ or retire (whichever is later). Distributions of before-tax contributions and any tax-deferred earnings are subject to ordinary income tax. Roth contributions and earnings can be withdrawn tax-free if the Roth contributions have been in place for at least five tax years and the withdrawal is made after age 59½ or is due to disability or death. Consult your employer for more details.

Withdrawal/surrender charges
There are no withdrawal charges. However, should your employer allow plan assets to be transferred to any additional program provider other than MassMutual, this provision may change. Contact your employer or your Participant Service Center for more information.
It pays to plan for life in retirement.
What are your retirement goals? How do you plan to achieve them? A large part of retirement is the flexibility to do what you want when you want, and that kind of flexibility takes planning. Your employer’s retirement savings plan can help.

Inflation matters.
Retirement is expensive enough already – factor in inflation, and the costs can be stunning. Just eating in retirement can cost two people over $200,000 - $5 a meal, 3 meals a day, over 20 years. Adding a modest 3% annual inflation rate, the cost swells to nearly $300,000.

How you live in retirement may be determined by what you can afford when the time comes. By preparing today, you may have more choices for your life tomorrow.

How much should you save?
It depends on how much money you’d like to have in retirement and when you start investing. The earlier you start, the more time your money has to work for you.

To help you decide how much to save, check out the Retirement Goal Planner at www.massmutual.com/serve or ask a financial professional for advice.

Is the Roth after-tax option right for you?
Your plan offers the opportunity to save for retirement through Roth after-tax contributions. The money that you earn is taxed before contribution, so withdrawals taken after age 59½ will be tax free (as long as the account has been funded for five years).

The decision to contribute to a Roth account will depend on your personal financial situation. To help you decide if the Roth option is right for you, try the online Roth calculators at www.massmutual.com/serve or seek advice from a financial professional.

Learn more.
To access your account information and our online tools, calculators, and resources, go to www.massmutual.com/serve. If you have questions and need to talk to a real person, call 1-800-528-9009.
You've got options.
There is no one-size-fits-all approach to investing. That's why your plan offers multiple strategies for asset management. You can select a target date fund or you can opt to build your own portfolio by selecting from your plan's individual investment options.

**OPTION 1**

Select a target date fund.
What year will you retire? That's all you need to know to select one of the target date funds. An "all-in one" investment portfolio, a target date fund is a diversified mix of investment options that takes into consideration the time you have to invest before you retire.

It is diversified across a mix of investment options and automatically rebalanced to help keep the fund’s allocation on track.

You simply choose the fund that is closest to your target retirement date. Adjusting over time, the allocation of investments becomes more conservative as you get closer to your retirement date. The principal value of the target date investment option is not guaranteed at any time, including the target date.

**OPTION 2**

Choose your own investments.
You can build your portfolio from any of the individual investment options in the plan. This strategy is best suited to investors who have taken the time to study their investment options.

Your retirement plan offers a variety of investment options, covering a range of risk levels and investment objectives. Some investment options seek an increase in the value of shares (growth) while others aim to earn income (dividends or interest) for investors.

Before making your investment decisions, you may want to consult with a financial professional.
UNDERSTANDING YOUR INVESTMENT OPTIONS.

Your plan offers a variety of investments, which are made up of different types of securities, as described below.

**Money market/Stable value investments**

These short-term investments are designed to provide a steady rate of return, greater investment stability, and a relatively lower level of risk. Although the portfolio seeks to preserve the value of your investment at $1.00 per share, it is possible to lose money in a stable value investment, and the yield will fluctuate with changes in market conditions. Over time, these investments have provided lower returns than stock or bond funds. Investments in a money market account are not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency.

**Bonds**

Bonds represent “loans” investors make to corporations, governments or agencies, and are designed to provide stability, income, and some appreciation in value. If held to maturity, bonds offer a fixed rate of return and a fixed principal value. Bonds generally offer a potentially higher return than money market/stable value investments and a lower return than stocks. The value of bonds usually fluctuates less than stocks. However, corporate bonds, U.S. Treasury bills, and government bonds will fluctuate in value, and the return of principal is not guaranteed if sold before maturity.

**Stocks**

Stocks represent part ownership in a business and are meant to provide long-term growth by increasing in value. Some stocks also provide dividend income. Historically, stocks have outperformed other types of investments over the long term. However, stocks fluctuate in value more than money market/stable value investments or bonds, and when sold may be worth more or less than their original cost. Keep in mind that you can’t predict future results based on how the market performed in the past.

**Balanced investments**

Balanced investments consider the risk and return potential of each asset class and invest a percentage of assets in both stocks and bonds, along with a small amount in stable value investments for liquidity.

**International stocks**

Investments in stocks issued by foreign businesses provide investors with potential long-term growth of capital while helping to diversify their portfolios. Foreign stocks may offer greater returns than U.S. investments but also involve higher risks relating to interest and currency exchange rates, securities regulation, and taxes, as well as unstable economic or political conditions. International stocks fluctuate in value and may be worth more or less than their original cost. Global investments have assets in both foreign and U.S. stocks.

**Large-cap* stocks**

Large-cap stocks are shares in large, financially established “blue chip” companies with a market cap of over $10 billion. The goal of these investments is the long-term growth of capital. Risk and return are typically moderate to high.

**Mid-cap* stocks**

These shares in companies in the $2 billion to $10 billion market cap range seek long-term growth. Since mid-cap stocks may fluctuate more widely than the more stable large-cap stocks, there is a potential for greater long-term growth as well as higher risk.

**Small-cap* stocks**

Small-cap stocks represent companies with a market cap of $300 million to $2 billion. Over long periods of time, small-cap stocks have had higher returns than large-cap stocks, which makes them attractive to aggressive investors. At the same time, they are much more volatile and have higher short-term risk.

**Specialty stocks**

Specialty investments are concentrated in a specific area of the market, such as technology or health care. Because they are focused on a small market segment, these investments tend to have both a higher risk and higher potential for return than more diversified investments.

All investments possess some element of risk, including possible loss of principal. Past performance is no guarantee of future results.

*The term “cap” is short for market capitalization, which is calculated by multiplying the price of a stock by the number of outstanding shares. Generally speaking, this represents the market’s estimate of a company’s value.
How much risk you are comfortable with is an important consideration in choosing how you allocate your assets. How do you feel about investment risk – the chance that your investments could lose money? You also need to think about inflation risk – the risk that conservative investments such as short-term investments may not keep pace with inflation. Investing in more than one asset class – or a blend of them – may help you to balance your risk.

Investment Options RISK/RETURN SPECTRUM
For illustrative purposes only; please consult an investment profile or prospectus for detailed risk/return information.
1 The fund’s investments are concentrated in a specific industry or sector, and are subject to greater risk than traditional diversified equity funds.

2 Investing in foreign issuers and non-dollar securities may involve different and additional risks associated with foreign currencies, investment disclosure, accounting, securities regulation, commissions, taxes, political or social instability, war, or expropriation.

3 Small company investing involves specific risks not necessarily encountered in large company investing, such as increased volatility.

4 Mid-cap stocks generally have higher risk characteristics than large-company stocks.

5 Securities rated “BB” and below are referred to as “high yield, high risk” securities or “junk bonds.” High yield bonds generally involve greater credit risk and may be more volatile than investment-grade bonds.

6 Money market funds are not insured or guaranteed by The Federal Deposit Insurance Corporation or any other government agency. Although the fund seeks to preserve the value of your investment at $1.00 per share (unit), it is possible to lose money investing in the fund. If a money market fund is pending liquidation under the U.S. Treasury Department’s Guarantee Program, there may be a period of time in which assets cannot be invested or redeemed.

* Does not include asset allocation models, if available in your plan.
STANISLAUS COUNTY DEFERRED COMPENSATION PLAN
(THE “PLAN”)
PLAN ID: 150163
As of 1/9/2018

IMPORTANT NOTICE
Plan and Investment-Related Information
Including Investment Option Performance History, Fees and Expenses

The following information is being provided to you by, or at the direction of, your Plan Fiduciary to help provide you with important disclosures and information regarding any Plan account you may maintain.

Please note that nothing in this Notice is intended to serve as a substitute for investment, fee and expense information that may be available to you in a summary plan description, prospectus, or in other disclosure materials. Before making any investment decisions regarding your account, you should review all information available to you and not rely solely upon the information contained in this Notice.

In addition, please be mindful that:

- An investment’s past performance is no guarantee of future results.
- To help achieve long-term retirement security, you should give careful consideration to the benefits of a well-balanced and diversified investment portfolio.
- Fees and expenses are only one of several factors you should consider when making investment decisions. For more information and an example demonstrating the long-term effect of fees and expenses, please visit:

  www.dol.gov/ebsa/publications/401k_employee.html

Please review this information carefully, and note that no other action on your part is required at this time. However, if you would like to enroll or make changes to your account, simply log-in to www.massmutual.com/serve at any time, or call the Participant Service Center at 888-945-6559. Representatives are available Monday through Friday, 8:00 a.m. – 8:00 p.m. Eastern Time.

Your Plan Sponsor can provide you with the following additional information regarding your Plan, upon your request:

- Copies of prospectuses (or any short-form or summary prospectuses, or similar documents) relating to your Plan’s investment options
- Copies of any financial statements or reports, such as statements of additional information, shareholder reports and similar materials relating to your Plan’s investment options to the extent such materials are provided to the plan
- A statement of the value of a share or unit of each investment option in your Plan, as well as the date of the valuation
- A list of the assets comprising the portfolio of each investment option which constitute Plan assets and the value of each such asset (or the proportion of the investment which it comprises)

If you’d like any additional information or have any questions about this notice, please contact your Plan Sponsor. Contact information:

Stanislaus County
1010 10th Street
Suite 5900
Modesto, CA 95354
PART I

GENERAL PLAN INFORMATION

Your right to direct investments in your Plan account
You may direct your contributions into the investment options available through the Plan, subject to the terms of your Plan and the limitations and restrictions described in this notice. Please refer to your Summary Plan Description or contact your Plan Sponsor.

Restrictions that may apply to your investment direction
You may change how contributions to your account are invested on any day the New York Stock Exchange is open for business, subject to the terms of your Plan and the limitations and restrictions described in this notice, including any restrictions described in the investment performance and fees section of this Notice. Please note that, if you initiate in excess of 20 exchanges among the investment options offered in the plan during a calendar year, you must submit any subsequent changes using the form provided by the service center. Note: the 20-exchange limit does not apply to Fund exchanges that occur automatically as part of an asset allocation or Dollar Cost Averaging program that operates pursuant to your plan’s recordkeeping system. Reallocations made based on a Fund merger or liquidation also do not count toward this transfer limit. Additionally, changes your plan sponsor or other plan fiduciary make to your plan’s Fund line-up do not count towards this transfer limit.

Exercising voting, tender and other rights
Voting, Tender and Similar Rights – Generally, any voting, tender or similar rights regarding the investment options available through your Plan will be exercised by your Plan Sponsor, or your Plan Sponsor’s designee. Certain exceptions may apply; if your Plan Sponsor, or its designee, receives materials relating to the exercise of voting, tender or similar rights that are passed through to you, the Plan presently intends to provide them to you. You will generally have the ability to exercise voting, tender or similar rights, regarding any investments in a self-directed brokerage account. If your plan offers Company Stock, you have the right to exercise any voting, tender or similar rights on company common stock credited to your Plan account. If applicable, you will receive proxy, tender or exchange materials along with further instructions, which you must follow in order to exercise any voting, tender or similar rights.

The Plan’s investment options
The Plan provides investment options into which you can direct your contributions. The investment performance and fees section of this document lists these investment options and provides information regarding each alternative. A copy of this document, including the chart comparing investment options, is available on the Web site or can be obtained by contacting your Plan Sponsor.

The Plan’s self-directed brokerage account option
Through your Plan account, you may access your Self Directed Brokerage Account (SDBA), a separate investment vehicle which provides a direct link to Charles Schwab & Co.’s Personal Choice Retirement Account (PCRA). The SDBA differs from the other designated investment alternatives in your plan by giving you the opportunity to select and manage investments from a much larger universe of investment options. If you choose to utilize the SDBA, the amount you can allocate to the SDBA will be limited to 50% of your current account balance. In addition, a fee to set up the SDBA will be charged to your account (please see The Plan’s Individual Fees and Expenses section below) and various other fees such as trading commissions, front or back end sales loads, and minimum balance fees may be charged to your account on an ongoing basis. To obtain more information about your SDBA, including the specific fees that may be assessed for account management and for investment options accessed through your SDBA, please request an SDBA Enrollment Brochure from your Plan Sponsor and visit Charles Schwab & Co. at www.schwab.com/public/schwab/investing/accounts_products/accounts/pcra. Note: Offered through Charles Schwab & Co. at an additional cost. Charles Schwab & Co. is not an affiliate or subsidiary of MassMutual. This SDBA option is intended for the knowledgeable investor. The level of risk will vary depending on the investment choices a participant makes. Investment limitations apply.
THE PLAN’S ADMINISTRATIVE FEES AND EXPENSES
The Plan pays certain outside service providers for Plan administrative services, such as legal, trustee/custodial accounting and recordkeeping services. Such service expenses may be deducted from individual Plan accounts, unless the Plan Sponsor elects, at its own discretion, to pay for some or all of the Plan’s administrative service expenses through non-Plan assets. The cost for these expenses may vary from year to year and is based on a variety of factors. As of the date of these materials, the Plan does not currently assess Plan administrative fees against participant accounts.

Your plan’s contract may contain charges and adjustments that apply when the plan contract is discontinued (terminated). For further information, please contact your Plan Sponsor.

THE PLAN’S INDIVIDUAL FEES AND EXPENSES
The Plan imposes certain charges against individual participant accounts, rather than against the Plan as a whole, when individual participants incur certain charges for specific circumstances or services. These charges may arise based on a participant’s use of a feature available under the Plan (e.g., participant loans), or based on the application of applicable law (e.g., processing a domestic relations order issued by a court). The following list includes the individual participant fees and expenses that could be charged to you, based on your usage. Your quarterly account statement will show any individual fees charged to your account. In addition, buying or selling some investments may result in charges to an individual account, such as commissions or redemption fees.

Please note: Amounts below are shown as full dollar amounts or as a percentage of your account balance. All fees and expenses are displayed as charges on an annualized basis, subject to change at any time, and may be apportioned and deducted from individual Plan accounts on a quarterly basis. All fees actually deducted from your account during a particular Plan quarter will be reflected and identified on your Plan’s quarterly account statement.

The Plan may impose service charges on individual accounts as follows:

<table>
<thead>
<tr>
<th>Type of Individual Service Fee</th>
<th>Fee Amount/Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loan Set-up Fee</td>
<td>$50</td>
</tr>
</tbody>
</table>

For further information or detail regarding any fees described as "Ad Hoc or miscellaneous fees" on your statement, you may contact the Participant Service Center or your plan sponsor.
THE PERFORMANCE DATA SHOWN REPRESENTS PAST PERFORMANCE AND IS NO GUARANTEE OF FUTURE RESULTS. The investment return and principal value of an investment may fluctuate so that when shares/units are redeemed they may be worth more or less than their original cost. Current performance may vary from the performance data quoted. For performance data current to the most recent month-end, visit our website at www.massmutual.com/serve.

The table appearing in Part II is intended to provide you with information regarding the investment options in your Plan, including information regarding investment performance history, fees and expenses, and any investment restrictions applicable as of the date of this material. For your Plan’s variable return investment options, we have additionally provided benchmark information against which each investment option’s performance can be compared.

While past performance is never a guarantee of future performance, it’s especially important to remember this when evaluating a fund’s performance over a short period of time (e.g., less than one year). Short-term results – positive or negative – may be due to one-time or extraordinary events, which may lead to unusual performance which is not a fair representation of the fund’s longer-term performance potential.

Fees and expenses are among many factors to consider when you decide to invest in an option. You may also want to think about whether an investment in a particular option, along with your other investments, fits with your personal circumstances and will help you achieve your investment goals.

The cumulative effect of fees and expenses can substantially reduce the growth of your retirement plan account. Visit the Department of Labor’s Web site for an example showing the long-term effect of fees and expenses at www.dol.gov/ebsa/publications/401k_employee.html.

1 With respect to mutual fund investment options, the gross annual underlying expense ratio is presented as the total annual fund or class operating expenses, before waivers and disbursements, that have been paid by the fund and stated as a percent of the fund’s total net assets. The net annual underlying expense ratio is presented as the annual fund or class operating expenses, less any expense waivers and disbursements that have been paid by the fund and stated as a percent of the fund’s total net assets. With respect to investment options that are not mutual funds, these expense ratios are intended to present similar information, but may have been calculated using methodologies that differ from those used for mutual fund investment options. Underlying Fund Expense Ratios presented here do not reflect the effect of the Program and Administration Charge (sometimes referred to as a “separate account charge”, or a “mortality, expense risk and administrative charge”) applicable to your Plan’s contract.

2 A Program and Administrative Charge may be deducted from the returns on the investment options in the Plan, assessed against participant accounts on a quarterly basis or paid directly by the plan sponsor to cover certain administrative services under the Plan’s contract. For further information, please refer to “The Plan’s Administrative Fees and Expenses.” If Plan Administrative fees are charged to your account balance, the actual dollar amount will be reported to you in the calendar quarter following the quarter in which the charge occurs. Please refer to your quarterly account statement for information on any fees actually charged to your account.

3 If a Program and Administrative Charge is deducted on the investment options, the Total Gross Annual Expense Ratio is intended to reflect the effect of the Program and Administrative Charge applicable under your Plan’s contract by adding the charge to the Gross Annual Underlying Fund Expense Ratio for each applicable investment option. The Total Net Annual Expense Ratio is intended to reflect the effect of the Program and Administrative Charge applicable under your Plan’s contract by adding the charge to the Net Annual Underlying Fund Expense Ratio for each applicable investment option.
Average annual returns are calculated as a steady compounded rate of return over the period of time indicated. Returns are historical and include change in share value and reinvestment of dividends and capital gains, if any. Total returns that are less than one year are not annualized.

If a Program and Administrative Charge is deducted on the investment options, these performance data reflect the deduction of the Program and Administrative Charge applicable to your Plan's Contract, but do not reflect the possible imposition of any redemption fees or charges associated with any withdrawal benefits that may be available through your Plan. Your plan sponsor may elect to have the Program and Administrative Charge deducted from your plan's contract values on a quarterly basis or may elect to pay the Program and Administrative Charge directly. In either of these cases, these performance data do not reflect the deduction of the Program and Administrative Charge applicable to your Plan's contract.

Since inception return is used for funds fewer than 10 years old. The performance returns reflected in this chart are calculated to the inception date of the initial class of the fund. The performance returns reflected in this chart with respect to each benchmark investment are calculated to the inception date of the fund share class to which it is being compared.

Any fees described in this section are fees paid directly from your investment in this option (e.g. redemption fees, exchange fees, account fees, purchase fees, transfer or withdrawal fees, or surrender charges).

The fund's investments are concentrated in a specific industry or sector, and are subject to greater risk than traditional diversified equity funds.

Investments in foreign securities may involve different and additional risks associated with foreign currencies, investment disclosure, accounting, securities regulation, commissions, taxes, political or social instability, war or expropriation.

Mid Cap stocks generally have higher risk and reward characteristics than large company stocks.

Investments rated below investment grade, "BBB", are commonly referred to as "high yield, high risk securities" or "junk bonds."

Investments in foreign securities may involve different and additional risks associated with foreign currencies, investment disclosure, accounting, securities regulation, commissions, taxes, political or social instability, war or expropriation. The State Street Global Advisers funds are commingled trust investment vehicles for which State Street Global Advisers serves as trustee.

Small company stocks generally have higher risk reward characteristics than large company stocks. The State Street Global Advisers funds are commingled trust investment vehicles for which State Street Global Advisers serves as trustee.

S&P is an unmanaged index. “Standard & Poor’s”, “S&P”, “Standard & Poor’s 500” and “500” are trademarks of the McGraw-Hill Companies, Inc. and have been licensed for use by Hartford Life Insurance Company and its affiliates. This investment option is not sponsored, endorsed, sold or promoted by Standard and Poor's (“S&P”) and S&P makes no representation regarding the advisability of investing in this investment option. S&P is an unmanaged index not available for direct investing.

Competing funds may include, but not necessarily be limited to, fixed accounts of annuity contracts or funding agreements, money market funds, short-term bond funds, short-term lifecycle funds and stable value funds. Non-competing funds are generally equity or stock funds, or bond funds with a duration of more than three years. Other types of investment options may also be non-competing. For further information, please contact your Plan sponsor or the Participant Service Center.

There are specific risks associated with certain investment options. For additional details, please refer to the Investment Option Sheets included in this Enrollment Book.

Investments in the Possibilities program are available through group variable funding agreements (HL-20326, 20326NY, HL-16553, 16553NY) issued by Hartford Life Insurance Company.
Part II: Investment Option Performance and Applicable Fees and Charges
For the Period Ending November 30, 2017

Insurance Company (Simsbury, CT). Contracts are administered by Massachusetts Mutual Life Insurance Company.

Performance does not reflect the deduction of any plan charges which may be assessed to plan participants.

This table shows only the asset-based fees, charges and expenses associated with the investment choices of the group variable funding agreement. Please refer to Part I for information on other fees and charges that may apply to your plan's contract such as a contingent deferred sales charge, annual maintenance fee, and other fees or charges, if applicable.

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### VARIABLE RETURN INVESTMENT OPTIONS

The table below focuses on investment options that do not have a fixed or stated rate of return.

THE PERFORMANCE DATA SHOWN REPRESENTS PAST PERFORMANCE AND IS NO GUARANTEE OF FUTURE RESULTS. The investment return and principal value of an investment may fluctuate so that when shares/units are redeemed they may be worth more or less than their original cost. Current performance may vary from the performance data quoted. For performance data current to the most recent month-end, visit our website at [www.massmutual.com/serve](http://www.massmutual.com/serve).

<table>
<thead>
<tr>
<th>Fund Name / Share Class</th>
<th>Morningstar Category</th>
<th>Applicable Benchmark</th>
<th>Fees &amp; Restrictions</th>
<th>Inception Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speciality</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hartford Healthcare HLS IA</td>
<td>Health</td>
<td></td>
<td></td>
<td>05/01/2000</td>
</tr>
<tr>
<td><strong>Fees and Restrictions</strong>: N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Invesco Real Estate R5</td>
<td>Real Estate</td>
<td></td>
<td></td>
<td>05/01/1995</td>
</tr>
<tr>
<td><strong>Fees and Restrictions</strong>: N/A</td>
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<td></td>
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<tr>
<td>MFS Utilities R4</td>
<td>Utilities</td>
<td></td>
<td></td>
<td>02/14/1992</td>
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<tr>
<td><strong>Fees and Restrictions</strong>: N/A</td>
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</table>
Part II: Investment Option Performance and Applicable Fees and Charges

For the Period Ending November 30, 2017

<table>
<thead>
<tr>
<th>Fund Name / Share Class</th>
<th>Morningstar Category</th>
<th>Applicable Benchmark</th>
<th>Fees &amp; Restrictions</th>
<th>Investment Option Performance</th>
<th>Inception Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hartford Global Growth HLS IA</td>
<td>International/GLOBAL</td>
<td>MSCI ACWI Large Cap NR USD</td>
<td>N/A</td>
<td>24.92%</td>
<td>09/30/1998</td>
</tr>
<tr>
<td>Hartford International Opportunities HLS IA</td>
<td>Foreign Large Blend</td>
<td>MSCI ACWI Ex USA NR USD</td>
<td>N/A</td>
<td>27.59%</td>
<td>07/02/1990</td>
</tr>
<tr>
<td>Oppenheimer Global A</td>
<td>World Large Stock</td>
<td>MSCI ACWI Large Cap NR USD</td>
<td>N/A</td>
<td>24.92%</td>
<td>12/22/1969</td>
</tr>
<tr>
<td>State Street Intl Index Sec Lend Series T</td>
<td>Foreign Large Blend</td>
<td>MSCI ACWI Ex USA NR USD</td>
<td>N/A</td>
<td>27.59%</td>
<td>03/01/2003</td>
</tr>
</tbody>
</table>

INTERNATIONAL/GLOBAL

Investments in international stocks involve risks associated with interest-rate and currency-exchange-rate changes as well as with market, economic, and political conditions of the countries where investments are made. There may be greater returns but also greater risks than with U.S. investments. International stocks fluctuate in value and may be worth more or less than their original cost.
## Part II: Investment Option Performance and Applicable Fees and Charges

For the Period Ending November 30, 2017

<table>
<thead>
<tr>
<th>Fund Name / Share Class</th>
<th>Morningstar Category</th>
<th>Applicable Benchmark</th>
<th>Fees &amp; Restrictions</th>
<th>Annual Underlying Fund Expense Ratio¹</th>
<th>Applicable Fees &amp; Charges</th>
<th>Total Annual Expense Ratio²</th>
<th>Investment Option Performance ³</th>
<th>Inception Date</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SMALL-CAP</strong></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hood River Small Cap Growth Ret Small Growth</td>
<td>1.13%</td>
<td>1.00%</td>
<td>0.00%</td>
<td>1.13%</td>
<td>1.00%</td>
<td>$11.30</td>
<td>$10.00</td>
<td>5.41%</td>
</tr>
<tr>
<td><strong>Russell 2000 Growth TR USD</strong></td>
<td>23.69%</td>
<td>15.84%</td>
<td>16.19%</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fees and Restrictions⁶</strong>: N/A</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>State Street Russell Sml Cp Index Sec Lend A ⁹</td>
<td>0.26%</td>
<td>0.06%</td>
<td>0.00%</td>
<td>0.26%</td>
<td>0.06%</td>
<td>$2.60</td>
<td>$0.60</td>
<td>10.35%</td>
</tr>
<tr>
<td><strong>Russell 2000 TR USD</strong></td>
<td>18.34%</td>
<td>15.02%</td>
<td>8.75%</td>
<td>N/A</td>
<td></td>
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<tr>
<td><strong>Fees and Restrictions⁶</strong>: N/A</td>
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<td></td>
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</tr>
<tr>
<td>Westwood SmallCap Value Inst Small Blend</td>
<td>1.11%</td>
<td>0.99%</td>
<td>0.00%</td>
<td>1.11%</td>
<td>0.99%</td>
<td>$11.10</td>
<td>$9.90</td>
<td>14.46%</td>
</tr>
<tr>
<td><strong>Russell 2000 TR USD</strong></td>
<td>18.34%</td>
<td>15.02%</td>
<td>8.75%</td>
<td>N/A</td>
<td></td>
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</tr>
<tr>
<td><strong>Fees and Restrictions⁶</strong>: N/A</td>
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<tr>
<td><strong>MID-CAP</strong></td>
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<td></td>
</tr>
<tr>
<td>Hartford MidCap HLS IA 15</td>
<td>0.70%</td>
<td>0.70%</td>
<td>0.00%</td>
<td>0.70%</td>
<td>0.70%</td>
<td>$7.00</td>
<td>$7.00</td>
<td>9.37%</td>
</tr>
<tr>
<td><strong>Russell Mid Cap Growth TR USD</strong></td>
<td>25.03%</td>
<td>15.59%</td>
<td>9.07%</td>
<td>N/A</td>
<td></td>
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<tr>
<td><strong>Fees and Restrictions⁶</strong>: N/A</td>
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<td></td>
</tr>
</tbody>
</table>

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**Notes:**

1. Annual Underlying Fund Expense Ratio
2. Applicable Fees & Charges
3. Total Annual Expense Ratio
4. Investment Option Performance
5. Inception Date
6. Fees and Restrictions

---

Small-cap stocks generally have higher risk and reward characteristics than large company stocks.

Mid-cap stocks generally have higher risk and reward characteristics than large company stocks.
<table>
<thead>
<tr>
<th>Fund Name / Share Class</th>
<th>Morningstar Category</th>
<th>Applicable Benchmark</th>
<th>Fees &amp; Restrictions</th>
<th>Investment Option Performance^5</th>
<th>Inception Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Street S&amp;P MC Index Non-Lend Series A Mid-Cap Blend</td>
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<td></td>
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<tr>
<td>Russell Mid Cap TR USD</td>
<td>Mid-Cap Blend</td>
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<tr>
<td>American Century Equity Income I Large Value</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Russell 1000 Value TR USD</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>American Funds The Growth Fund of America R5 Large Growth</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Russell 1000 Growth TR USD</td>
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<tr>
<td>Hartford Capital Appreciation HLS IA Large Blend</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Russell 1000 TR USD</td>
<td></td>
<td></td>
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</tbody>
</table>

**LARGE-CAP**

*Stocks fluctuate in value and are subject to more risk than bonds or money market investments. Shares, when redeemed, may be worth more or less than their original cost.*

<table>
<thead>
<tr>
<th>Fund Name / Share Class</th>
<th>Morningstar Category</th>
<th>Applicable Benchmark</th>
<th>Fees &amp; Restrictions</th>
<th>Investment Option Performance^5</th>
<th>Inception Date</th>
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<tbody>
<tr>
<td>American Century Equity Income I Large Value</td>
<td></td>
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<tr>
<td>Russell 1000 Value TR USD</td>
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<tr>
<td>American Funds The Growth Fund of America R5 Large Growth</td>
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<tr>
<td>Russell 1000 Growth TR USD</td>
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<tr>
<td>Hartford Capital Appreciation HLS IA Large Blend</td>
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<tr>
<td>Russell 1000 TR USD</td>
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</table>

**Fees and Restrictions^6**: N/A
<table>
<thead>
<tr>
<th>Fund Name / Share Class</th>
<th>Morningstar Category</th>
<th>Applicable Benchmark</th>
<th>Fees and Restrictions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hartford Dividend and Growth HLS IA Large Value</td>
<td></td>
<td></td>
<td>N/A 03/08/1994</td>
</tr>
<tr>
<td>Russell 1000 Value TR USD</td>
<td>Russell 1000</td>
<td>14.83% 14.17% 6.84% N/A</td>
<td></td>
</tr>
<tr>
<td>Vanguard Institutional Index Inst Large Blend</td>
<td>Russell 1000</td>
<td>22.61% 15.69% 8.40% N/A</td>
<td></td>
</tr>
<tr>
<td>Invesco Equity and Income Y Allocation--50% to 70% Equity</td>
<td>Morningstar Mod Tgt Risk TD USD</td>
<td>14.91% 7.96% 5.66% N/A</td>
<td></td>
</tr>
<tr>
<td>Calvert VP SRI Balanced Portfolio Allocation--50% to 70% Equity</td>
<td>Morningstar Mod Tgt Risk TR USD</td>
<td>14.91% 7.96% 5.66% N/A</td>
<td></td>
</tr>
<tr>
<td>Invesco Equity and Income Y Allocation--50% to 70% Equity</td>
<td>Morningstar Mod Tgt Risk TR USD</td>
<td>14.91% 7.96% 5.66% N/A</td>
<td></td>
</tr>
</tbody>
</table>

**Part II: Investment Option Performance and Applicable Fees and Charges**

For the Period Ending November 30, 2017

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<tr>
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<th>Fees and Restrictions</th>
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<td></td>
</tr>
<tr>
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<td>Russell 1000</td>
<td>22.61% 15.69% 8.40% N/A</td>
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<tr>
<td>Calvert VP SRI Balanced Portfolio Allocation--50% to 70% Equity</td>
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<tr>
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<td>Morningstar Mod Tgt Risk TR USD</td>
<td>14.91% 7.96% 5.66% N/A</td>
<td></td>
</tr>
</tbody>
</table>

**ASSET ALLOCATION/BALANCED**

Asset Allocation doesn’t ensure a profit or protect against loss.

<table>
<thead>
<tr>
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<tr>
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<td>Russell 1000</td>
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<tr>
<td>Vanguard Institutional Index Inst Large Blend</td>
<td>Russell 1000</td>
<td>22.61% 15.69% 8.40% N/A</td>
<td></td>
</tr>
<tr>
<td>Calvert VP SRI Balanced Portfolio Allocation--50% to 70% Equity</td>
<td>Morningstar Mod Tgt Risk TD USD</td>
<td>14.91% 7.96% 5.66% N/A</td>
<td></td>
</tr>
<tr>
<td>Invesco Equity and Income Y Allocation--50% to 70% Equity</td>
<td>Morningstar Mod Tgt Risk TR USD</td>
<td>14.91% 7.96% 5.66% N/A</td>
<td></td>
</tr>
</tbody>
</table>

**Fees and Restrictions**: N/A
### Part II: Investment Option Performance and Applicable Fees and Charges

For the Period Ending November 30, 2017

<table>
<thead>
<tr>
<th>Fund Name / Share Class</th>
<th>Morningstar Category</th>
<th>Applicable Benchmark Fees &amp; Restrictions</th>
<th>Annual Underlying Fund Expense Ratio(^1)</th>
<th>Applicable Fees &amp; Charges</th>
<th>Total Annual Expense Ratio(^1)</th>
<th>Investment Option Performance(^5)</th>
<th>Fees and Restrictions(^8): N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>JPMorgan SmartRetirement 2020 A Target-Date 2020</td>
<td></td>
<td></td>
<td>1.07%</td>
<td>0.81%</td>
<td>0.00%</td>
<td>1.07%</td>
<td>0.81%</td>
</tr>
<tr>
<td>Morningstar Lifetime Mod 2020 TR USD</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JPMorgan SmartRetirement 2025 A Target-Date 2025</td>
<td></td>
<td></td>
<td>1.08%</td>
<td>0.84%</td>
<td>0.00%</td>
<td>1.08%</td>
<td>0.84%</td>
</tr>
<tr>
<td>Morningstar Lifetime Mod 2025 TR USD</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JPMorgan SmartRetirement 2030 A Target-Date 2030</td>
<td></td>
<td></td>
<td>1.12%</td>
<td>0.86%</td>
<td>0.00%</td>
<td>1.12%</td>
<td>0.86%</td>
</tr>
<tr>
<td>Morningstar Lifetime Mod 2030 TR USD</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>JPMorgan SmartRetirement 2035 A Target-Date 2035</td>
<td></td>
<td></td>
<td>1.15%</td>
<td>0.88%</td>
<td>0.00%</td>
<td>1.15%</td>
<td>0.88%</td>
</tr>
<tr>
<td>Morningstar Lifetime Mod 2035 TR USD</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

\(^1\) Annual Underlying Fund Expense Ratio

\(^2\) Program and Administrative Charge

\(^3\) Total Annual Expense Ratio

\(^4\) Average Annual Return

\(^5\) Investment Option Performance

\(^6\) Inception Date

\(^8\) Fees and Restrictions

<table>
<thead>
<tr>
<th>Fund Name / Share Class</th>
<th>Morningstar Category</th>
<th>Applicable Benchmark Fees &amp; Restrictions</th>
<th>Annual Underlying Fund Expense Ratio(^1)</th>
<th>Applicable Fees &amp; Charges</th>
<th>Total Annual Expense Ratio(^1)</th>
<th>Investment Option Performance(^5)</th>
<th>Fees and Restrictions(^8): N/A</th>
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<tr>
<td>JPMorgan SmartRetirement 2020 A Target-Date 2020</td>
<td></td>
<td></td>
<td>1.07%</td>
<td>0.81%</td>
<td>0.00%</td>
<td>1.07%</td>
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<tr>
<td>Morningstar Lifetime Mod 2020 TR USD</td>
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<tr>
<td>JPMorgan SmartRetirement 2025 A Target-Date 2025</td>
<td></td>
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<td>1.08%</td>
<td>0.84%</td>
<td>0.00%</td>
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<tr>
<td>Morningstar Lifetime Mod 2025 TR USD</td>
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<tr>
<td>JPMorgan SmartRetirement 2030 A Target-Date 2030</td>
<td></td>
<td></td>
<td>1.12%</td>
<td>0.86%</td>
<td>0.00%</td>
<td>1.12%</td>
<td>0.86%</td>
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<tr>
<td>Morningstar Lifetime Mod 2030 TR USD</td>
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<tr>
<td>JPMorgan SmartRetirement 2035 A Target-Date 2035</td>
<td></td>
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<td>1.15%</td>
<td>0.88%</td>
<td>0.00%</td>
<td>1.15%</td>
<td>0.88%</td>
</tr>
<tr>
<td>Morningstar Lifetime Mod 2035 TR USD</td>
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</tr>
</tbody>
</table>
## Part II: Investment Option Performance and Applicable Fees and Charges

For the Period Ending November 30, 2017

<table>
<thead>
<tr>
<th>Fund Name / Share Class</th>
<th>Morningstar Category</th>
<th>Applicable Benchmark</th>
<th>Fees &amp; Restrictions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>JPMorgan SmartRetirement 2040 A</strong> Target-Date 2040</td>
<td>Morningstar Lifetime Mod 2040 TR USD</td>
<td>1.20%</td>
<td>0.89%</td>
</tr>
<tr>
<td>Fees and Restrictions: N/A</td>
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<tr>
<td><strong>JPMorgan SmartRetirement 2045 A</strong> Target-Date 2045</td>
<td>Morningstar Lifetime Mod 2045 TR USD</td>
<td>1.24%</td>
<td>0.89%</td>
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<tr>
<td>Fees and Restrictions: N/A</td>
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<td></td>
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</tr>
<tr>
<td><strong>JPMorgan SmartRetirement 2050 A</strong> Target-Date 2050</td>
<td>Morningstar Lifetime Mod 2050 TR USD</td>
<td>1.31%</td>
<td>0.89%</td>
</tr>
<tr>
<td>Fees and Restrictions: N/A</td>
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<td></td>
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</tr>
<tr>
<td><strong>JPMorgan SmartRetirement Income A</strong> Target-Date Retirement</td>
<td>Morningstar Lifetime Mod Incm TR USD</td>
<td>1.03%</td>
<td>0.72%</td>
</tr>
<tr>
<td>Fees and Restrictions: N/A</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>
### Part II: Investment Option Performance and Applicable Fees and Charges

For the Period Ending November 30, 2017

<table>
<thead>
<tr>
<th>Fund Name / Share Class</th>
<th>Morningstar Category</th>
<th>Applicable Benchmark</th>
<th>Fees &amp; Restrictions</th>
<th>Annual Underlying Fund Expense Ratio¹</th>
<th>Applicable Fees &amp; Charges</th>
<th>Total Annual Expense Ratio¹</th>
<th>Total Return</th>
<th>Average Annual Return⁴</th>
<th>Inception Date</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
<td><strong>BONDS</strong></td>
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<tr>
<td>Corporate bonds, U.S. Treasury bills and U.S. government bonds will fluctuate in value, and the return of principal is not guaranteed if sold before maturity.</td>
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<tr>
<td>Hartford Total Return Bond HLS IA  Intermediate-Term Bond</td>
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<tr>
<td>BBgBarc US Agg Bond TR USD</td>
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<tr>
<td>Fees and Restrictions⁵: N/A</td>
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<tr>
<td>Putnam High Yield Y⁵  High Yield Bond</td>
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<tr>
<td>ICE BofAML US High Yield TR USD</td>
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<tr>
<td>Fees and Restrictions⁵: N/A</td>
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<tr>
<td>Vanguard Total Bond Market Index Admiral  Intermediate-Term Bond</td>
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<tr>
<td>BBgBarc US Agg Bond TR USD</td>
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<td></td>
</tr>
<tr>
<td>Fees and Restrictions⁵: N/A</td>
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</tr>
</tbody>
</table>
# Part II: Investment Option Performance and Applicable Fees and Charges

For the Period Ending November 30, 2017

## MONEY MARKET/STABLE VALUE

Money market investments are not insured or guaranteed by the Federal Deposit Insurance Corporation (FDIC) or any other government agency. Although these investments seek to preserve their value at $1.00 per share, it is possible to lose money by investing in them. If a money market investment is pending liquidation under the U.S. Treasury Department’s Guarantee Program, there may be a period of time in which assets cannot be invested or redeemed.

<table>
<thead>
<tr>
<th>Fund Name / Share Class</th>
<th>Morningstar Category</th>
<th>Applicable Benchmark</th>
<th>Fees &amp; Restrictions</th>
<th>Investment Option Performance</th>
<th>Inception Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank of the West Insured Deposit Option I</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>09/21/2000</td>
</tr>
<tr>
<td>Stable Value</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

### Fees and Restrictions:

**Competing funds:** Competing funds may include, but not necessarily be limited to, fixed accounts of annuity contracts or funding agreements, money market funds, short-term bond funds, short-term lifecycle funds and stable value funds. Non-competing funds are generally equity or stock funds, or bond funds with a duration of more than three years. Other types of investment options may also be non-competing. For further information, please contact your Plan sponsor or the Participant Service Center.

**Competing funds:** Transfers between the General Account and this investment option are prohibited.
Part II: Investment Option Performance and Applicable Fees and Charges

FIXED RETURN INVESTMENT OPTION
The table below focuses on investment options that have a fixed or stated return.

<table>
<thead>
<tr>
<th>Fixed Return Investment</th>
<th>1st Q 2017</th>
<th>2nd Q 2017</th>
<th>3rd Q 2017</th>
<th>4th Q 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Account</td>
<td>4.00%</td>
<td>4.00%</td>
<td>4.00%</td>
<td>4.00%</td>
</tr>
</tbody>
</table>

**Fees and Restrictions**:  
**Competing funds**: Transfers between this investment option and Bank of the West Insured Deposit Option Inv Opt are prohibited.

Up to 1/6th of the total General Account value for your Plan’s contract can be transferred from the General Account per twelve-month period or contract year, as applicable, subject to the competing fund restrictions.

The Declared Rate set forth above is credited through the close of the calendar year on contributions received during the designated calendar quarter. For contributions received prior to 10/01/17, the Declared Rate is 4.00%. Rates quoted are effective annual yields.

Certain special rules apply to the Fixed Account investment option upon contract discontinuance. If your employer discontinues the contract and moves the plan's assets to another provider, amounts invested in the Fixed Account may be subject to a market value adjustment, which may alter the amount paid at discontinuance based on the formula set forth in the contract, or may be paid out over a set period of years as specified in the contract. Please contact your employer for more information.

**Adjustment Provisions/Minimum Guaranteed Rate**:  
The rate of interest displayed is the current declared rate on an annualized basis and is effective for the term shown above. Your Plan's contract also includes a current minimum guaranteed interest rate ("MGIR") of 4.00%. For some contracts, the MGIR is set for the life of the contract. For other contracts, the MGIR will be reset annually using the methodology described in the contract and will be subject to the contract’s state of issue non-forfeiture law regarding minimum interest rates or, if no state law exists, the National Association of Insurance Commissioners (NAIC) model non-forfeiture law.

For current information regarding the specific declared and minimum interest rates, associated with this investment option for your plan and contract, please visit [www.massmutual.com/serve](http://www.massmutual.com/serve) or contact MassMutual at [888-945-6559](tel:888-945-6559).
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- Ensuring personal information is only shared with third parties as necessary for standard business purposes or as authorized by you; and
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- Your transactions with us or our affiliated companies; and
- Information we obtain from third parties such as consumer or other reporting agencies and medical or health care providers.

We may share personal information about you with:
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- Our affiliated companies, such as insurance or investment companies, insurance agencies or broker-dealers;
- Nonaffiliated companies in order to perform standard business functions on our behalf including those related to processing transactions you request or authorize, or maintaining your account or policy;
- Courts and government agencies in response to court orders or legal investigations;
- Credit bureau reports; and
- Other financial institutions with whom we may jointly market products, if permitted in your state.

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