

Reg BI Disclosure

1. ABOUT MML INVESTORS SERVICES

This required disclosure brochure (**Reg BI Disclosure**) contains information about MML Investors Services, LLC (**MMLIS, we, 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**), and closed-end funds. In addition, MMLIS makes certain alternative investment options available to customers that 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) at the time of purchase.

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 with MMLIS.

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 are registered only as IARs of MMLIS. MMLIS financial professionals who are only registered as

IARs of MMLIS are not able 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 by those exams. All of 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 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. For example, while Series 7 Registered Representatives are licensed to sell options, MMLIS requires Registered Representatives to take an additional options training course and gain firm approval to offer options to customers.

The chart in Section 3 summarizes the broker-dealer investments MMLIS's Registered Representatives can provide based on the registrations that 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 broker-dealer 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, which is available at <https://brokercheck.finra.org/>, and is 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; MMLIS may make additional types of investments available on a limited basis.

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*	—	✓

TYPES OF INVESTMENTS AVAILABLE THROUGH MMLIS (continued)

Investment Class	Types of Investments	Series 6	Series 7
Individual Securities	Stocks	—	✓
	Corporate Bonds	—	✓
	Government Bonds	—	✓
	Municipal Bonds	—	✓
	Options*	—	✓
Alternative Investments	Collateralized Mortgage Obligations (CMOs)*	—	✓
	Private Equity Funds*	—	✓
	Private Hedge Funds*	—	✓
Structured Products	Private Real Estate Funds*	—	✓
	Structured Notes*	—	✓
	Structured CDs*	—	✓

* Require additional training and/or approval.

In addition, some alternative investments, such as Oil and Gas, Non-Traded Real Estate Investment Trusts (**REITs**) and Business Development Corporations (**BDCs**) can be transferred into your MMLIS account from an outside firm, but cannot be recommended by or purchased through your Registered Representative.

MMLIS's Registered Representatives can recommend investments that are proprietary and non-proprietary securities products. **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 (**MassMutual**[®]). **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; investments held directly with the product issuer; education accounts (such as 529 Plans); retirement accounts (such as IRA accounts); and certain specialty accounts (such as margin accounts).

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 or some 529 Plans) are available only in direct accounts held at the issuer or its transfer agent or custodian.

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 have the option to use the securities in your brokerage account as collateral for different types of lending. 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 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 broker-dealer 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. The MassMutual Trust Company

MMLIS Registered Representatives can refer you to our affiliate, The MassMutual Trust Company (MMTC), for trust and other fiduciary services. MMTC requires a minimum relationship size of \$1,000,000. MMTC will charge you fees of up to 1.40% of your assets under management with them per year. You will also pay fees and expenses associated with the mutual funds or ETFs, if any, in your account. MMTC 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%. MMLIS pays a portion of the referral fee to our Registered Representatives and a portion to their managers. Please refer to the disclosure from MMTC 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 (a) transaction fees, (b) securities product fees, and (c) 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, such as a stock, bond, or ETF in your brokerage account, you will pay us a commission (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, including markups/markdowns.

Similarly, when you buy certain investment products, such as mutual funds, 529 Plans and unit investment trusts, you will pay a commission or 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 commission.

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 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 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 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.

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 tuition 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 amount (or redemption amount) at the time fund shares are purchased or sold (redeemed), and a portion

of this charge is typically paid as a commission. 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 typically offer 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 typically offer 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" managed or passively managed (such as an index fund) and the asset classes in which the funds invest.
 - **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:** In addition to the expense ratio, 529 Plans also have program

fees that are comprised of the program management fee and the state fee and 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 of Class A share assets. 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 charge a level load, which is usually a 12b-1 fee of 1.00% on an annualized basis of share class assets. 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 when you sell (redeem) your mutual fund shares. The CDSC is typically assessed as a percentage of your investment, and it declines over time and is eventually eliminated the longer you hold your shares. Class C shares are not generally convertible to Class A shares, which makes them more expensive than Class A shares if they are held for the long term. However, some fund companies automatically convert Class C shares to Class A shares after a period of 8 to 10 years. Class C shares are not eligible for breakpoints.
- **Class R Shares** – This share class is available to retirement investors purchasing shares in a mutual fund through employer-sponsored retirement plans, such as 401(k) plans. 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 and what other mutual fund investment you currently hold. 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 the Class C Shares, and the mutual fund may offer large purchase breakpoint discounts from the front-end sales load for Class A Shares. 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 Class A shares. In general, most mutual funds and 529 Plans provide breakpoint discounts to investors who make large purchases at one time.

Breakpoints usually begin at investment amounts of \$50,000. 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 of Class A shares.

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 had invested \$40,000, those amounts can be combined to reach a \$50,000 breakpoint, 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 trigger 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.

Many 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 usually 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 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 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 and 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 your personal 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.

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 contract or policy. 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 an investor 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.

Fees for Variable Insurance Products

There are unique fees and charges for variable annuity and variable life insurance 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 in 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 Contingent Deferred Sales Charge (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, which is a kind of asset-based sales charge. 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:** The variable products we make available 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 0.95% to 1.40% on an annualized basis of total account value. For variable life insurance, this daily charge (which can sometimes be referred to as an asset charge) typically ranges from 0.15% to 1.20% on an annualized basis of total account value.

- **Administrative Charge:** Some variable products we make available 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:** The variable life insurance products we make available 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. See Section 6.A above for a discussion of mutual fund operating expenses.
- **Optional Features and Riders:** Some of the variable products we make available 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 your variable product's account value for these optional features or riders. There may also be a charge when you exercise these optional features or riders.
- **Other Transaction Fees:** Some variable products we make available charge fees for certain transactions, such as excess transfers of money among investment options, making withdrawals (separate from any CDSC), exercising riders and annuitization of the contract value in some states. Information about these fees can be found in each variable product's prospectus.

- **Policy Loans:** On most variable life insurance policies, clients can access portions of their account value in the form of a loan. Clients are charged interest on the loan. 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

For variable annuities and variable life insurance products, the insurance company issuing the variable product pays MMLIS a commission. 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.

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 value of the 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 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. The BGAs receive an override commission from

the insurance company in connection with providing these services. The 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** – 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 or “**CDSC 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 Unit Investment Trust (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.

Like mutual funds, many UITs that charge initial sales charges offer discounts in the sales charge based on the dollar amount or number of units of the investment (called “**price breaks**”). Below is a sample price break schedule – please consult the prospectus of the UIT you are considering buying for a specific price break schedule.

Sample UIT Sales Charge Price Break Schedule

Units Purchased	Sales Charge
Less than 50,000	1.00%
50,000 to 99,999	0.75%
100,000 to 249,999	0.25%
250,000 and above	0.00%

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 at a reduced sales charge. 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. 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 a tax professional regarding your situation. The rollover option may be subject to suspension, modification or termination by the issuer.

D. Exchange Traded Funds (ETFs)

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 ETFs 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 or lower 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.

Most ETFs that are heavily traded have relatively low 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 competition, 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 of which you should be aware. 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) provide 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.

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. The 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. 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, MMLIS and our Registered Representatives have an incentive to encourage you to purchase investments, trade often, and make additional investments.

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).

Our Registered Representatives that are also IARs of MMLIS 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 we receive to our Registered Representatives, which varies from 40% to 82.5% of what we receive, is set annually and is generally based on the amount of commissions earned by the Registered Representative during the prior calendar year. For variable life insurance products, MMLIS pays a minimum of 70% of the commission we receive to our Registered Representatives. Our commission structure creates an incentive for Registered Representatives to recommend more investments and trades this year to earn a higher portion of commissions the following year.

A different commission structure applies when Registered Representatives sell MassMutual variable products. 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 outlined in the range above. When Registered Representatives sell MassMutual 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.

Sales of investments 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, associate 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 MassMutual annuity and insurance products (which can include MassMutual variable products) in order to maintain their MassMutual insurance agent contract. Sales of MassMutual 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 MassMutual 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. In addition, for Registered Representatives contracted as insurance agents, sales of investments 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.

Associate agents. Registered Representatives who are contracted as associate 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 annuity and insurance products to maintain their associate 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 associate 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. Associate 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 are not eligible to receive these health and welfare benefits; however, certain brokers 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.

In addition, MassMutual has provided or made available loans to certain insurance agents and associate agents as an incentive for them to become agents or associate agents of MassMutual. If the agent or associate 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.

The sales requirements, and benefits and recognition programs described above create conflicts of interest and incentives for Registered Representatives to recommend MassMutual products over other, non-proprietary products.

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 and Barings, LLC. MMLIS's affiliates 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. While Invesco is not an affiliate of MMLIS, it is considered a "related party" of MMLIS under applicable accounting standards. Registered Representatives may recommend that you invest in investment products advised and/or distributed by one or more Invesco entities. Registered Representatives do not get paid more for selling Invesco products; however, MassMutual benefits indirectly from sales of Invesco products due to its minority ownership interest.

Offering products issued by MMLIS's affiliated and related parties 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 compensation generated for us from these transactions generally are 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 our clearing firm, NFS, which present a conflict of interest for us. Registered Representatives do not receive any portion of these payments, nor do they receive more or less compensation based on which product you purchase in connection with these payments. 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.

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 issued by an affiliate of NFS). During 2019, MMLIS received in excess of \$4 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.

The various additional payments MMLIS receives from NFS also 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.

Payments from Product Sponsors

MMLIS receives cash payments from various mutual funds (or their affiliates), variable annuity and variable life insurance issuers (or their affiliates), and other product sponsors (**Product Sponsors**) whose products we make available. 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 sales information and lists of Registered Representatives, thus giving Product Sponsors better access to Registered Representatives than product sponsors that do not make payments to MMLIS. 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 \$50,000 to \$5,000,000 annually. The following Product Sponsors made payments in excess of \$500,000 to us in 2019: American Funds, BlackRock, Fidelity Advisor, Invesco, AXA, Brighthouse, Jackson National, Prudential, and Lincoln Financial.

Payments were also received in 2019 from each of the following mutual fund sponsors and/or variable annuity issuers in 2019: AIG, Franklin Templeton, JP Morgan, Lord Abbett, Nationwide, Pacific Life, PIMCO, Putnam, Russell, Transamerica, and Vanguard.

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 the firm. 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.

In addition to revenue sharing and marketing support payments that MMLIS receives from its mutual fund Product Sponsors, the firm also receives networking fees from some of these same firms. Networking fees are typically paid to allow for account-level information to be exchanged and reconciled between MMLIS and a mutual fund issuer. During 2019, MMLIS received networking fee income of less than \$100,000 from each of the following issuers: Franklin Templeton and DWS Investments.

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.

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 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. The 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 a 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 deposited into a designated investment option each business day. MMLIS has designated the NFS Bank Deposit Sweep Program (**BDSP**) as the default cash sweep option for eligible brokerage accounts you open with MMLIS.

Cash invested in the BDSP is placed in an FDIC-insured investment account and earns a yield calculated as an annual interest rate based on the amount invested. At any time, you may select another available cash sweep option such as a non-FDIC insured government money market fund. Non-FDIC insured government money market funds generally pay a higher yield than the FDIC-insured BDSP offered by MMLIS.

The FDIC-insured BDSP is intended to be a short-term vehicle for cash in your brokerage account. Please contact your Registered Representative if you are interested in investing your cash balances in other available investment options and for current yields of such options. Accounts that hold assets on behalf of, or for the benefit of, a for-profit corporation, a partnership, or a limited liability company (**Ineligible Accounts**) are not eligible to participate in the BDSP. MMLIS has designated a government money market fund as the cash sweep option for Ineligible Accounts.

MMLIS receives a portion of the yield on amounts invested in the BDSP in the form of payments from NFS. The portion of the yield MMLIS receives is higher than the portion you receive. If interest rates rise, the payment MMLIS receives from NFS increases. The payments MMLIS receives in connection with the BDSP create a conflict of interest and incentive for MMLIS to designate the BDSP as the cash sweep option. MMLIS Registered Representatives do not receive any portion of these payments.

In addition, these payments create a conflict of interest and incentive for MMLIS to continue to use NFS as its clearing firm and custodian for brokerage accounts. As there are other sweep investment options available in the marketplace, designating the BDSP as the cash sweep option is a material limitation placed on brokerage accounts offered through MMLIS. This material limitation, and MMLIS's receipt of a portion of the yield on the BDSP, creates a conflict of interest and incentive for MMLIS to direct you to utilize the BDSP over other available cash sweep options.

With respect to other cash sweep options available, MMLIS typically receives payments from the sponsor of available money market sweep options or its affiliates. These payments are a conflict of interest and incentive for MMLIS to designate or make available a particular money market fund as a cash sweep option over other available investment options.

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.

8. RISK DISCLOSURES

A. 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.

B. Risk of Funding Individual Retirement Accounts (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.

C. 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.

9. 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.



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: 1-800-542-6767, 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 ¹
\$2,500 and above	Maximum of 2.50% of \$ amount ¹

* \$15 surcharge on foreign equity transactions

¹ The maximum rate of 2.50% is effective on August 10, 2020. Between August 1, 2020 and August 10, 2020, the maximum rate was 2.00%.

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/about/publications/character-risks.jsp>.

2. Commissions on Fixed Income

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

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

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 certificate
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

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

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 WealthscapeSM.

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.

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 15th and December 31st of the current year will be excluded from the retirement fee billing process.

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	<ul style="list-style-type: none"> Your investment strategy can continue without interruption. Your only action will be to make sure the benefits office has your current home address. 	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> All your employer-sponsored retirement assets will be in one plan. 	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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 70½ and want to delay payment of RMDs

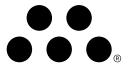
SPECIAL CONSIDERATIONS FOR RETIREMENT PLAN ROLLOVER OPTIONS (continued)

YOUR CHOICES	ADVANTAGES	DISADVANTAGES	THIS CHOICE MAY WORK WELL FOR YOU
Transfer your assets directly into an IRA	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • 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.
Receive your plan assets as a distribution (check) from your former employer	<ul style="list-style-type: none"> • Once you pay taxes, the remainder is available for your immediate use. 	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • Need the after-tax value of your assets to provide for an immediate expense. • Will not need these assets later 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.

Information is as of January 4, 2021 and is subject to change.



Securities, investment advisory, and financial planning services offered through qualified representatives of MML Investors Services, LLC (MMLIS), a registered investment adviser and broker/dealer (Member FINRA, www.FINRA.org, and SIPC, www.SIPC.org) and a MassMutual subsidiary, 1295 State Street, Springfield, MA 01111-0001.

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