

MassMutual Select Funds

MassMutual Select Total Return Bond Fund

Ticker: Class I–MSPZX, Class R5–MSPSX, Service Class–MSPHX, Administrative Class–MSPLX, Class A–MPTRX, Class R4–MSPGX, Class R3–MSPNX

Before you invest, you may want to review the Fund’s prospectus, which contains more information about the Fund and its risks. You can find the Fund’s prospectus and other information about the Fund online at www.massmutual.com/funds. You can also get this information at no cost by calling 1-888-309-3539 or by sending an email request to fundinfo@massmutual.com.

INVESTMENT OBJECTIVE

This Fund seeks maximum total return, consistent with preservation of capital and prudent investment management.

FEES AND EXPENSES OF THE FUND

This table describes the fees and expenses that you may pay if you buy and hold shares of the Fund. For Class A shares, you may qualify for sales charge discounts if you invest, or agree to invest in the future, at least \$25,000 in MassMutual funds. More information about these and other discounts is available in the section titled *Sales Charges by Class* beginning on page 145 of the Fund’s Prospectus or from your financial professional.

Shareholder Fees (fees paid directly from your investment)

	Class I	Class R5	Service Class	Admini- strative Class	Class A	Class R4	Class R3
Maximum Sales Charge (Load) Imposed on Purchases (as a % of offering price)	None	None	None	None	4.75%	None	None
Maximum Deferred Sales Charge (Load) (as a % of the lower of the original offering price or redemption proceeds)	None	None	None	None	None	None	None

Annual Fund Operating Expenses (expenses that you pay each year as a percentage of the value of your investment)

	Class I	Class R5	Service Class	Admini- strative Class	Class A	Class R4	Class R3
Management Fees ⁽¹⁾	.30%	.30%	.30%	.30%	.30%	.30%	.30%
Distribution and Service (Rule 12b-1) Fees	None	None	None	None	.25%	.25%	.50%
Other Expenses	.04%	.14%	.24%	.34%	.34%	.24%	.24%
Total Annual Fund Operating Expenses	.34%	.44%	.54%	.64%	.89%	.79%	1.04%

(1) Management Fees have been restated to reflect current fees.

Example

This example is intended to help you compare the cost of investing in the Fund with the cost of investing in other mutual funds. It assumes that you invest \$10,000 in each share class of the Fund for the time periods indicated and then redeem all of your shares at the end of those periods. For Class A shares, the example includes the initial sales charge. The example also assumes that your investment earns a 5% return each year and that the Fund’s operating expenses are exactly as described in the preceding

table. Although your actual costs may be higher or lower, based on these assumptions your costs would be:

	<u>1 Year</u>	<u>3 Years</u>	<u>5 Years</u>	<u>10 Years</u>
Class I	\$ 35	\$109	\$191	\$ 431
Class R5	\$ 45	\$141	\$246	\$ 555
Service Class	\$ 55	\$173	\$302	\$ 677
Administrative				
Class	\$ 65	\$205	\$357	\$ 798
Class A	\$562	\$745	\$945	\$1,519
Class R4	\$ 81	\$252	\$439	\$ 978
Class R3	\$106	\$331	\$574	\$1,271

Portfolio Turnover

The Fund pays transaction costs, such as commissions, when it buys and sells securities (or “turns over” its portfolio). A higher portfolio turnover rate may indicate higher transaction costs and may result in higher taxes when Fund shares are held in a taxable account. These costs, which are not reflected in annual fund operating expenses or in the example, affect the Fund’s performance. During the most recent fiscal year, the Fund’s portfolio turnover rate was 264% of the average value of its portfolio.

INVESTMENTS, RISKS, AND PERFORMANCE

Principal Investment Strategies

Under normal circumstances, the Fund invests at least 80% of its net assets (plus the amount of any borrowings for investment purposes) in a diversified portfolio of investment grade fixed income securities (rated Baa3 or higher by Moody’s, BBB- or higher by Standard & Poor’s, BBB- or higher by Fitch, or A-2 by S&P, P-2 by Moody’s, or F-2 by Fitch for short-term debt obligations, or, if unrated, determined by the Fund’s subadviser, *Metropolitan West Asset Management, LLC* (“MetWest”), to be of comparable quality). These typically include bonds, notes, collateralized bond obligations, collateralized debt obligations, mortgage-related and asset-backed securities, municipal securities, private placements, and securities subject to legal restrictions on resale pursuant to Rule 144A. These investments may have interest rates that are fixed, variable, or floating. The Fund invests in securities of varying maturities issued by domestic and foreign corporations and governments (and their agencies and instrumentalities). MetWest focuses the Fund’s portfolio holdings in areas of the bond market (based on quality, sector, coupon, or maturity) that the subadviser believes to be relatively undervalued.

The Fund may invest up to 20% of its net assets in below investment grade debt securities (“junk” or “high yield” bonds), including securities in default and bank loans. In the event that a security is downgraded after its purchase by the Fund, the Fund may continue to hold the security if MetWest considers doing so would be consistent with the Fund’s investment objective.

The Fund may invest up to 25% of its total assets in foreign securities that are denominated in U.S. dollars. The Fund may also invest up to 15% of its total assets in foreign securities that are not denominated in U.S. dollars and up to 10% of its total assets in emerging market foreign securities.

The Fund may but will not necessarily engage in foreign currency forward transactions to take long or short positions in foreign currencies in order to seek to enhance the Fund’s investment return or to seek to hedge or to attempt to protect against adverse changes in currency exchange rates. In pursuing its investment objective, the Fund may (but is not obligated to) use a wide variety of exchange-traded and over-the-counter derivatives, including options, futures contracts, and swap contracts for hedging or investment purposes as a substitute for investing directly in securities or to adjust various portfolio characteristics, including the duration (interest rate volatility) of the Fund’s portfolio. Use of derivatives by the Fund may create investment leverage.

The Fund may purchase and sell securities on a when-issued, delayed delivery, or forward commitment basis. The Fund may normally short sell up to 25% of the value of its total assets for hedging or investment purposes.

The Fund may also invest in money market securities, including commercial paper. The Fund may enter into repurchase agreement transactions. The Fund may hold a portion of its assets in cash or cash equivalents. The Fund may enter into dollar roll or reverse repurchase agreement transactions.

MetWest intends for the Fund’s portfolio duration to be between two to eight years. The dollar-weighted average maturity of the Fund’s portfolio is expected to range from two to fifteen years. Duration measures the price sensitivity of a bond to changes in interest rates. Duration is the dollar weighted average time to maturity of a bond utilizing the present value of all future cash flows.

MetWest employs a value-oriented fixed income management philosophy with a goal of consistently

outperforming the portfolio benchmark while maintaining volatility similar to the benchmark. The investment process is predicated on a long-term economic outlook, which is determined by the investment team on a quarterly basis and is reviewed constantly. Investments are characterized by diversification among the sectors of the fixed income marketplace. The investment management team seeks to achieve the desired outperformance through the measured and disciplined application of five fixed income management strategies which include duration management, yield curve positioning, sector allocation, security selection, and opportunistic execution.

The first three strategies are top-down in orientation and start with a decision of where within the plus-or-minus one year range around the benchmark the duration should be established. Then comes a determination of how the overall average duration is to be effected – with a concentration of intermediate maturity issues or a combination of long- and short-term issues. The relative value decision regarding where to overweight/underweight sectors, including governments, agencies, corporates, mortgages, or asset-backed securities, is dependent on the current market environment. Bottom-up security selection involves the day-to-day fundamental analysis of available bond market opportunities, while execution is characterized by the aggressive and informed negotiation of the prices at which transactions take place.

The Fund expects that it will engage in active and frequent trading and so will typically have a relatively high portfolio turnover rate.

Principal Risks

The following are the Principal Risks of the Fund. The value of your investment in the Fund could go down as well as up. You can lose money by investing in the Fund.

Bank Loans Risk Many of the risks associated with bank loans are similar to the risks of investing in below investment grade debt securities. Changes in the financial condition of the borrower or economic conditions or other circumstances may reduce the capacity of the borrower to make principal and interest payments on such instruments and may lead to defaults. Senior secured bank loans are typically supported by collateral; however the value of the collateral may be insufficient to cover the amount owed to the Fund, or the Fund may be prevented or delayed from realizing on the collateral. Some loans may be unsecured; unsecured loans generally present a greater risk of loss to the Fund if the issuer defaults. If

the Fund relies on a third party to administer a loan, the Fund is subject to the risk that the third party will fail to perform its obligations. In addition, if the Fund holds only a participation interest in a loan made by a third party, the Fund's receipt of payments on the loan will depend on the third party's willingness and ability to make those payments to the Fund. The settlement time for certain loans is longer than the settlement time for many other types of investments, and the Fund may not receive the payment for a loan sold by it until well after the sale; that cash would be unavailable for payment of redemption proceeds or for reinvestment. Interests in other bank loans may not be readily marketable and may be subject to restrictions on resale. In some cases, negotiations involved in disposing of indebtedness may require weeks to complete. Consequently, some indebtedness may be difficult or impossible to dispose of readily at what the Fund believes to be a fair price.

Below Investment Grade Debt Securities Risk Below investment grade debt securities, commonly known as "junk" or "high yield" bonds, have speculative characteristics and involve greater volatility of price and yield, greater risk of loss of principal and interest, and generally reflect a greater possibility of an adverse change in financial condition that could affect an issuer's ability to honor its obligations.

Cash Position Risk If the Fund holds a significant portion of its assets in cash or cash equivalents, its investment returns may be adversely affected and the Fund may not achieve its investment objective.

Credit Risk Credit risk is the risk that an issuer, guarantor, or liquidity provider of a fixed-income security held by the Fund may be unable or unwilling, or may be perceived (whether by market participants, ratings agencies, pricing services or otherwise) as unable or unwilling, to make timely principal and/or interest payments, or to otherwise honor its obligations. The Fund may also be exposed to the credit risk of its counterparty to repurchase agreements, reverse repurchase agreements, swap transactions, and other derivatives transactions, and to the counterparty's ability or willingness to perform in accordance with the terms of the transaction. The value of such transactions to the Fund will depend on the willingness and ability of the counterparty to perform its obligations, including among other things the obligation to return collateral or margin to the Fund.

Defaulted and Distressed Securities Risk Because the issuer of such securities is in default and is likely

to be in distressed financial condition, repayment of defaulted securities and obligations of distressed issuers (including insolvent issuers or issuers in payment or covenant default, in workout or restructuring, or in bankruptcy or insolvency proceedings) is uncertain.

Derivatives Risk Derivatives can be highly volatile and involve risks different from, and potentially greater than, direct investments, including risks of imperfect correlation between the value of derivatives and underlying assets, counterparty default, potential losses that partially or completely offset gains, and illiquidity. Derivatives can create investment leverage. Losses from derivatives can be substantially greater than the derivatives' original cost and can sometimes be unlimited. If the value of a derivative does not correlate well with the particular market or asset class the derivative is designed to provide exposure to, the derivative may not have the effect anticipated. Derivatives can also reduce the opportunity for gains or result in losses by offsetting positive returns in other investments. Many derivatives are traded in the over-the-counter market and not on exchanges.

Dollar Roll and Reverse Repurchase Agreement Transaction Risk These transactions generally create leverage and subject the Fund to the credit risk of the counterparty.

Fixed Income Securities Risk The values of fixed income securities typically will decline during periods of rising interest rates, and can also decline in response to changes in the financial condition of the issuer, borrower, counterparty, or underlying collateral assets, or changes in market, economic, industry, political, and regulatory conditions affecting a particular type of security or issuer or fixed income securities generally. Certain events, such as market or economic developments, regulatory or government actions, natural disasters, terrorist attacks, war, and other geopolitical events can have a dramatic adverse effect on the debt market and the overall liquidity of the market for fixed income securities. During those periods, the Fund may experience high levels of shareholder redemptions, and may have to sell securities at times when the Fund would otherwise not do so, and potentially at unfavorable prices. Certain securities may be difficult to value during such periods. Fixed income securities are subject to interest rate risk (the risk that the value of a fixed income security will fall when interest rates rise), extension risk (the risk that

the average life of a security will be extended through a slowing of principal payments), prepayment risk (the risk that a security will be prepaid and the Fund will be required to reinvest at a less favorable rate), and credit risk. These risks may be heightened due to the current historically low interest rate environment.

Foreign Investment Risk; Emerging Markets Risk; Currency Risk Investments in securities of non-U.S. issuers (including depositary receipts) entail risks not typically associated with investing in securities of U.S. issuers. Similar risks may apply to securities traded on a U.S. securities exchange that are issued by companies with significant exposure to non-U.S. countries. In certain countries, legal remedies available to investors may be more limited than those available with regard to U.S. investments. Because non-U.S. securities are normally denominated and traded in currencies other than the U.S. dollar, the value of the Fund's assets may be affected favorably or unfavorably by currency exchange rates, exchange control regulations, and restrictions or prohibitions on the repatriation of non-U.S. currencies. Income and gains with respect to investments in certain countries may be subject to withholding and other taxes. There may be less information publicly available about a non-U.S. company than about a U.S. company, and many non-U.S. companies are not subject to accounting, auditing, and financial reporting standards, regulatory framework and practices comparable to those in the U.S. Foreign investments may be subject to the risks of seizure by a foreign government, imposition of restrictions on the exchange or export of foreign currency, other economic sanctions, and tax increases. The securities of some non-U.S. companies, especially those in emerging markets, are less liquid and at times more volatile than securities of comparable U.S. companies. Emerging markets securities are subject to greater risks than securities issued in developed foreign markets, including less liquidity, greater price volatility, higher relative rates of inflation, greater political, economic, and social instability, greater custody and operational risks, and greater volatility in currency exchange rates. Non-U.S. transaction costs, such as brokerage commissions and custody costs may be higher than in the United States. In addition, there may be a possibility of nationalization or expropriation of assets, imposition of currency exchange controls, confiscatory taxation, political or financial instability, and diplomatic developments that could adversely affect the values of the Fund's investments in certain non-U.S. countries.

Frequent Trading/Portfolio Turnover Risk Portfolio turnover generally involves some expense to the Fund and may result in the realization of taxable capital gains (including short-term gains). The trading costs and tax effects associated with portfolio turnover may adversely affect the Fund's performance.

Inflation Risk The value of assets or income from the Fund's investments will be less in the future as inflation decreases the value of money. As inflation increases, the value of the Fund's assets can decline as can the value of the Fund's distributions.

Leveraging Risk Instruments and transactions, including derivatives, dollar rolls, and reverse repurchase agreement transactions, that create leverage may cause the value of an investment in the Fund to be more volatile, could result in larger losses than if they were not used, and tend to compound the effects of other risks.

Liquidity Risk Certain securities may be difficult (or impossible) to sell or positions difficult to close out at a desirable time and price, and the Fund may be required to hold an illiquid investment that is declining in value, or it may be required to sell certain illiquid investments at a price or time that is not advantageous in order to meet redemptions or other cash needs. Some securities may be subject to restrictions on resale. There can be no assurance that there will be a liquid market for instruments held by the Fund at any time.

Management Risk The Fund relies on the manager's investment analysis and its selection of investments to achieve its investment objective. There can be no assurance that the Fund will achieve the intended results and the Fund may incur significant losses.

Market Risk The value of the Fund's portfolio securities may decline, at times sharply and unpredictably, as a result of unfavorable market-induced changes affecting particular industries, sectors, or issuers. Stock markets can decline significantly in response to issuer, market, economic, industry, political, regulatory, geopolitical and other conditions, as well as investor perceptions of these conditions. The Fund is subject to risks affecting issuers, such as management performance, financial leverage, industry problems, and reduced demand for goods or services.

Mortgage- and Asset-Backed Securities Risk Investments in mortgage- and asset-backed securities subject the Fund to credit risk, interest rate risk, extension risk, and prepayment risk, among other

risks. Mortgage-backed and asset-backed securities not issued by a government agency generally involve greater credit risk than securities issued by government agencies. Payment of principal and interest generally depends on the cash flows generated by the underlying assets and the terms of the security. The types of mortgages (for example, residential or commercial mortgages) underlying securities held by the Fund may differ and be affected differently by market factors. Investments that receive only the interest portion or the principal portion of payments on the underlying assets may be highly volatile. The market for mortgage- and asset-backed securities has recently experienced high volatility and a lack of liquidity. As a result, the value of many of these securities has significantly declined.

Repurchase Agreement Risk These transactions must be fully collateralized at all times, but involve some risk to a Fund if the other party should default on its obligation and the Fund is delayed or prevented from recovering the collateral.

Short Sales Risk If the Fund sells a security short, it will make money if the security's price goes down (in an amount greater than any transaction costs) and will lose money if the security's price goes up. There is no limit on the amount of money the Fund may lose on a short sale. The Fund may not be able to close out a short sale when it might wish to do so, or may only do so at an unfavorable price. Short sales can involve leverage. If the Fund invests the proceeds from short positions in other securities the Fund could lose money both on the short positions and on the securities in which it has invested the short proceeds.

Sovereign Debt Obligations Risk Investments in debt securities issued by governments or by government agencies and instrumentalities involve the risk that the governmental entities responsible for repayment may be unable or unwilling to pay interest and repay principal when due. Many sovereign debt obligations may be rated below investment grade ("junk" or "high yield" bonds). Any restructuring of a sovereign debt obligation held by the Fund will likely have a significant adverse effect on the value of the obligation. In the event of default of sovereign debt, the Fund may be unable to pursue legal action against the sovereign issuer or to realize on collateral securing the debt.

U.S. Government Securities Risk Obligations of certain U.S. Government agencies and instrumentalities are not backed by the full faith and credit of the U.S.

Government, and there can be no assurance that the U.S. Government would provide financial support to such agencies and instrumentalities.

Valuation Risk The Fund is subject to the risk of mispricing or improper valuation of its investments, in particular to the extent that its securities are fair valued.

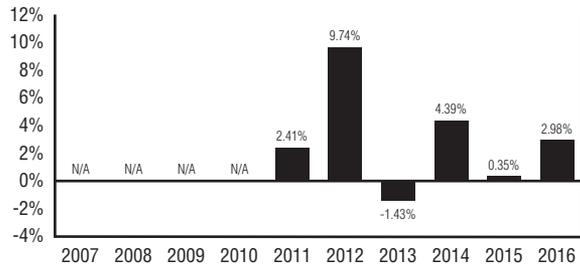
When-Issued, Delayed Delivery, TBA, and Forward Commitment Transaction Risk These transactions may create leverage and involve a risk of loss if the value of the securities declines prior to settlement.

Performance Information

The following bar chart and table provide some indication of the risks of investing in the Fund. The bar chart shows changes in the Fund’s performance from year to year for Class I shares. The table shows how the Fund’s average annual returns for 1 and 5 years, and since inception, compare with those of a broad measure of market performance. The Fund’s name and investment strategy changed on October 27, 2014. The performance results shown below would not necessarily have been achieved had the Fund’s current investment strategy been in effect for the entire period for which performance results are presented. Performance for Class A shares of the Fund for periods prior to its inception date (04/01/14) is based on the performance of Class R5 shares, adjusted for Class A expenses. Performance for Class A shares of the Fund reflects any applicable sales charge. Past performance (before and after taxes) is not necessarily an indication of how the Fund will perform in the future. More up-to-date performance information is available at <http://www.massmutual.com/funds> or by calling 1-888-309-3539.

Annual Performance

Class I Shares



Highest Quarter: 3Q '12, 3.36% Lowest Quarter: 2Q '13, -3.30%

After-tax returns are calculated using the historical highest individual federal marginal income tax rates and do not reflect the impact of state and local taxes. Actual after-tax returns depend on an investor’s tax situation and may differ from those shown. After-tax returns are not relevant to investors who hold Fund shares through tax-advantaged arrangements, such as 401(k) plans or individual retirement accounts. After-tax returns are shown for Class I only. After-tax returns for other classes will vary.

Average Annual Total Returns
(for the periods ended December 31, 2016)

		One Year	Five Years	Since Inception (07/06/10)
Class I	Return Before Taxes	2.98%	3.13%	3.27%
	Return After Taxes on Distributions	1.01%	1.68%	1.89%
	Return After Taxes on Distributions and Sales of Fund Shares	1.84%	1.83%	2.01%
Class R5	Return Before Taxes	2.87%	2.99%	3.12%
Service Class	Return Before Taxes	2.86%	2.90%	3.03%
Administrative Class	Return Before Taxes	2.71%	2.80%	2.92%
Class A	Return Before Taxes	-2.46%	1.59%	1.71%
Class R4	Return Before Taxes	2.53%	2.67%	2.82%
Class R3	Return Before Taxes	2.25%	2.42%	2.56%
Bloomberg Barclays U.S. Aggregate Bond Index (reflects no deduction for fees, expenses, or taxes)		2.65%	2.23%	3.10%

MANAGEMENT

Investment Adviser: MML Investment Advisers, LLC (“MML Advisers”)

Subadviser: Metropolitan West Asset Management, LLC (“MetWest”)

Portfolio Managers:

Tad Rivelle is the Chief Investment Officer and a Generalist Portfolio Manager at MetWest. He has managed the Fund since October 2014.

Laird R. Landmann is the President and a Generalist Portfolio Manager at MetWest. He has managed the Fund since October 2014.

Stephen M. Kane, CFA is a Group Managing Director and Generalist Portfolio Manager at MetWest. He has managed the Fund since October 2014.

Bryan T. Whalen, CFA is a Group Managing Director and Generalist Portfolio Manager at MetWest. He has managed the Fund since October 2014.

PURCHASE AND SALE OF FUND SHARES

Shares of the Fund are generally available to retirement plans, other institutional investors, and individual retirement accounts. Fund shares are redeemable on any business day by written request, telephone or internet (available to certain customers).

TAX INFORMATION

The Fund intends to make distributions that may be taxed as ordinary income, qualified dividend income, or capital gains, unless you are an investor eligible for preferential tax treatment.

PAYMENTS TO BROKER-DEALERS AND OTHER FINANCIAL INTERMEDIARIES

If you purchase the Fund through a broker-dealer or other financial intermediary, the intermediary may receive a one-time or continuing payments from the Fund, MML Advisers or its affiliates, or others for the sale of Fund shares or continuing shareholder services provided by the intermediary. These payments may create a conflict of interest by influencing the broker-dealer or other intermediary to recommend the Fund over another investment. You should contact your intermediary to obtain more information about the compensation it may receive in connection with your investment.