Reg BI Disclosure

1. ABOUT MML INVESTORS SERVICES

This required disclosure brochure (**Reg BI Disclosure**) contains information about MML Investors Services, LLC (**MMLIS**, **we**, **us** or **our**) and our relationship with retail customers (**you** or **your**). Among other things, this Reg BI Disclosure addresses the scope and terms of our relationship with you, the type and scope of our services, the fees and costs associated with your transactions, holdings, and accounts, and the conflicts of interest that exist for MMLIS and its financial professionals.

MMLIS is registered with the Securities and Exchange Commission (**SEC**) as both a broker-dealer and an investment adviser. MMLIS is also a member of the Financial Industry Regulatory Authority, Inc. (**FINRA**) (www.finra.org).

Our brokerage and investment advisory services and fees differ, and it is important for you to understand these differences. Free and simple tools are available for you to research firms and financial professionals at www.Investor.gov/CRS, which also provides educational materials about broker-dealers, investment advisers, and investing. MMLIS's customer relationship summary (**Form CRS**) is available at www.mmlinvestors.com/FormCRS.

As a broker-dealer, MMLIS can recommend various types of accounts, investment strategies, and specific securities to you, as well as place orders to buy and sell securities for you. MMLIS offers a wide range of investments, including individual securities such as stocks, bonds and options, and investments we refer to as "securities products" such as mutual funds, variable annuities, variable life insurance, unit investment trusts (**UITs**), municipal fund securities (such as 529 education saving plans (**529 Plans**)), exchange traded funds (**ETFs**), exchange-traded product **(ETPs)***, structured products and closed-end funds. In addition, MMLIS makes certain private placements and alternative investment options available to customers who meet applicable eligibility requirements.

While this Reg BI Disclosure contains information about many of the investments and services we make available, for certain investments, we will provide additional disclosure (such as a prospectus, trade confirmation or offering document).

Recommendations that MMLIS or its financial professionals make will be in a broker-dealer capacity unless the recommendations are made in connection with an account subject to a separate investment advisory agreement.

In addition to the investments and services we provide as a broker-dealer, MMLIS provides investment advisory services, such as managed accounts, referral programs and fee-based financial planning (**Advisory Services**). MMLIS's Advisory Services are not described in this brochure. They are described in separate brochures you will receive if you sign up for Advisory Services. If you would like to learn more about Advisory Services offered by MMLIS, please request a copy of these brochures. All recommendations made by MMLIS or its financial professionals regarding Advisory Services will be made by MMLIS in an investment advisory capacity.

2. ABOUT MMLIS'S FINANCIAL PROFESSIONALS AND THEIR CAPACITY

MMLIS provides services to you through its financial professionals. When providing broker-dealer services, our financial professionals act in the capacity of registered representatives (**Registered Representatives**). Most of MMLIS's financial professionals are Registered Representatives. When providing Advisory Services, MMLIS financial professionals act in the capacity of investment adviser representatives (**IARs**). Many of MMLIS's financial professionals are dually registered as both Registered Representatives and IARs, however, some could be registered only as IARs of MMLIS. If a MMLIS financial professional is only registered as an IAR, that person would be unable to offer any of the broker-dealer services offered by the firm.

MMLIS's Registered Representatives have all passed certain qualification examinations that allow them to provide services for investments covered

* ETFs and ETPs are subject to different regulatory requirements and offer different investor protections.

by those exams. In general, MMLIS's Registered Representatives have passed either the Series 6 or Series 7 FINRA exam. Registered Representatives who have passed only the Series 6 exam limit their recommendations and services to mutual funds, variable life insurance and variable annuities products, UITs, and municipal fund securities (such as 529 Plans). Registered Representatives who have passed the Series 7 exam can also recommend and provide services for additional types of investments including individual securities, ETFs, alternative investments and structured products.

MMLIS's IARs must generally satisfy additional qualification requirements, such as passing the Series 65 or Series 66 qualifications exams. Not every MMLIS financial professional is an IAR. Those financial professionals who are not IARs are not able to offer Advisory Services.

In addition to satisfying the licensing requirements, MMLIS requires additional training and/or firm approval for financial professionals to offer certain investments where we believe it is appropriate.

The chart in Section 3 summarizes the investments MMLIS's Registered Representatives can provide based on the registrations they hold and any applicable training requirements.

It is important that you understand any material limitations on the array of investments and services that your financial professional can provide based on the exams they have passed, the registrations they hold, and the training requirements they have met. If your financial professional does not hold a Series 7 license or is not licensed as an IAR (i.e., cannot offer Advisory Services), he or she will provide you with supplemental disclosures at the outset of your relationship with us that describes that limitation.

Many of MMLIS's financial professionals work as part of a team with other financial professionals who may hold different or additional licenses. If your financial professional is not licensed to offer you a particular investment or service, you may be referred to another member of the team who can offer other investments or services that your financial professional is not licensed or qualified to offer.

You can obtain information about MMLIS and its financial professionals through FINRA's BrokerCheck, (https://brokercheck.finra.org/) an online tool that tells you whether a financial professional is registered to sell securities, offer investment advice, or both. BrokerCheck also provides a snapshot of a financial professional's employment history, as well as applicable legal events or customer disputes.

3. TYPES OF INVESTMENTS AVAILABLE THROUGH MMLIS

Below is an overview of the types of investments that MMLIS generally makes available. The chart also indicates the applicable FINRA exam that authorizes a Registered Representative to recommend or provide services for the specified type of investment. This is not an exhaustive list.

Investment Class	Types of Investments	Series 6	Series 7
Variable Products	Variable Annuities	✓	✓
	Variable Life Insurance	✓	✓
Pooled Securities	Mutual Funds	✓	✓
	Exchange Traded Funds (ETFs)	—	✓
	Unit Investment Trusts (UITs)	✓	✓
	529 Plans	✓	✓
	ABLE Plans	✓	✓
	Closed-End Funds	—	✓
	Interval Funds*	—	✓
Individual Securities	Stocks	—	✓
	Corporate Bonds	—	✓
	Government Bonds	—	✓
	Municipal Bonds	—	✓
	Options*	—	✓
	Collateralized Mortgage Obligations (CMOs)*	—	✓
Alternative Investments Such As	Private Equity Funds*	—	✓
	Private Hedge Funds*	—	✓
	Private Real Estate Funds*	—	✓
Structured Products	Structured Notes*	—	✓
	Structured CDs*	—	✓

* Require additional training and/or approval.

Other alternative investments such as Private Placement Variable Universal Life Insurance (**PPVUL**), Private Placement Variable Annuities (**PPVAs**), Non-Traded Real Estate Investment Trusts (**REITs**) and Business Development Corporations (**BDCs**) can be recommended by or purchased through your Registered Representative.

MMLIS's Registered Representatives can recommend proprietary and non-proprietary investments. Proprietary products are mutual funds, variable annuities and other securities products that are issued, managed or distributed by our affiliates, such as Massachusetts Mutual Life Insurance Company, C.M. Life Insurance Company, MML Bay State Life Insurance Company and MassMutual Ascend (**MassMutual**®), MML Investment Advisers, LLC, Barings, LLC and MML Distributors, LLC. Non-proprietary products are mutual funds and other securities products issued, managed, or offered by companies not affiliated with MMLIS. Offering proprietary products presents conflicts of interest that you should understand when you receive recommendations from MMLIS and MMLIS's Registered Representatives. Please see Section 7 for more information.

4. TYPES OF ACCOUNTS AND SERVICES AVAILABLE THROUGH MMLIS

As a broker-dealer, MMLIS provides the following services through its Registered Representatives:

- Recommending securities to buy or sell.
- Recommending investment strategies designed to help you meet your financial goals.
- Recommending the type of account you should open (for example, non-retirement vs. retirement account).
- Providing information and making recommendations related to rollovers (for example, moving your retirement savings from a 401(k) to an Individual Retirement Account (**IRA**)).
- Placing trades in your account at your direction.

When opening an account with us, you may choose between many different options, including brokerage accounts held with our clearing firm (with or without the margin feature); investments held directly with the product issuer; education accounts (such as 529 Plans); and retirement accounts (such as IRAs).

MMLIS offers two ways to open an account — either with its clearing firm (brokerage accounts) or directly with the product issuer, its transfer agent or custodian (direct accounts).

Most of the investments that MMLIS makes available are held in brokerage accounts. However, some investments (like variable insurance products and some 529 Plans) are available only in direct accounts.

A. Brokerage Accounts

MMLIS has entered into a clearing agreement with National Financial Services LLC (**NFS**) in order to offer you brokerage account services. Most brokerage accounts allow you to buy or trade in many different types of investments, including stocks, bonds, mutual funds, some 529 Plans and ETFs. Brokerage accounts are held with NFS. Some brokerage accounts offer optional cash management features, such as checking, debit cards, credit cards and bill paying services. You may also be able to use the securities in your brokerage account as collateral for a loan issued by a third party. In certain circumstances, MMLIS and your Registered Representative will receive compensation in connection with your loan. The account application and customer agreement for the account you are opening will contain more information on the features available for your brokerage account.

As the clearing firm for your brokerage account, NFS, at MMLIS's direction, is responsible for:

- Executing, clearing, and settling securities transactions for your brokerage account.
- Sending you transaction confirmations and periodic brokerage account statements.
- Acting as custodian for funds and securities NFS receives on your behalf.
- Following instructions regarding transactions, and the receipt and delivery of securities, in your brokerage account.
- Extending margin credit, if you are approved for margin borrowing.

B. Direct Accounts

In a direct account, you can only hold the securities that are offered by the specific issuer of the security or a transfer agent or other service provider for the issuer. The most commonly held direct accounts are for mutual funds, variable annuities, variable life insurance, some 529 Plans and ABLE accounts.

You will generally enter into an agreement directly with the issuer, which will provide more information on your direct account.

After your account is established, you may either contact the issuer directly or your Registered Representative to make changes to your account or place trades.

C. Discretion on Accounts

MMLIS's Registered Representatives do not have discretionary investment authority, which means that they cannot buy or sell investments in your account without obtaining your consent in advance. Your Registered Representative may recommend investments or investment strategies to you, but you are responsible for making the ultimate decision regarding the purchase or sale of investments.

D. Account Monitoring

While your Registered Representative is available to answer questions after your account is opened, MMLIS's services do not include account monitoring. Your Registered Representative may review the holdings in your account for the purpose of determining whether to provide new recommendations to you. If you desire on-going and continuous account monitoring, you should inform your Registered Representative and consider whether one of MMLIS's Advisory Services would be more appropriate for you.

E. Account Minimums

MMLIS does not have any minimum account requirements. Some product issuers, such as mutual funds or insurance companies, have account minimums or minimum deposit requirements for their specific offerings. This information can be found in the product's prospectus, offering document or account agreement.

F. MassMutual Private Wealth & Trust, FSB

MMLIS Registered Representatives can refer you to our affiliate, MassMutual Private Wealth & Trust, FSB (MMPWT), for trust and other fiduciary services. MMPWT requires a minimum relationship size of $1,000,000. MMPWT will charge you annual fees of up to 1.40% of your assets under management with them. You will also pay the underlying fees and expenses, if any, associated with the holdings in your account. MMPWT pays a portion of the fee it receives from you to MMLIS for introducing you to them as a client. The amount of the referral fee varies but can be up to 0.70% of your assets under management. MMLIS pays a portion of the referral fee to our Registered Representatives and a portion to their managers. Please refer to the disclosure from MMPWT for additional details on the services they can provide to you, account minimums, and fees and expenses.

5. TYPES OF FEES

The principal fees you will pay include transaction fees, securities product fees and account fees. Please note that most fees described in this Reg BI Disclosure are expressed as a range, since they vary from investment to investment. For investments offered by means of a prospectus, offering circular or similar document, you should review that document for more information about the fees you will incur.

A. Transaction Fees

When you buy or sell an individual security in your brokerage account, you will pay us a commission (which could be an explicit fee or a markup/markdown) at the time of the transaction. A copy of our Brokerage Commission Schedule (current as of the date of publication of this Reg BI Disclosure) is provided in **Appendix B**. For these transactions, you will receive a confirmation, which lists the exact commission or markup/markdown that you paid. Your Registered Representative can discount all brokerage commissions from these published rates, within approved ranges.

Similarly, when you buy certain investment products, such as mutual funds, 529 Plans and UITs, you will pay a sales load or sales charge (load), which is generally subtracted from your investment amount at the time of purchase. In the case of variable insurance products, a load typically is not deducted from your investment amount at the time of purchase, but the insurance company issuing the product pays us a sales commission. For most variable insurance products, you pay this sales commission indirectly because the insurance company's cost for paying sales commissions is built into the fees and charges of the product.

B. Securities Product Fees

For many securities products, including mutual funds, 529 Plans, ETFs, UITs, variable annuities and variable life insurance, there are on-going fees (such as management fees, operating expenses, or mortality and expense charges) built into the cost of the product that you bear as an investor. The product issuer in turn often pays us part of some of these fees, such as a "12b-1" fee in the case of mutual funds, based on invested assets. For variable annuities and variable life insurance products, the product issuer generally pays us a sales commission based on deposits into your annuity or insurance product.

You may also be charged direct fees based on actions you take with your investments, such as deferred sales charges or redemption or surrender fees when you sell or withdraw funds from the investment.

C. Account Fees

For brokerage accounts, you will pay account fees that are deducted from your account on a regular basis (monthly, quarterly, or annually), depending on the features that you select or the services that you use. Please see **Appendix C** of this Reg BI Disclosure for the Brokerage Account Fee Schedule. All fees are subject to change and are governed by your account agreement.

D. Credit Terms on Margin Transactions

If you request and are approved for a margin loan for the purpose of buying securities, you will be charged interest on the loan. The annual rate of interest you will be charged may vary from a minimum of 0.50% to a maximum of 1.5% above the National Financial Base Lending Rate (**NFBLR**), depending upon the amount of your average debit balance. The NFBLR is set at the discretion of NFS (who extends the credit) with references to commercially recognized interest rates, industry conditions regarding the extension of margin credit, and general credit conditions. Please see **Appendix D** for a copy of the margin schedule (that is current as of the date of publication of this Reg BI Disclosure). NFS shares a portion of the revenue it earns on margin balances in your brokerage account with us.

6. FEES AND EXPENSES RELATED TO PARTICULAR INVESTMENTS

Our Registered Representatives can recommend investing in securities products that have embedded fees and expenses that have a direct impact on the cost of purchasing and holding the securities products. The type, purpose and structure of these fees differ among products. This section discusses those fees and expenses and is intended to be read in conjunction with the prospectus or offering document for the specific product recommended. Please refer to the prospectus or offering document, which contains additional information regarding sales and other charges and expenses, associated risks, and other product features and terms.

A. Mutual Funds and 529 Plans

Mutual funds can provide you with the opportunity to invest in a professionally managed, diversified portfolio of securities. 529 Plans can provide you with the opportunity to invest indirectly in mutual funds through a tax-advantaged education savings account that allows you to contribute and accumulate funds for certain tuition related expenses. If you are considering an investment in mutual funds or 529 Plans, you should understand how fees, share classes, sales charges (or loads) and breakpoints impact the cost you will incur in purchasing and owning a mutual fund or 529 Plan.

Fees for Mutual Funds or 529 Plans

Mutual funds are either "load" or "no-load" funds. If a mutual fund is sold without a sales charge, it is called a "no-load" fund. A "load" fund charges either a front-end or back-end sales charge, deducted from the investment or redemption amount at the time fund shares are purchased or sold (redeemed), and some or all of this charge is typically paid to MMLIS. 529 Plans have a similar load structure.

Below is an explanation of some of the fees and charges for mutual funds and 529 Plans.

- **Loads**: As noted above, for some load funds and 529 Plans, you will pay an upfront fee or load at the time you purchase a mutual fund or 529 Plan. The load is subtracted from your investment. The load will vary based on the mutual fund family and share class being purchased.
- **Fund Operating Expenses:** The management fee, 12b-1 fee and other expenses make up a fund's "**expense ratio**." The expense ratios for open-end mutual funds that we offer typically range (on an annualized basis) from 0.25% to 2.50% for equity funds, 0.25% to 2.25% for fixed income funds (excluding money market funds), and 0.50% to 3.75% for alternative funds. The expense ratios for closed-end mutual funds that we offer typically range from 0.50% to 3.75%. The expense ratios for the 529 Plans we typically offer range from 0.40% to 2.40%. Some mutual funds and 529 Plans may have

expense ratios that exceed these ranges. Please refer to the prospectus or offering document for the specific fund or 529 Plan that you are considering.

- **Management Fee**: The management fee pays the fund's investment adviser for managing the fund's investment portfolio. The management fee is assessed daily, as a percentage of the fund's assets. The fee varies from fund to fund, depending on a variety of factors, including whether the fund is actively or passively managed (such as an index fund) and the asset in which the fund invests.
- **Distribution and/or Service Fee(s):** This fee, sometimes referred to as a "12b-1 fee," is typically intended to cover the marketing and distribution of the mutual fund to prospective investors and may also cover certain shareholder servicing costs.
- **Other Fees and Expenses.** Funds also bear other operating costs, such as brokerage costs for portfolio transactions and other shareholder servicing costs not covered by a 12b-1 fee and expenses.

• **529 Plan Program Fees**: 529 Plans also have program fees that are comprised of the program management fee and the state fee. These range from 0.00% to 0.55%.

Share Classes for Mutual Funds or 529 Plans

A mutual fund or 529 Plan may offer more than one "class" of its shares to investors. Each class has different fees, and sales and expense charges. The most common mutual fund share classes we make available to customers are Classes A and C, although other classes may exist for specific funds. Most 529 plans are sold as Class A shares or Class C shares.

Key characteristics of common share classes include:

• **Class A Shares** — This class typically charges a front-end sales load, which generally ranges up to 5.75% for equity funds, and 3.75% for bond funds, but can vary based on fund family, asset class and investment amount. Class A shares typically have a 12b-1 fee of around 0.25% on an annualized basis. Some funds reduce the front-end sales load for larger purchases by offering breakpoint pricing. Breakpoints provide a discount if your investment amount reaches a certain threshold.

• **Class C Shares** — Class C shares usually have a 12b-1 fee of 1.00% on an annualized basis. Class C shares do not have a front-end sales charge like Class A shares, but they do have a Contingent Deferred Sales Charge (**CDSC**), which means that you pay a sales charge if you sell (redeem) your shares within a short time of purchase, usually 12 to 18 months. The CDSC is typically assessed as a percentage of your investment. Class C shares are generally automatically converted to Class A shares, which makes them more expensive than Class A shares upon expiration of the required holding period, typically 7 to 10 years. Class C shares are not eligible for breakpoints.

• **Class R Shares** — This share class is available to retirement investors purchasing shares through employer-sponsored retirement plans, such as 401(k) plans and in some cases IRAs. Class R shares do not have a front-end sales charge or CDSC like Class A or Class C shares, but Class R shares do have on-going fees and expenses, such as 12b-1 fees, intended to finance the distribution activities related to sales of the fund shares. These fees and expenses are deducted from your assets on an on-going basis.

Determining which class is right for you requires careful consideration. Among other factors, you need to consider the size of your purchase, over what period of time you are planning to invest, whether your chosen class offers a share conversion feature and what other mutual fund investment you currently hold. If purchasing in a 529 Plan, also consider the age of the beneficiary, your state of residence versus the state plan purchased and when you plan to withdraw the funds. If you intend to purchase a large dollar amount of shares, buying Class A shares may be preferable. The asset-based charges on Class A Shares are generally lower than for Class C Shares, and the mutual fund may offer large purchase breakpoint discounts from the front-end sales load. Please note that the amount of compensation we and your Registered Representative receive as a result of your mutual fund and 529 Plan purchase(s) will, in many cases, vary depending on the class of shares you purchase.

Breakpoint Pricing

Most mutual funds and 529 Plans offer investors a variety of ways to qualify for breakpoint discounts on the sales charge associated with the purchase of shares such as discounts to investors who make large purchases at one time.

Breakpoints may begin at investment amounts of $25,000. Generally, as the amount of the purchase increases, the percentage used to determine the sales load decreases. The entire sales charge may be waived for investors that make very large purchases.

Mutual fund prospectuses contain tables that illustrate the available breakpoint discounts and the investment levels at which breakpoint discounts apply. Additionally, most mutual funds and 529 Plans allow investors to qualify for breakpoint discounts based upon current holdings from prior purchases through "Rights of Accumulation," and future purchases, based upon "Letters of Intent." For 529 Plans, breakpoint schedules can be found in the prospectus for the underlying investment that you choose within the 529 Plan.

- **Rights of Accumulation**: A Right of Accumulation (**ROA**) combines your current and previous fund purchases to determine whether you qualify for a breakpoint. For example, if you are investing $10,000 in a fund today, but previously invested $40,000 and have not withdrawn any of your investment, those amounts can be combined to reach a $50,000 breakpoint (if the current value is at least $50,000), which will entitle you to a lower sales load on your $10,000 purchase.

- **Letter of Intent (LOI)**: If you cannot immediately invest the minimum amount necessary to receive a breakpoint discount, but you are planning to make additional investments soon, you might still be able to obtain a reduced sales charge by using an LOI. An LOI is a statement that you sign that expresses your intent to invest a specified amount in that fund within a given period.

  Some fund companies permit you to include purchases completed within 90 days before the LOI is signed, and within 13 months after the LOI is signed, toward the dollar amount of the breakpoint threshold. If you expect to invest regularly in a fund with a front-end sales load, it is worth finding out if an LOI can help you qualify for a reduced sales charge. Please be advised that if you do not invest the amount stated in your LOI, the fund can retroactively collect the higher sales charge on your purchase.

- **Family discounts**: In the case of either ROAs or LOIs, you can often obtain credit toward your discounts for mutual fund holdings in other related accounts, in different mutual fund classes, or in different mutual funds that are part of the same fund family. For example, a fund may allow you to get a breakpoint discount by combining your fund purchases with those of your spouse or minor children. You also may be able to obtain credit for mutual fund holdings in retirement accounts, 529 Plans, or accounts held at other brokerage firms.

  Before buying a mutual fund, review your account statements and those of your family to see if any existing holdings can be combined to obtain a breakpoint discount. You may have related mutual fund holdings in accounts at other brokerage firms or with the mutual fund company itself that can help you reach a breakpoint discount. Be sure that you tell your Registered Representative about all your mutual fund holdings and those of your family, including holdings at other broker-dealers or with the mutual fund itself.

Below is an example of breakpoint pricing for a Class A share purchase. You should review each product's prospectus, offering document or other available information for specific breakpoint schedules for any product that you are considering.

Sample Mutual Fund Class A Share Breakpoint Schedule

Investment Amount	Sales Charge
Less than $25,000	5.75%
$25,000 – $49,999	5.50%
$50,000 – $99,999	4.75%
$100,000 – $249,999	3.75%
$250,000 – $499,999	2.50%
$500,000 – $999,999	2.00%
$1,000,000 or more	0.00%

Additional Information on 529 Plans

529 Plans are educational savings programs offered by states that enable individuals to accumulate assets on a tax-deferred or tax-free basis in order to fund certain qualified education expenses on behalf of a child or other beneficiary. A 529 Plan is established and maintained by a state agency and is typically administered by a mutual fund company. Some states that impose a state income tax offer favorable tax treatment or other benefits to their residents only if they invest in that state's sponsored 529 Plan. If you are not purchasing a 529 Plan sponsored by your state of residence, you should investigate whether your state

offers its residents a 529 Plan with tax advantages or other benefits. Any state-based benefit offered with respect to a particular 529 Plan should be one of many appropriately weighted factors, such as fees and expenses, to be considered in making an investment decision. If at any time you withdraw money from a 529 Plan that is not used for qualified education expenses, you are generally required to pay income tax and, in some circumstances, an additional penalty.

Since the tax rules that apply to 529 Plans may be complicated, you should consult with a tax professional to learn more about the federal tax advantages or disadvantages or other state-specific tax benefits (including limitations) associated with investing in a 529 Plan given your specific circumstances.

In addition, many states do not consider K-12 education to be a qualifying expense which means they have not decided to follow the federal tax laws on the matter. If you live in one of these states and take money out of your 529 plan in order to pay tuition for K-12 education, you may end up owing state taxes for the withdrawal. Therefore, you should also consult with a tax professional if you want to utilize your 529 Plan funds to pay for K-12 tuition.

B. Variable Insurance Products

Variable insurance products (variable products), which include both variable annuities and variable life insurance, are issued by an insurance company in the form of an insurance policy or annuity contract. Variable products provide an investor the insurance benefits and guarantees typically associated with insurance, as well as the opportunity for the product's "account value" (i.e., the money invested in the product) and insurance benefits to be based on the performance of designated mutual funds (underlying funds) available under the product as investment options rather than being based on a crediting rate set by the insurance company (as is the case with structured annuities). Most variable products (outside of structured annuities) provide access to a wide array of underlying funds.

- **Variable annuities** are primarily designed to allow an investor to accumulate non-tax qualified funds on a tax-deferred basis that can be converted to an income stream upon retirement (which can be guaranteed for life).
- **Variable life insurance** is primarily designed to provide a death benefit and also allows the owner to build up an account value that the owner can access (subject to certain conditions and limits).

Variable products are intended to be long-term investments for long-term protection, income, and investment goals, and should not be purchased by someone who anticipates a need in the short-term to access or withdraw funds invested in a variable product, as withdrawing funds or surrendering a variable product in the short-term will likely result in surrender charges and tax penalties.

If you are considering purchasing a variable annuity or variable life insurance product through us, you should understand the fees and charges that impact your account value (i.e., the amount that you can withdraw or receive on full surrender), as well as other features of these products. For more detailed information about specific variable products, please refer to the prospectus for the variable product you are considering.

A PPVUL is an investment product that provides death benefit protection with a focus on cash value accumulation potential. A PPVA is an investment product that allows for tax deferred growth. Both, PPVULs and PPVAs provide high net worth individuals with flexible and customizable investment options. These are complex, long-term investments and other less complex security products or brokerage services may be more suitable for most investors. PPVULs and PPVAs are sold in private placements, which are non-public offerings of securities exempt from certain registration requirements. An exempt offering of a PPVUL or PPVA is not subject to the same regulatory requirements as a registered fund. Among other things, this means it may engage in potentially riskier investment practices, charge higher fees, and impose liquidity restrictions on policy owners' assets. Liquidity restrictions can impose significant delays in accessing policy values and benefits. The PPVUL or PPVA offering memorandum contains more information about the product, its risks, and fees.

Fees for Variable Insurance Products

There are unique fees and charges for variable products that cover the cost of contract administration, acquisition costs (such as the commission we receive when we sell a variable product) and the insurance benefits provided by the product, as well as the operating expenses of the underlying funds. Some of the fees and charges for the variable products we make available are described (usually as a range) in more detail below. Fees can exceed the ranges provided. You should carefully read the prospectus for the variable product you are considering to make sure that you understand its fees and charges.

- **Surrender Charge or CDSC**: Depending on the product type and share class you invest in, you may incur a **surrender charge** or a **CDSC** if you withdraw funds early or surrender the product during a certain timeframe (called the "surrender period").
  - **Variable Annuities**: If you withdraw funds from a variable annuity during the surrender period (within a certain timeframe after the contract issuance or making a purchase payment), the insurance company will assess a CDSC. The initial CDSC for a variable annuity can equal up to 8.5% of the amount withdrawn or surrendered. However, the CDSC usually declines to zero gradually over the surrender period, which can sometimes last up to 7 years, with the higher surrender charges applying to surrenders and withdrawals made at the beginning of the surrender period, and the lower surrender charges applying to surrenders and withdrawals made toward the end of the surrender period. The CDSC is separate from any tax penalties that can apply to surrenders or withdrawals made before age 59½. Some variable annuities allow you to take out a certain percentage of your account value without paying a CDSC.
  - **Variable Life Insurance:** If you withdraw funds from a variable life insurance product, surrender charges will apply if you surrender your contract in full or decrease the policy's face amount (also referred to as the death benefit) during the surrender period. Variable life insurance products have a surrender period that is typically 10-15 years. Variable life insurance products do not use standardized percentages during the surrender period. Most products do not have a CDSC, but some do have a flat dollar amount fee or a 2.50% to 5.00% charge on the amount surrendered. The surrender charge and the surrender period are both described in the variable life insurance product's prospectus.
- **Mortality and Expense Risk Charge**: Variable products provide for a daily asset-based charge called a "mortality and expense risk charge." The mortality and expense risk charge is typically described as intended to cover the insurance benefits provided by the insurance company under the insurance contract (such as the insurance company's obligation to make annuity payments after the annuity date regardless of how long you live and to pay death benefits under annuity and life insurance contracts), as well as the risk that the current charges will be insufficient to cover the actual cost of administering the contract. For variable annuities, this daily charge typically ranges from an annualized rate of 0.95% to 1.40% of the total account value. For variable life insurance, this daily charge (which can sometimes be referred to as an asset charge) typically ranges from an annualized rate of 0.15% to 1.20% of the total account value.
- **Administrative Charge:** Some variable products also have an administrative charge, which may be a daily asset-based charge or an annual fee (or both) typically described as intended to cover the costs of administering the contract, preparing and mailing annual reports and statements, and maintaining contract records. This fee is typically \$25–\$50 per year if imposed as an annual fee or typically around 0.15% on an annualized basis (or both). Some insurers will waive this fee if you invest over a certain dollar amount, generally at least \$50,000 or \$100,000. For variable life insurance, the maintenance charge can range from \$7–\$30 monthly.
- **Cost of Insurance Charges:** Variable life insurance products impose these on-going charges for the cost of providing the death benefits. These charges vary greatly for each insured individual. The charges are based on factors, such as the insured's age, gender, health, underwriting class and death benefit amount. These charges generally increase as the insured gets older. These charges are typically deducted periodically, such as monthly. These charges do not apply to the variable annuities we make available.
- **Premium Expense Charges:** Variable life insurance products also typically impose a premium expense charge (sometimes referred to as a premium load), with the effect that only the net premium amount is invested or allocated to the variable life insurance product's account value. This charge is typically applied to each premium payment made and is generally described as being used to cover taxes assessed by state and/or other governmental agencies, as well as insurer's sales expenses. This charge generally ranges from 3.25% to 18.00% of premiums paid.

- **Underlying Fund Operating Expenses:** You will also indirectly pay the operating expenses for the underlying mutual funds in which you invest your variable product's account value. The underlying funds are typically "no-load" funds that do not have sales charges, but they do bear the same types of operating expenses as other mutual funds, including management fees and 12b-1 fees as described earlier.
- **Optional Features and Riders:** Some variable products offer optional features or riders, such as higher death benefits, living or guaranteed minimum income benefits, long-term care insurance benefits, disability benefits and more. Typically, additional recurring charges are deducted from a variable product's account value for these optional features or riders. There may also be a charge to exercise these optional features or riders.
- **Other Transaction Fees:** Some variable products charge fees for certain transactions, such as transferring money among investment options, making withdrawals (separate from any CDSC), exercising riders and annuitizing of the contract value. Information about these fees can be found in each variable product's prospectus.
- **Policy Loans:** On most variable life insurance policies, policy holders can access portions of their account value in the form of a loan. Policy holders are charged interest on these loans. Policy loans reduce the cash surrender value and may reduce the death benefit. Taking a policy loan could have adverse tax consequences if the policy terminates before the insured's death.

Commissions for Variable Products

The insurance company issuing the variable product pays MMLIS a commission for the sale and distribution of its variable products. For most variable products, you pay this commission indirectly because the insurance company's cost for paying commissions is built into the fees and charges of the product. The commissions we receive from the issuing insurance company vary based on the variable product and the insurance company, and the commissions also typically vary between initial premium payments and subsequent premium payments. Some insurers also pay supplemental compensation. This supplemental compensation, which we pay to our Registered Representatives, is based on criteria such as aggregate new sales across multiple types of insurance products.

Variable Annuities. For variable annuities, the commission is usually calculated as a percentage of deposits. The commission can be paid as an upfront commission (usually up to 5.50% to 7.00% of your initial purchase payment) or a hybrid commission, which is an upfront commission (usually ranging from 0.50% to 5.00% of your initial purchase payment) when you purchase the variable annuity plus an annual amount that equals a percentage of the annuity contract value until you surrender or annuitize your contract (usually ranging from 0.25% to 1.00% of your contract value).

Variable Life Insurance. For variable life insurance, the commission is usually calculated as a percentage of premiums paid, but the percentage can vary depending on whether the insurance product is purchased with a single premium or on the basis of on-going premium payments. If there are on-going premium payments, the percentage each year typically varies, ranging from 45.00% to 85.00% (and in some cases higher) of premium payments in the first policy year, and 1.00% to 5.00% of premium payments in subsequent years.

MMLIS utilizes third party companies, often referred to as brokerage general agents (**"BGAs"**), to support our Registered Representatives on sales of non-proprietary variable life insurance. BGAs receive an override commission from the insurance company in connection with providing these services. BGAs pay a portion of this override commission to MMLIS.

Share Classes for Variable Annuities

Some insurers whose variable annuities we make available offer different versions of their variable annuities, in different categories, sometimes referred to as "classes." These categories mainly differ in their initial investment requirements, fees, expenses, surrender or CDSC schedules, available features and riders, and may also differ in compensation we receive.

The most common classes are B and C, although other classes may exist for specific variable annuities. Each class has different fees and expenses. Determining which class is right for you requires careful consideration in light of your specific investment time horizon, liquidity needs, desired selection of option riders, and other factors. Key characteristics of common share classes include:

- **"B Share" Annuities** — These usually have a surrender period of 5 to 7 years on each purchase payment or since contract issuance and the surrender charge starts at approximately 6%

to 8.5% and declines each year to 0% over the surrender charge period. This class generally has an asset-based contract charge that ranges from 1.00% to 1.40%. There is also an administrative contract fee that ranges from $0–$50, which the product issuer may waive if you invest more than a certain dollar amount, generally at least $50,000 or $100,000.

- **"C Share" Annuities** — These are fully liquid and do not have a surrender period. These annuities allow you to access your money immediately after you invest it, but you will pay higher fees for that flexibility. C Shares typically have an asset-based contract fee that ranges from 1.25% to 1.30%. There is also an administrative contract fee that ranges from $0–$50, which may be waived by the product issuer if you invest more than a certain dollar amount, generally at least $50,000 or $100,000.

C. Unit Investment Trusts (UITs)

A UIT is a pooled investment vehicle established as a trust that holds a fixed portfolio of securities for a specified period of time and then terminates at maturity. A UIT provides an investor the opportunity to invest in a diversified portfolio of securities that generally will not change during the period the investor holds an interest in the UIT and typically has lower operating costs than a mutual fund.

There is a sales charge for purchases, but there is no management fee because the portfolio is not actively managed. A security in the portfolio, once purchased at the outset, may be changed only in unusual circumstances.

In addition to the sales charge, UITs also incur other fees and expenses deducted from trust assets, such as organizational and operating expenses. These fees and expenses include portfolio supervision, recordkeeping, administrative fees, and trustee fees. UITs also charge creation and development fees, which compensate the issuers for creating and developing the trusts. We may receive a portion of these fees and expenses.

UITs usually have a "buy and hold" strategy that is fixed throughout the life of the UIT and they are designed to be held until maturity. Due to the structure of the sales charges of UITs, they can be very expensive if you do not hold the UIT until maturity. Because of the nature of UITs, their structure, and upfront costs, they are not meant to be used for short-term trading.

At a UIT's maturity, you will generally have the option of reinvesting your proceeds into a new UIT. In connection with the termination of certain UITs, you may have the option to "rollover" your holdings into a new trust, generally in the next series, if available which may be subject to a new sales charge. Please talk to your Registered Representative if you are interested in rollover options. There may be tax consequences associated with rolling an investment from one series to the next and you should consult with your personal tax professional regarding your situation. The rollover option may be subject to suspension, modification or termination by the issuer.

D. Exchange Traded Funds

ETFs are investment funds that are listed for trading on a national securities exchange and whose shares can be bought and sold in the equity trading markets. Shares in the ETF represent an interest in a portfolio of securities that typically tracks an identified index*. ETFs have many of the same fees and costs, discussed above for mutual funds, but typically have lower management fees. The expense ratios for the ETFs that we typically offer range from 0.02% to 1.00%. Some ETFs have expense ratios that exceed these ranges. Please refer to the prospectus for the specific ETF that you are considering.

You pay these fees indirectly because they are deducted from assets of the ETF whose shares you own.

Transaction Fees

You will not pay a load when you purchase ETF shares, but you will pay a commission each time you buy or sell shares of an ETF. Please see **Appendix B** for specific information on commissions for ETFs. The more frequently you trade, the more you will pay in total commissions.

ETF shares trade on the basis of their market price and not their underlying net asset value (**NAV**). The NAV is calculated by dividing the total value of all the fund's assets, minus any liabilities such as on-going fees and expenses, by the number of shares outstanding. Since the ETF's shares trade on a secondary market, the shares may trade at prices higher (premium) or lower (discount) than the fund's NAV. The ETF's NAV and market price are generally close to each other because of a built-in creation and redemption process for ETF shares that provides arbitrage opportunities designed to help keep the market price of ETF shares at or close to the NAV per share of the ETF.

* MMLIS also makes available ETFs and ETPs that invest in digital assets (i.e. cryptocurrencies such as Bitcoin and Ether) and options contracts on these assets.

Most ETFs that are heavily traded have relatively small discounts and premiums. However, ETFs that follow markets that are less liquid, such as high-yield bonds, commodities or emerging markets can have higher differences due to lack of liquidity.

The "**bid/ask spread**" for the market price of ETF shares is also an indirect cost to owners of these shares. The "ask" or "offer" is the market price at which you can buy an ETF, and the "bid" is the market price at which you can sell the same ETF. The bid/ask spread is the difference between these two prices. The bid/ask spread is usually just a penny for heavily traded ETFs, but it can be bigger for smaller ETFs that are traded less frequently. This is more relevant if you trade often. The bid/ask spread is affected by market supply and demand, the liquidity of the underlying assets of the ETF, and other factors.

7. CONFLICTS OF INTEREST

MMLIS and our Registered Representatives have conflicts of interest when making recommendations that you should be aware of. These conflicts of interest, as discussed in more detail below, include the compensation we receive and the compensation, recognition, and incentive programs that MMLIS (and our parent company, MassMutual) provides to our Registered Representatives. Some of these conflicts of interest impact both MMLIS and our Registered Representatives, while other conflicts of interest primarily impact either MMLIS or our Registered Representatives.

MMLIS has adopted written policies and procedures reasonably designed to mitigate conflicts of interest that create an incentive for our Registered Representatives, when making a recommendation, to place their own interest or our interest ahead of yours. MMLIS provides training and guidance to its Registered Representatives to help ensure they recommend transactions and investments to you that are in your best interest. In addition, MMLIS has implemented policies and procedures reasonably designed to supervise and monitor recommendations by our Registered Representatives, including monitoring for excessive trading, replacements, and sales of products that are not in your best interest.

The Commonwealth of Massachusetts places additional requirements on broker-dealers to mitigate, eliminate or avoid conflicts of interest. To comply with these requirements, MMLIS has adopted additional policies and procedures applicable to recommendations subject to the Massachusetts requirements to mitigate, eliminate, or avoid the conflicts of interest described in this Reg BI Brochure. These additional policies and procedures do not apply to variable annuities, variable life insurance, or investment advisory services. In these cases, the conflict of interest would remain for the products or product types not subject to the additional mitigation, elimination, or avoidance procedures.

Compensation for Different Investments and Types of Investments

MMLIS is compensated when we sell investments to you or place trades for you and sometimes when we refer you to third party service providers. MMLIS pays a portion of this compensation to our Registered Representatives. Because MMLIS and our Registered Representatives are paid when we sell investments to you or place trades for you and sometimes when we refer you to third party service providers, MMLIS and our Registered Representatives have an incentive to encourage you to purchase investments, trade often, make additional investments and utilize the service providers with whom we have referral relationship.

The compensation we receive for similar investments varies, and also differs among types of investments. Registered Representatives have a conflict of interest and incentive to recommend the investment (such as variable product, mutual fund, share class or other product) that pays them more than other similarly available investments. Registered Representatives also have a conflict of interest and incentive to recommend the investment type that pays more compensation than other available investment types (such as recommending a variable annuity versus a mutual fund). Registered Representatives cannot waive commissions on sales of variable products.

Our Registered Representatives that are also IARs have an incentive to recommend you transition your brokerage or direct accounts to an advisory account after you have purchased or sold investments resulting in commissions or other fees. In addition, over time, advisory accounts are typically more expensive than brokerage accounts due to the ongoing advisory fee and additional services provided (such as, account monitoring and investment advice).

Commission Structure

MMLIS pays a portion of the commissions and fees we receive to our Registered Representatives. These payments vary between Registered Representatives, but usually fall within a range of 40% to 82.5% of what we receive. The percentage is determined each pay period on a rolling basis based on commissions and fees earned during the preceding twelve months.

For variable life insurance products, MMLIS pays a minimum of 70% of the commission we receive to our Registered Representatives.

The portion of advisory fees we pay to IARs can exceed 82.5%. The amount paid is determined each pay period on a rolling basis based on advisory fees earned during the preceding twelve months.

Registered Representatives and IARs also have the opportunity to earn an additional bonus (**Growth Bonus**). The Growth Bonus is awarded to Registered Representatives and IARs who satisfy certain minimum tenure and asset level requirements and who meet annual growth targets for the following products and services: (1) managed accounts custodied with NFS where MMLIS serves as the broker-dealer, (2) Wealth Management Services Advisory Annuities accounts, (3) brokerage accounts, and (4) MMPWT accounts. The Growth Bonus is tiered, with recipients eligible to receive from 1% to 4% of the fees and commissions earned on the aforementioned products and services. The Growth Bonus is paid in three equal annual installments, beginning the year after it is earned.

Our commission structure creates an incentive for Registered Representatives to recommend more investments and trades to earn a higher portion of commissions. The Growth Bonus creates an incentive for recipients to recommend the products and services described above over other MMLIS products and services as well as comparable products and services offered directly by third-parties.

A different commission structure applies when Registered Representatives sell proprietary variable products, such as those issued by MassMutual. In some instances, Registered Representatives will receive higher cash compensation when they sell non-proprietary variable products than when they sell proprietary variable products issued by MassMutual or its affiliates.

MMLIS pays General Agents and other managers who supervise or support the activities of our Registered Representatives a portion of commissions and other payments earned by the Registered Representatives subject to their supervision. In certain cases, the General Agents and other managers pay a portion of the commission they receive to the Registered Representative, which could result in the Registered Representatives receiving more than 82.5% of the commission and fees outlined in the range above. In certain cases, MMLIS permits General Agents to adjust the percentage of commissions and fees paid to Registered Representatives based on various factors. When Registered Representatives sell proprietary variable products, MassMutual pays the General Agents or other managers' overrides, allowances and other compensation on behalf of MMLIS. In certain cases, the General Agents and other managers pay a portion of the overrides and allowances they receive to the Registered Representative.

Total client assets as well as sales of investments and managed account products can also count towards rewards, recognition and trips provided by MMLIS and the Registered Representatives' General Agent or other manager.

Affiliation with MassMutual and Proprietary Products

MMLIS is a wholly-owned subsidiary of MassMutual. Registered Representatives are contracted as either insurance agents, alternate agents or insurance brokers authorized to solicit and sell the annuity and insurance products of MassMutual and its insurance company affiliates.

Insurance agents. Registered Representatives who are contracted as insurance agents are required to meet minimum sales thresholds of annuity and insurance products issued by MassMutual and its insurance company affiliates (which can include MassMutual variable products) in order to maintain their MassMutual insurance agent contract. Sales of MassMutual/proprietary variable products also count towards a Registered Representatives' eligibility for MassMutual's health and welfare programs (including retirement, medical, and dental benefits). In determining the continuation of their agent contracts and health and welfare benefits, MassMutual only gives credit to Registered Representatives for selling proprietary insurance products (including MassMutual variable annuity and variable insurance products) and does not give credit for selling other investments (such as variable annuity and variable insurance products) that are not issued by MassMutual or its insurance company affiliates. In addition, for Registered Representatives contracted as insurance agents, sales of investment products count towards eligibility for allowances, rewards, recognition, matching of charitable contributions, and trips provided by MassMutual. In determining the amount of certain allowances paid to an agent, MassMutual gives higher credit to Registered Representatives for selling MassMutual insurance products (including MassMutual variable annuity and variable insurance products), than it does for selling other investments (such as variable annuity and variable insurance products) that are not issued by MassMutual or its insurance company affiliates.

Alternate agents. Registered Representatives who are contracted as alternate agents of MassMutual are required to meet minimum sales thresholds of investments sold through MMLIS, which may include MassMutual variable products, to be eligible to remain registered with MMLIS, and minimum sales thresholds of investments or MassMutual/proprietary annuity and insurance products to maintain their alternate agent contract with MassMutual. Sales of investments also count towards allowances, rewards, recognition, matching of charitable contributions, and trips. In determining the amount of certain allowances paid to an alternate agent, MassMutual gives higher credit to Registered Representatives for selling MassMutual/proprietary insurance products (including MassMutual variable annuity and variable insurance products), than it does for selling other investments (such as variable annuity and variable insurance products) that are not issued by MassMutual or its insurance company affiliates. Alternate agents are not eligible for MassMutual's health and welfare programs such as retirement, medical, and dental benefits.

Brokers. Registered Representatives contracted as brokers of MassMutual (and agents who have attained "emeritus" status) are not eligible to receive health and welfare benefits; however, certain brokers and emeritus agents are required to meet minimum sales thresholds of investments sold through MMLIS, which may include MassMutual variable products, to be eligible to remain registered with MMLIS.

MMLIS has a program for its General Agents designed to incent them to (a) recruit, hire and retain insurance agents, alternate agents and brokers with licenses necessary to be Registered Representatives and IARs of MMLIS, (b) have their existing population of insurance agents, alternate agents and brokers obtain these licenses, and (c) have these newly licensed Registered Representatives and IARs sell mutual fund, brokerage and managed account products. To do this, the program provides for payments to General Agents tied to licensing metrics as well as sales and production goals for newly licensed Registered Representatives/IARs. General Agents may share a portion of this compensation with their Registered Representatives, creating a conflict of interest and incentive to help the General Agent meet or exceed certain the program criteria such as sales metrics.

MMLIS also has a program for its General Agents designed to incent them to grow their business. This program provides additional compensation to General Agents who meet or exceed certain criteria including but not limited to customer satisfaction, Registered Representative retention and sales metrics including minimum sales thresholds. General Agents may share a portion of this compensation with their Registered Representatives, creating a conflict of interest and incentive to help the General Agent meet or exceed certain program criteria such as sales metrics.

MassMutual has provided or made available loans to certain insurance agents and alternate agents as an incentive for them to become agents or alternate agents of MassMutual. If the agent or alternate agent achieves specified sales goals, which can include the sale of investments, MassMutual may forgive the loan or pay additional compensation to him or her to offset the loan repayment. MMLIS has a loan program available to new and existing IARs as an incentive for them to join or stay at MMLIS. This loan program is described and disclosed in the advisory disclosure brochure (Form ADV) for the applicable advisory programs.

MMLIS has a loan program available to IARs and Registered Representatives designed to assist in acquiring another investment adviser's and/or registered representative's book of business. These non-forgivable loans are issued at favorable rates relative to the market. Loan proceeds are disbursed directly to the selling third party adviser/registered representative, provided however that after the initial disbursements, subsequent disbursements are conditioned on the acquiring IAR/Registered Representative meeting certain commissions metrics within certain defined time periods after the loan closing date.

MMLIS also has a recruiting program for experienced Registered Representatives/IARs that includes both an initial transition loan as well as subsequent loan amounts to incent the transition of clients and clients' assets to MMLIS, and to support practice growth after joining MMLIS. A pro rata portion of any loan will be forgiven up to seven years following the date the Registered Representative/IAR joined MMLIS, provided the Registered Representative/IAR remains associated with MMLIS. The amount of any subsequent loan is conditioned on the Registered Representative/IAR meeting certain asset and sales targets after joining MMLIS. This includes sales of mutual funds, variable annuities and other securities products, as well as commissions from MMLIS brokerage accounts, and fees and asset levels for MMLIS advisory accounts.

Registered Representatives/IARs who, relative to their peers, have more assets in managed accounts custodied with NFS, brokerage accounts and MMPWT accounts qualify for higher levels of service from MMLIS's service center. Representatives/IARs qualifying for this higher level of service also qualify for a credit for the payment of annual registration and continuing education fees.

The sales requirements, loan and benefits and recognition and service programs described above create conflicts of interest and incentives for Registered Representatives to recommend opening accounts with MMLIS and transferring assets to accounts at MMLIS, to recommend MassMutual products over other, non-proprietary products, and to recommend certain types of products offered through MMLIS over others.

Other Conflicts Regarding Affiliated and Related Entities

MMLIS offers certain products at least in part because they are issued or managed by an affiliate, including MassMutual, MassMutual Ascend, MML Investment Advisers, LLC and Barings, LLC (Affiliated Parties). MMLIS's Affiliated Parties receive additional compensation associated with your purchase of such products.

MassMutual has a minority ownership interest in Invesco Ltd. (Invesco) which offers a variety of investment products including mutual funds and ETFs. MassMutual also has a minority interest in Stone Ridge Asset Management, LLC (Stone Ridge) which offers private funds that invest in a variety of alternative investments. Invesco and Stone Ridge are not affiliates of MMLIS. Mass Mutual and Jefferies have entered into a joint venture with each owning 50% of Jefferies Finance. Jefferies Finance arranges, manages and invests in commercial loans, bonds, other types of debt and certain equities, either itself or through one of the funds it or one of its subsidiaries manages. Registered Representatives may recommend that you invest in investment products advised and/or distributed by Jefferies Finance or one of its subsidiaries, one or more Invesco entities or by Stone Ridge. Registered Representatives do not get paid more for selling Invesco, Stone Ridge or Jefferies Finance products; however, MassMutual benefits indirectly from sales of Jefferies Finance, Invesco or Stone Ridge products due to its economic interests in these entities.

Offering products issued by MMLIS's Affiliated Parties, Jefferies Finance, Invesco and Stone Ridge creates a conflict of interest and incentive for MMLIS and its Registered Representatives to promote and recommend these affiliated or related products over other available products.

IRA Rollovers

Liquidating and transferring assets from a retirement account such as an existing 401(k) or other retirement or pension plan into an individual retirement account (**IRA rollover**) can result in higher fees and expenses.

MMLIS and our Registered Representatives have a conflict of interest and incentive to recommend IRA rollovers from a 401(k) or other employer-sponsored retirement account in order to earn compensation on investment recommendations for the IRA account. Fees and costs for investments acquired for an IRA account, and our compensation from these transactions, is generally higher than those for investments and transactions in your existing employer-sponsored retirement account. There are also certain benefits associated with your employer-sponsored retirement account that are not available with an IRA account. Please refer to **Appendix E** which provides additional detail regarding IRA rollovers.

Payments and Credits from NFS

MMLIS receives payments and expense credits from NFS based in part on assets custodied with NFS. These payments and credits create a conflict of interest and incentive for MMLIS to recommend clients open brokerage accounts and increase their account balances so that more assets will be custodied with NFS. These payments and credits also create conflicts of interest because MMLIS has an incentive to continue to use NFS as its clearing firm for trade execution and custody of brokerage accounts over other firms that do not or would not make such payments to the firm. Registered Representatives do not receive any portion of these payments or credits. In selecting and maintaining NFS as our clearing firm, MMLIS considers the range and quality of NFS' services including, among other things, the value of research provided, as well as execution capability, commission rates, financial responsibility, and responsiveness.

MMLIS receives additional compensation from NFS in the form of annual recurring business development credits, based on (i) the amount of net new assets that MMLIS customers custodied with NFS over the previous year, and (ii) maintenance of certain asset levels and numbers of accounts that MMLIS customers custody with NFS. Therefore, MMLIS has an incentive to recommend products and services that will lead to more assets being custodied with NFS, over products and services that are custodied with other custodians. Registered Representatives do not receive any portion of these credits.

MMLIS received credits from NFS when it began using NFS as its clearing firm. If MMLIS terminates its relationship with NFS before a certain period of time, MMLIS will have to pay a portion of these credits back. MMLIS will also have to pay additional fees to NFS if MMLIS terminates its relationship with NFS before a certain period of time. These repayment and payment obligations create a conflict of interest because MMLIS has an economic incentive to continue to use NFS as its clearing firm for trade execution and custody over other firms. Registered Representatives do not receive any portion of these credits.

NFS charges mutual fund companies a recurring fee to make their mutual funds available to MMLIS and other broker-dealers that use NFS as their clearing firm. The amount of the fee varies and depends on whether a mutual fund's share classes are part of NFS's No Transaction Fee (**NTF**) or iNTF programs or Transaction Fee (**TF**) program, or are not part of the NTF, iNTF or TF programs.

Different share classes of the same mutual fund can be available on NFS' platform, and one share class of a mutual fund can be part of a program (the NTF program, for example) while another share class of the same mutual fund is not. NFS shares with MMLIS a portion of the fee it receives (**NTF/TF payments**) for the assets that are invested in NTF, iNTF and TF mutual fund share classes, with some exceptions (such as Fidelity funds which are managed and distributed by an affiliate of NFS). During 2023, MMLIS received approximately $5.8 million from NFS in NTF/TF payments.

NFS generally charges mutual fund companies a higher fee for NTF mutual fund share classes than for other mutual fund share classes. Therefore, MMLIS generally receives a higher payment from NFS for each investment in an NTF mutual fund share class than for mutual fund share classes that are not included in the NTF program. Certain fund companies with share classes in the NTF program pay a lower fee to NFS than other fund companies with share classes in the NTF program. MMLIS therefore receives a lower payment for each investment in such companies' mutual fund share classes in the NTF program than other mutual fund share classes in the NTF program.

Mutual fund share classes that are part of NFS's NTF program are generally more expensive than other available mutual fund share classes.

The NTF/TF payments create a conflict of interest for MMLIS and give MMLIS an incentive to make available the mutual funds and mutual fund share classes for which NFS pays NTF/TF payments to us over the mutual funds and mutual fund share classes for which NFS does not make NTF/TF payments, even if these mutual fund share classes are more expensive for you. MMLIS has a similar incentive to make available the mutual funds and mutual fund share classes for which NFS pays a higher NTF/TF payment over other mutual funds and mutual fund share classes even if the investments for which NFS pays a higher NTF/TF payment are more expensive for you.

MMLIS pays a recurring fee to NFS based on the aggregate assets invested in the NFS platform through brokerage and advisory accounts, excluding any investments in NTF and iNTF mutual fund share classes, and cash and cash equivalents. This creates a conflict of interest and incentive for MMLIS to recommend the purchase of or make available NTF and iNTF mutual fund share classes or the holding of cash or cash equivalents in your brokerage account since they are excluded from the calculation of the fee MMLIS pays to NFS, even if such investments are more expensive for you.

MMLIS receives service credits from NFS based on the total assets in brokerage and advisory accounts held at NFS. MMLIS also receives fees from NFS to attend its sponsored sales and/or training conferences. These credits and fees create a conflict of interest and incentive for MMLIS to recommend brokerage accounts as well as more investments and services that will lead to more assets being held or custodied with NFS.

There are also various additional payments MMLIS receives from NFS, including payments to attend sales and training conferences, a portion of the IRA maintenance fee NFS earns on self-directed IRA accounts, and a portion of the revenue NFS earns on free credit balances you maintain in your brokerage account. Registered Representatives do not receive any portion of these payments. These payments create conflicts of interest because MMLIS has an incentive to continue to use NFS as the clearing firm for trade execution and custody of brokerage accounts over other firms that do not or would not make such payments to the firm.

Fees and Payments to NFS

The fees NFS charges MMLIS are calculated using a fee schedule that contains asset-based tiers where fees decrease as assets increase. Therefore, MMLIS has an incentive to recommend products and services that will lead to more assets being custodied with NFS.

When the number of MMLIS accounts that are custodied at NFS reach certain thresholds of adoption of electronic delivery of statements and confirmations, the percentage used to calculate MMLIS's fee to NFS decreases. In addition, NFS charges MMLIS a fee for every account that receives statements and confirmations by U.S. mail. These arrangements create an incentive for MMLIS to encourage clients to adopt electronic delivery (by charging fees for paper delivery, for example).

NFS also separately charges us for many of the services they provide to clients (such as the services listed in Appendix C). When the fees we collect from you for these services are less than the amount NFS charges, we pay NFS the difference. Conversely, when the fees we collect exceed the amount NFS charges, we keep the difference.

Payments from Product Sponsors

MMLIS receives cash payments from third-parties including mutual funds (or their affiliates), variable annuity and variable life insurance issuers (or their affiliates), and other product sponsors and product platform providers (**Product Sponsors**) whose products we make available. With respect to variable life insurance, Product Sponsors may make such payments to MMLIS' wholly owned insurance agency subsidiary, MML Insurance Agency, LLC. These cash payments (commonly referred to as **revenue sharing** and/or **marketing support** payments) are in addition to any sales charges, commissions, 12b-1 payments and service fees described above that we receive when we sell their products. MMLIS uses these payments for general expenses including, conducting training, conferences, and other meetings for our Registered Representatives, subsidizing processing and administrative charges of these products, and to pay for marketing and other general expenses.

Product Sponsors making payments to MMLIS have greater access to Registered Representatives to provide training and other educational presentations. MMLIS provides Product Sponsors with agency management contact information, thus giving Product Sponsors better access to Registered Representatives than product sponsors that do not make payments to MMLIS. MMLIS will also offer Product Sponsors of ETFs the opportunity to make additional payments separate and apart from what is described above to purchase analytical data related to the sale of ETFs. In addition, MMLIS publicizes its Product Sponsors and their products and services within internal MMLIS marketing materials and/or websites and provides links to Product Sponsors' websites.

Product Sponsors make payments to MMLIS based on any one or more of the following: fixed annual amount, previous or expected sales of their products, an annual contribution toward a particular event that MMLIS is sponsoring, or other formula agreed upon between MMLIS and the Product Sponsor. The amount MMLIS receives from each Product Sponsor ranges from $75,000 to $5,000,000 annually. The following Product Sponsors made payments in excess of $500,000 to us in 2023: Capital Group, Brinker, BlackRock, Corebridge, Fidelity, Invesco, AIG, Equitable, Brighthouse, Jackson National, Nationwide, Prudential, Allianz, Pacific Life, Transamerica and Lincoln Financial.

Payments were also received in 2023 from each of the following product sponsors and/or variable annuity issuers: BNY Mellon, Franklin Templeton, First Trust, Morningstar, JP Morgan, Northern Trust, Lord Abbett, American Century, City National Rochdale, Frontier Asset Management, Donoghue Forlines, Russell Investments, iCapital, PIMCO, Envestnet, Symmetry, LMCG, SEI, and Goldman Sachs.

MMLIS's receipt of payments from Product Sponsors creates a conflict of interest and incentive for MMLIS to make available the investments issued by Product Sponsors over other investments from issuers or sponsors that do not make any revenue sharing, marketing support or other additional payment to us. As detailed above, payments MMLIS receives from its Product Sponsors vary and the basis on which the payments are calculated differs among Product Sponsors. MMLIS has a conflict of interest and incentive to recommend those Product Sponsors whose payment or payment structure would result in the most compensation for MMLIS.

MMLIS also receives payments from certain UITs. Revenue sharing practices are generally disclosed in the applicable UIT's prospectus. These compensation arrangements create an incentive for MMLIS to recommend these mutual funds and UITs over other available products.

Referral Arrangements

Certain third parties, including investment banks, lenders that provide securities backed lines of credit (using the securities in your brokerage account as collateral for a loan issued by a third party), commercial loans, student loan refinancing service providers and platforms that aggregate offerings from multiple lenders (e.g., providers of unsecured loans) make payments to MMLIS in exchange for referrals. Some of these payments are made solely in recognition of the referral while other payments are contingent on your use of the third party's services. In some cases MMLIS will share a portion of this revenue with your Registered Representative. You will receive more information about these payments in the course of the referral to one of these third parties.

MMLIS may also refer you to its affiliate, Flourish Financial LLC (Flourish). Flourish offers Flourish Cash, a brokerage account intended for clients interested in earning higher yields than what are available through banks. Even though Flourish does not compensate MMLIS for these referrals there is a conflict of interest and incentive for MMLIS to refer you to Flourish because of its relationship to MMLIS.

Payments, Training and Support Provided by Product Sponsors to Our Registered Representatives

From time to time, Product Sponsors provide our Registered Representatives and their managers with investment tools, business entertainment, expense reimbursement for business meetings, and pay for travel, lodging and other expenses, in connection with their attendance at an educational, due diligence or similar business meetings sponsored by the sponsor. From time to time, these Product Sponsors also provide marketing support payments within certain limits and nominal gifts to Registered Representatives and their managers. These Product Sponsors have greater access to Registered Representatives to provide training, other educational presentations, and help create targeted marketing campaigns for Registered Representatives. These conferences, payments, and support create a conflict of interest and incentive for Registered Representatives to recommend these Product Sponsor's products over other available products.

Cash Sweep Program for Brokerage Accounts

MMLIS provides a "cash sweep" program where uninvested cash balances (such as from securities transactions, dividends, interest payments, or deposits) in your brokerage account are swept to a designated option each business day. The Advantage Cash Sweep Program (ACSP), an FDIC insured cash sweep administered through NFS is the primary cash sweep offering. The ACSP is the only available cash sweep option, except for accounts that are not eligible for the ACSP. These ineligible accounts (primarily Keoghs and accounts held by customers located outside the United States) will use a Fidelity Money Market Mutual Fund as the cash sweep option.

In accordance with the Advantage Cash Sweep Disclosure Document, uninvested cash balances in your brokerage account are deposited in an FDIC-insured account at one or more banks (Program Bank) and earn interest at a rate determined based on the amount on deposit. Money Market Mutual Funds generally have a higher yield than the interest rate paid on the ACSP.

Your cash sweep option is intended to be a short-term vehicle for cash awaiting investment in your brokerage account. Please contact your Registered Representative if you are interested in investing your cash balances in other available investments.

MMLIS receives fees as well as other compensation or benefits in connection with both sweep options (the ACSP and the Fidelity Money Market Mutual Fund).

The ACSP creates significant financial benefits for MMLIS as we receive a fee from each Program Bank equal to a percentage of Program Deposits. The fees paid by the Program Banks to MMLIS in connection with the ACSP: (i) are higher than the fees or payments MMLIS receives in connection with the Fidelity Money Market Mutual Fund, (ii) are higher than the revenue generated by other cash sweep options MMLIS used in the past, (iii) are higher than the interest paid to you on your deposit, (iv) will increase as the size of your deposit increases, (v) and will increase if interest rates rise. Designating the ACSP as the only cash sweep option for eligible accounts is also a material limitation placed on brokerage accounts offered through MMLIS.

These payments, this material limitation and the structure of the ASCP more generally, create conflicts of interest and incentives for MMLIS to designate the ASCP as the cash sweep option and to exclude other core sweep options in favor of the ASCP. Please refer to the section of the Advantage Cash Sweep Disclosure Document titled "Benefits to MMLIS and Conflicts of Interest" for more details concerning these payments and these and other conflicts of interest created by the ASCP.

MMLIS receives payments from Fidelity in connection with the Fidelity Money Market Mutual Fund cash sweep option. These payments are a conflict of interest and incentive for MMLIS to designate or make available The Fidelity Money Market Fund over other available investment options.

MMLIS Registered Representatives do not receive any portion of any fee or payment received by MMLIS in connection with a cash sweep option.

Material Limitations of MMLIS's Registered Representatives

Some of our Registered Representatives are not licensed to recommend or sell you all of the products offered by MMLIS. Please refer to Section 2 of this Reg BI Disclosure for additional information regarding the role and capacity in which Registered Representatives act when making recommendations to you. These restrictions create a conflict of interest and incentive for these Registered Representatives to recommend only the products or services which they are authorized to sell over other products or services that may be available to you through other Registered Representatives affiliated with us or another firm.

MMLIS and its Registered Representatives do not perform account monitoring or have discretionary investment authority over your account. Please refer to Section 4 above for additional information regarding these limitations.

Trading Errors

MMLIS attempts to effect transactions correctly and resolve any trade errors promptly and fairly. Should a trade error occur as a result of our handling of a transaction, and the error correction results in a loss, the amount of the loss will not be charged to the client. If the error correction results in a gain, the gain will be kept by MMLIS. Gains that are captured due to trade errors are placed in MMLIS' general account and may be used at MMLIS' discretion. If gains are not used to cover an expense within a fiscal year, such gains will be considered a profit and used for the benefit of MMLIS.

8. RISK DISCLOSURES

Risk of Investing

While we will take reasonable care in developing and making recommendations to you, securities involve risk, and you may lose money. There is no guarantee that you will meet your investment goals, or that our recommended investment strategy will perform as anticipated. Please consult any available offering documents for any security we recommend for a discussion of risks associated with the investment. We can provide those documents to you, or help you find them.

Risk of Funding IRAs with Annuities

Because the Internal Revenue Code provides for deferral of taxes on contributions and earnings in both annuities and tax-qualified plans, including IRAs, an annuity carries no additional tax benefit where it funds an IRA. Therefore, your decision regarding whether to purchase an annuity contract to fund an IRA should be based not on its tax-deferral feature, but on other features and benefits.

Annuities may offer features and benefits not available with other investments, but they also may have higher fees and expenses. You should carefully evaluate the fees and expenses of an annuity against its features and benefits as part of your decision-making process.

Prior to making any decision to purchase an annuity contract, your Registered Representative should clearly explain to you each of the considerations discussed above and you should understand and be comfortable with this explanation. In addition, you should consult with your personal tax professional before funding an IRA with an annuity.

Special Considerations for Retirement Plan Rollover Options

If you currently participate in a 401(k) or other employer-sponsored qualified plan and decide to change jobs, you have choices for investing your retirement plan assets. It is important that you understand the advantages and disadvantages of each option to ensure that you make an informed decision. Among other things, you should carefully consider changes in services, fees, expenses, commissions, and investment options, tax implications, and potential conflicts of interest that your Registered Representative might have before making your decision. Please see **Appendix E** for more information.

Prohibited Transaction Exemption 2020-02 Information

When providing investment recommendations that are treated as fiduciary investment advice as defined by Department of Labor regulations ("Recommendations"), MML Investors Services and our financial professionals will act as investment advice fiduciaries to you under the Internal Revenue Code, ("Code") and/or the Employee Retirement Income Security Act ("ERISA") for your individual retirement account ("IRA") or retirement plan accounts subject to Title I of ERISA, as applicable. Our fiduciary status relates only to the specific individual retirement accounts and retirement plan account(s) you have with us, and only to Recommendations made on or after December 20, 2021. Although we act as fiduciaries under the Code and/or ERISA, this does not necessarily mean that we act as fiduciaries under other laws. This acknowledgment does not create any enforceable legal rights beyond those conferred by the Code or ERISA as applicable. In particular, IRA owners and beneficiaries do not have a legal right of action to enforce the duties associated with our fiduciary status, which are enforceable only by the Internal Revenue Service under an excise tax provision of the Code. Our fiduciary status automatically terminates if your individual retirement account or retirement plan account with MML Investors Services terminates. We reserve the right to retroactively amend any representations or statements herein regarding our status as fiduciaries to the extent permitted by law.

9. ACCOUNT ACTIVITY AFTER ACCOUNT OPENING MAY HAVE TAX CONSEQUENCES

Dividends, capital gains, transfers, and sales of securities in your account may create a taxable event. We do not provide tax advice. It is your responsibility to obtain legal, tax, and accounting guidance from independent professionals prior to making any investment decision, including whether to open an account. You are responsible for any and all tax consequences resulting from any transactions in your account, including the payment of any taxes that may be due as a result of a transaction in the account.

10. MMLIS'S INVESTMENT PHILOSOPHY

Relationships with Clients

We require our Registered Representatives to have a reasonable basis, taking into account the potential risks, rewards, and costs associated with a recommendation, to believe that each recommendation made to you is in your best interest, and does not place our interest or the interest of our Registered Representatives ahead of your interest at the time the recommendation is made.

MMLIS's Registered Representatives seek to understand your needs and objectives by collecting and reviewing information from you. It is critical that you provide current, complete and accurate information and update the information provided if it becomes inaccurate.

Provided below are some of the investment principles and concepts that MMLIS's Registered Representatives may employ while developing investment recommendations that are designed to help you achieve your financial goals and objectives.

- **Long-term perspective —** We work closely with our clients to help them understand that while there are risks associated with investing, establishing a personalized investment strategy that is applied and maintained with a long-term view often provides the best opportunity to achieve long-term success.
- **Diversification and Asset allocation** — A key element of our investment philosophy is diversification. When you diversify your assets, you spread them across several investments with varying degrees of risk and return potential. One way to achieve diversification is through asset allocation — the process of dividing your money in specific percentages among multiple asset classes.

  Each asset class has its own risk and return characteristics. Generally, investments with higher levels of risk carry the greatest potential for reward. Because each asset class has a different risk/return profile and reacts differently to changes in the financial markets, it's generally a good idea to have a range of asset classes represented in your portfolio.
- **Systematic investing and dollar cost averaging** — represents a time-tested strategy that can help to reduce investment risk. To dollar cost average, you invest equal amounts of money on a regular schedule. If an investment's price is high, you buy fewer shares or units. When prices are low, you buy more shares. Investing regularly, using dollar cost averaging, helps reduce the risk associated with buying during big swings in market prices.

APPENDIX A – SUPPLEMENTAL INFORMATION

The following sections provide more information about MMLIS to supplement our Reg BI Disclosure, which precedes these sections. The following information may be included in other disclosures we provide, and may be updated from time to time, separately from any updates to our Reg BI Disclosure.

Policies and Controls

A. Prohibitions for Registered Representatives

MMLIS has instituted a variety of supervisory controls, policies and procedures to reduce conflicts of interest and provide additional protections for our customers.

As part of these policies, MMLIS imposes a number of prohibition on your Registered Representative, including but not limited to:

- Accepting cash;
- Accepting a personal check from you made payable to him or her or an entity owned by him/her;
- Depositing your funds into his or her personal account;
- Maintaining custody or possession of your property;
- Placing trades on a discretionary basis (trading in your brokerage account without your consent);
- Borrowing money from you;
- Acting as your attorney-in-fact, trusted contact or trustee;
- Guaranteeing the performance of any investment you have purchased.
- Redirecting your statements and trade confirmations to themselves;
- Signing your name on your behalf or asking you to sign blank forms;
- Recommending you take a loan to buy securities except by using margin;
- Lending money to you or paying fees on your behalf; or
- Being named as your beneficiary or executor

If your Registered Representative suggests any of these activities, please contact us immediately at 1-800-731-7109.

B. Customer Affiliation with FINRA Member Firms

Please be advised that if you are associated with a FINRA member firm and have disclosed your relationship to MMLIS, we are required to notify your firm in writing of your intention to open or maintain an account with us. Upon written request from your firm, MMLIS will transmit duplicate copies of confirmations, statements, or other information with respect to your account(s) to their attention.

C. Checks and Securities Certificates

Checks and securities certificates received in connection with the opening of an account are safeguarded in a secure office location, and promptly forwarded to NFS or the product issuer for deposit into the account. However, checks and/or securities certificates may be held by MMLIS for up to seven business days prior to forwarding in order for MMLIS to obtain all the required paperwork and/or perform a review of all paperwork. If an account is not approved, all checks and securities certificates received are returned to you. In addition, MMLIS maintains records of all checks and securities certificates received.

D. Third-party Research Reports

If your Registered Representative provides you with any research reports prepared by third-party companies that are not affiliated with MMLIS, please understand the following:

MMLIS does not prepare, edit or endorse research reports prepared by third parties (**third-party research reports**). Research is subject to change without notice and MMLIS does not guarantee the accuracy, timeliness, completeness or usefulness of any third-party research report.

Third-party research reports are provided for informational and/or educational purposes only and are not intended to provide tax, legal, or investment advice. Third-party research reports are written without any particular investor or class of investors' financial situation or needs in mind, and therefore, the information in them should not be construed as an offer to sell, a solicitation of an offer to buy, or a recommendation for any security by MMLIS or any third party.

You are responsible for determining whether any of the information in a third-party research report is useful or applicable to you based on your own unique financial situation or needs.

Neither MMLIS nor any third party has made any determination that any recommendation, investment or strategy referenced in any third-party research report is appropriate for you based on your investment objectives and financial situation.

MMLIS is not responsible or liable for any content of a third-party research report, nor is MMLIS liable for losses resulting from the use of any third-party research report. If you use a third-party research report, you are doing so at your own risk.

E. Trusted Contact Information

Every time you open an account, MMLIS is required to ask if you would like to provide the name and contact information for a Trusted Contact Person. It is your decision if you wish to provide this information.

By choosing to provide information about a trusted contact person, you authorize MMLIS to contact that person and disclose information about your account(s) in the following circumstances:

- To address possible financial exploitation.
- To confirm the specifics of your current contact information or health status.
- To identify a legal guardian, executor, trustee or holder of power of attorney.
- Any other reason permitted by FINRA Rule 2165 (Financial Exploitation of Specified Adults).

The Trusted Contact Person will be contacted for informational purposes only and will have no authority to act upon your account(s) unless previously provided (examples: an authorized person on an entity account or a joint account held with the identified Trusted Contact Person).

Business Continuity Plan (BCP)

Each business function within MMLIS maintains a detailed recovery plan that documents the steps necessary to continue critical operations following various types of business interruptions. These plans are updated regularly to reflect current business operations and the environment in which we operate.

Generally, we will be able to resume critical business operations within 24 hours of an interruption. Events may result in a business interruption impacting our home office in Springfield, Massachusetts or your local community and the office maintained by your local representative. We have taken both possibilities into consideration.

Transactions in your account are generally processed at our home office in Springfield, Massachusetts. This is also where many records concerning your account and our business operations are maintained. We have plans in place to conduct business from alternate locations if business is interrupted at our home office.

For business interruptions that affect only our building, business operations may be conducted from other facilities owned by MassMutual in the surrounding area. Our operations can be relocated to MassMutual facilities in other geographic locations in the event of a more widespread business interruption.

Our systems recovery program is supported by detailed recovery plans that document how our critical technical infrastructure and applications (administered in a data center maintained by MassMutual) will be restored in the event of a business interruption. An uninterruptable power supply and back-up generators protect the data center from extended power outages.

Systems are backed-up and tapes are stored at an offsite location. Physical security of the data center is appropriately controlled. In the event the main data center is unavailable, MassMutual contracts with a national vendor of recovery services to restore the necessary applications.

MMLIS does not maintain physical custody of customers' funds or securities. For our customers with mutual fund or variable product accounts purchased directly from the product sponsor, customers' funds and securities are maintained at each respective product sponsor. In the event of an internal or external significant business disruption **(SBD)**, if telephone service is available, our registered representatives would directly contact the product sponsor on the client's behalf.

For customers with brokerage accounts, customers' funds or securities are maintained at our clearing firm, National Financial Services. In the event of an internal or external SBD, if telephone service is available, our registered persons will take customer orders or instructions and contact our clearing firm on their behalf, and if our web access is available, our firm will post on our website that customers may access their funds and securities by contacting their registered representative.

In the event of a business interruption affecting our home office, your primary contact should continue to be your Registered Representative. Your Registered Representative will be informed as to which of our contingency plans has been put into effect to continue processing business and allow access to your funds.

If a business interruption affects your local community, you may be unable to reach your local Registered Representative or anyone in his or her office. Under such circumstances, contact the home office: MML Investors Services, 1295 State Street, Springfield, MA, 01111-0001. Phone: 1-800-731-7109,
Fax: 1-877-665-4749.

MMLIS's Privacy Policy

At MMLIS, we recognize that our relationships with you are based on integrity and trust. As part of that trust relationship, we want you to understand that in order to provide our investments and services to you, we must collect, use and share personal information about you. This Privacy Notice describes policies and practices about how we protect, collect and share personal information related to the investments and services you receive from us. It also describes how you can limit some of that sharing.

We Protect Your Personal Information By:

- Using security measures that include physical, electronic and procedural safeguards to protect your personal information from unauthorized access or use in accordance with state and federal requirements.
- Training employees to safeguard personal information and restricting access to personal information to those employees who need it to perform their job functions.
- Contractually requiring business partners with whom we share your personal information to safeguard it and use it exclusively for the purpose for which it was shared.

Personal Information We May Collect:

The types of personal information we may collect depends on the type of product or service you have with us and may include:

- Information that you provide to us on applications or forms, during conversations with us or our representatives, or when you visit our website (for example, your name, address, Social Security number, date of birth, income, and assets).
- Information about your transactions with us and our affiliates, including your account balances and transactional history.
- Information from third parties such as consumer or other reporting agencies or other institutions if you transfer positions or funds to us.

We May Share All of the Personal Information We Collect, as Described Above, With:

- Registered Representatives who provide our products and services to you;
- Our affiliated companies, such as insurance or investment companies, insurance agencies or broker-dealers that market our products and services to you;
- Companies that perform marketing or administrative services for us;
- Non-affiliated 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;
- Courts and government agencies in response to court orders or legal investigations;
- Credit bureaus; and
- Other financial institutions with whom we may jointly market products, if permitted in your state.
- In addition, we may share certain of your personal information with your MMLIS Registered Representative, when they leave MMLIS to join another financial institution (whom we call a "**departing representative**") so that they can continue to work with you at their new firm.

Important Privacy Choices

MMLIS respects your privacy choices. If you prefer that we do not share your personal information about your accounts held with us with your departing representative, you can opt out of such sharing, that is, you may direct us not to do so. If you wish to opt out of the sharing of your personal information with your departing representative, you may call us at 1-855-520-7715.

You may make this privacy choice and contact us at any time, however, if we do not hear from you, we may share your information with your departing representative as described above. If this is a joint account, if one joint owner tells us not to share information that choice will apply to the other owner or owners. If you have already told us your choice, there is no need to do so again.

Other than as described above, we will only share your personal information as permitted by law and, if the law requires us to obtain your consent or give you the opportunity to opt out of some types of sharing, we will do so before sharing the information.

For California and Vermont residents, we will not share your personal information with your departing representative unless we receive your express consent.

If you are no longer our customer, we may continue to share your personal information as described in this Privacy Notice.

If you have any questions or concerns about this Privacy Notice, please contact us at 1-855-520-7715.

APPENDIX B — BROKERAGE COMMISSION SCHEDULE

1. Commissions on Equities, Exchange Traded Funds and Options

Transaction Amount	Commission Rate*
$0 – $2,499	$30 + Maximum of 2.50% of $ amount
$2,500 and above	Maximum of 2.50% of $ amount

Note: Rep has the ability to discount all commissions. Commission capped at 5% of principal.

*$15 surcharge on foreign equity transactions

We offer option contracts for you to buy or sell. Options are contracts that give you the right, but not the obligation, to buy or sell an underlying asset at a fixed price within a certain period of time. An option contract that gives you the right to buy the underlying asset is referred to as a "call" option, and an option contract that gives you the right to sell the underlying asset is referred to as a "put" option.

More information about options contracts is available on the options disclosure document, which includes required disclosures of the characteristics and risks of standardized options contracts. It is available at https://www.theocc.com/company-information/documents-and-archives/options-disclosure-document.

2. Commissions on Fixed Income

Product Type	Commission Rate
Over the Counter Secondary Bonds Certificates of Deposit	MMLIS acts as principal; mark-up not to exceed 2.00% of amount.
New Issue Certificates of Deposit	MMLIS acts as principal; specific mark-up as defined in the Prospectus. Commissions generally range from 3.00 to 5.00%
New Issue Structured Products	MMLIS acts as principal; specific mark-up as defined in the Term Sheet and/or the Prospectus.

3. Commissions on Unit Investment Trusts

Transaction Type	Commission Rate
Purchase	Sales charge assessed by UIT

APPENDIX C — NFS BROKERAGE ACCOUNT FEE SCHEDULE

Annual Client Account fees

Basic Brokerage Account	$0
Premiere Select IRA and Retirement Plan Annual Account Maintenance Fee[1,8]	$35
Premiere Select Mutual Fund Only Annual Account Maintenance Fee[1,2,3]	$10

Termination Fees

Premiere Select Retirement Account	$125
Outgoing Transfer of Assets	$50 for Non-Qualified Accounts

Cash Management Fees

Select Access Account (includes direct deposit, direct debit and bill pay)	$10 per year
With the option to add any of these individual features:	
Checkwriting	$5 per year
Visa Debit Card	$5 per year
Premier Access Account (includes direct deposit, direct debit, bill pay, checkwriting and debit card)	$100 per year
ATM Fees (in-network)	$1 ATM Fee per withdrawal
ATM Fees (non-network)	Varies
Check Reorder Fee	Free
Legacy Brokerage Access Account	Free
Premiere Select IRA Checkwriting	Free
Returned Checks/ACH	$25 per check
Bounced Check – BNY Mellon Drafts	$15 per check
Copy of a check	$2.50

[1] IRAs established after September 15 are not subject to the maintenance fee for the current year.

[2] Accounts choosing to convert to the Mutual Fund Only option will be charged a one-time $50 conversion fee.

[3] SIMPLE IRAs are not eligible for the reduced $10 Annual Maintenance Fee.

[4] Annual Custody and Valuation fees will be capped at $500 per account per year.

[5] Broker's Call Rate is the interest rate charged by banks on loans made to broker-dealers, who use these loan proceeds to make margin loans to their clients.

[6] List of specific funds and CUSIPs can be found on Wealthscape℠.

Miscellaneous Fees

Transfer + Ship Securities (book entry only)	$25 per certificate
Transfer + Ship Securities (paper certificate)	$500 per certificate
Legal Transfers	$150 per CUSIP
Legal Returns	$75 per CUSIP
Physical Reorganizations	$150 per CUSIP
Safekeeping on Physical Certificates	$10 per security
Stop Payments	$15 per transaction
990-T Tax Return Filing Fee	$75
Wire Fee	$15
Foreign Transfer	$200 per CUSIP
Overnight Fee	$7.50
Cash Debit Balance Interest Charge	Broker's Call + 3%[5]
Transactional Surcharge Funds[6]	$10
Shipping + Handling Fee[7]	$3.50 per trade
Paper Statement/Confirmation Fee	$20 per year[9]
Mailgrams	$5 per event
Trade and Margin Extensions	$12 per event

Alternative Investment Fees

Registered Alternative Investment[4]	$35 per position per year
Non-Registered Alternative Investment[4]	$125 per position per year
Alternative Investment Transfer or Re-registration	$50 per transaction

[7] Trades exempt from the miscellaneous shipping and handling fee are mutual funds, trades in Delivery Versus Payment/Receive Versus Payment accounts, and all new security issues.

[8] Premiere Select IRA Maintenance Fee: This is an annual fee and applies to the following Premiere Select Retirement Accounts: Traditional and Rollover IRAs, Beneficiary IRA, Roth IRAs, Money Purchase Plans (including Beneficiary Plans), SIMPLE IRAs, Profit Sharing Plans (including Beneficiary Plans), SEP IRAs, Solo 401(k)s.

[9] This fee will be assessed in June. Accounts established in the same calendar quarter as the fee is charged will not be assessed a fee for the first year. The client must elect eDelivery for both statements and confirms to avoid this fee. Effective June 2025, this fee increased from $10 to $20.

Collection day for the annual fee is typically the first week in November. Please note that the fee is not charged to Premiere Select Retirement Accounts held in a Corporate Registered Investment Adviser Program.

For clients with an aggregate account relationship of $750,000+ reported under the same primary Social Security Number, annual fees will be waived. Eligible account relationships must reside on the securities brokerage platform.

New IRA accounts opened between September 19th and December 31st of the current year will be excluded from the retirement fee billing process.

APPENDIX D — CREDIT TERMS ON MARGIN TRANSACTIONS

If you request and are approved for a margin loan for the purpose of buying securities, you will be charged interest on the loan. The annual rate of interest you will be charged may vary from a minimum of 0.50% to a maximum of 1.5% above the National Financial Base Lending Rate (NFBLR), depending upon the amount of your average debit balance.

The NFBLR is set at the discretion of NFS (who extends the credit) with references to commercially recognized interest rates, industry conditions regarding the extension of margin credit, and general credit conditions.

Margin Rate

Average Debit Balance	Interest to be Charged Above NFBLR
$0 – $9,999	1.50%
$10,000 – $24,999	1.25%
$25,000 – $99,999	1.00%
$100,000 – $499,999	0.75%
$500,000 or more	0.50%

In determining the daily debit balance and the resulting rate of interest, MMLIS combines the margin account balances in all accounts, except Type 3-Short Accounts and Type 9-Income Accounts. Interest is then computed for each account based on the rate resulting from averaging the daily debit balances during the interest period.

Your monthly statement will show the dollar amount of interest and the interest rate charged to your account. There will be no interest charge reflected on your statement if your monthly charge is less than $1.00. An interest cycle will cover the period beginning with the first business day following the 20th of each month.

Separate charges at an annual rate of 1.50% above NFBLR may be made in the Type 1-Cash Account in connection with:

- Prepayments (by approval only) — payments to you of the proceeds of a security sale before the regular settlement date.
- "When-Issued" transactions — when the market price of the "when-issued" security deteriorates from your contract price by an amount that exceeds your cash deposit, interest may be charged on such excess.
- Late payments — payments for securities purchased that are received past settlement date.

For more information on margin, please refer to your customer agreement.

APPENDIX E — SPECIAL CONSIDERATIONS FOR RETIREMENT PLAN ROLLOVER OPTIONS

If you currently participate in a 401(k) or other employer-sponsored qualified plan and decide to change jobs, you have choices for investing your retirement plan assets. It is important that you understand the advantages and disadvantages of each option to ensure that you make informed decisions. Among other things, you should carefully consider changes in services, fees, expenses, commissions and investment options, tax implications and potential financial professional conflicts of interest before making your decision. The chart below outlines four courses of action and some of the related considerations that you should review with your financial professional and tax advisor.

YOUR CHOICES	ADVANTAGES	DISADVANTAGES	THIS CHOICE MAY WORK WELL FOR YOU
Leave your assets in your former employer's plan	• Your investment strategy can continue without interruption. • Your only action will be to make sure the benefits office has your current home address.	• In some situations employers do not permit former employees to leave money in the plan. • You will be limited to the investment choices available in the plan. • Many plans publish educational information in employee newsletters or other materials distributed at work. Once you are no longer an employee, you may find that information you receive about the plan is limited. • Corporate reorganizations and/ or changing employees may make it difficult to keep your former employer informed about changes in your address or status. • Many plans limit the number of withdrawals available to former employees.	• Want to keep your assets invested for retirement. • Would like to remain invested either due to current market conditions or because you are satisfied with the investment choices. • Have an outstanding loan balance which you are unable to repay at this time. • Are concerned about fee and expense increases.
Move your assets into your new employer's plan	• All your employer-sponsored retirement assets will be in one plan.	• Some plans do not permit transfers of assets into the plan, or have a waiting period. • Your new plan may be limited in investment choices and services. • The plan may limit withdrawals or other access. • The new plan's fees and expenses may be higher than the original.	• Want to keep your assets invested for retirement. • Want to keep all retirement assets in a single account. • Are satisfied with the investment choices. • Are still working after age 72 and want to delay payment of RMDs
Receive your plan assets as a distribution (check) from your former employer	• Once you pay taxes, the remainder is available for your immediate use.	• Income and penalty taxes could take a substantial portion of your distribution. Your employer will withhold 20% of the proceeds for tax purposes, although the actual taxes you owe may be higher. Also, if you are under age 59½, an IRS federal penalty of 10% may apply in addition to federal income tax. • If you are not retiring right now, you may need these assets later to provide retirement income.	• Need the after-tax value of your assets to provide for an immediate expense. • Will not need these assets later to provide retirement income.

SPECIAL CONSIDERATIONS FOR RETIREMENT PLAN ROLLOVER OPTIONS (continued)

YOUR CHOICES	ADVANTAGES	DISADVANTAGES	THIS CHOICE MAY WORK WELL FOR YOU
Transfer your assets directly into an IRA	• You will maintain the tax-advantaged status of your assets. • You can choose an investment that matches your investment objectives. • Having assets transferred directly to an IRA avoids any income tax withholding. • You could convert assets to a Roth IRA.* • If you decide that you want to take distributions before the age of 59½, you may choose substantially equal periodic payments under Internal Revenue Code Section 72(t)** and avoid early withdrawal penalties. • You may be able to roll your assets into a plan provided by a future employer, if you choose.	• You need to spend time and energy choosing an investment vehicle for the IRA and the investments available in the current plan may not be available outside the plan. • IRAs do not permit loans, so if your former employer's plan permits loans to former employees, you would be giving up that benefit. • Conversion to a Roth IRA subjects amount converted to current income tax. • If you leave your job between ages 55 and 59½, you may be able to take penalty-free withdrawals from a plan. In contrast, you generally cannot take penalty-free withdrawals from an IRA until age 59½. It may also be easier to borrow money from a plan. • The fees and expenses charged for the IRA and the chosen investment vehicle(s), including commissions or other fees paid to the financial advisor, may be higher than the current plan. • Under federal law, plan assets generally have unlimited protection from creditors. IRA assets are only protected in bankruptcy proceedings. State laws vary as to whether IRA assets are protected in lawsuits. • Services provided to the employee through the plan may not be available with the IRA. • Transfers of appreciated employer stock may be immediately taxable. • Consider whether funds from the IRA are coming from your qualified plan at your current employer. There may be adverse consequences associated with withdrawals, such as suspension of employer contribution matches, loss of access to funds through loans, etc.	• Want to keep your assets invested for retirement. • Want to create a new investment strategy. • Are interested in eventually converting your assets to a Roth IRA. See your tax advisor to discuss the advantages/ disadvantages for your situation. • Are retiring and would like to use your assets to provide retirement income.

* The primary advantage of a Roth IRA is that qualified distributions are tax-free at the federal level and in most states. However, in order to convert your assets to a Roth IRA, you would be required to pay income taxes on your deductible contributions and earnings now. Your tax advisor can provide an individual income tax analysis for your situation.

** According to Section 72(t) of the Internal Revenue Code, people who are not yet age 59½ can take withdrawals that will be exempt from the 10% federal income tax penalty (though subject to normal income tax) for early withdrawals from an IRA if those withdrawals are part of a series of substantially equal payments made on a regular basis (i.e., at least one a year), calculated according to IRS rules and payments continue for the longer of five years or until the account holder reaches age 59½. Any change to the series of payments before the required time period has been reached may be considered a modification and subject you to an additional penalty.

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