Important Disclosures

Current performance may be lower or higher than return data quoted herein. For more current information, including month-end performance, please call 877-474-5016 or visit https://retire.massmutual.com. The investment return and principal value of an investment will fluctuate; so an investor's shares, units, or units from the underlying investment such that the amount of the revenue received from the underlying investment for administrative services is equal to the projected revenue for the prior year. As a result of this process, the reported performance and expenses of the unitized plan fund is based on but not identical to the performance and expenses reported for the underlying investment.

Maximum Sales Charge/12b-1 Fee/Redemption Fee

Maximum Sales Charges and Redemption Fees are waived for MassMutual retirement plan participants. In addition, 12b-1 Fees are a component of the Net and Gross Expense Ratio; they are not in addition to the overall expense ratio.

Morningstar Proprietary Statistics

Some Morningstar proprietary calculations, including the Morningstar Rating, Morningstar Return, and Morningstar Risk may be calculated based upon pre-inception returns. Please see the pre-inception returns disclosure (above) for more details. For definitions of these statistics including credit quality, please visit www.MassMutual.com/7/mstrdisclosure.pdf.

Morningstar Rating

This fund's star rating is developed after evaluating a fund's performance, returns (and risk) together into one evaluation. To determine a fund's star rating for a given time period (three, five, or 10 years), the fund's risk-adjusted return is plotted on a bell curve: If the fund scores in the top 10% of its category, it receives 5 stars (Highest); if it falls in the next 22.5% it receives 4 stars (Above Average); a place in the middle 35% earns 3 stars (Average); a place in the next 22.5%, receive 2 stars (Below Average); and the bottom 10% get only 1 star (Lowest). The Overall Morningstar Rating is a weighted average of the available three-, five-, and 10-year ratings.

Investment Risk

Money market investments are not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. Although these investments seek to preserve the value of your investment at $1.00 per share, it cannot guarantee that it will do so. The fund’s sponsor has no legal obligation to provide financial support to a money market fund; and you should not expect that the sponsor will provide financial support to the fund at any time. You could lose money by investing in a money market option.

Risks of investing in debt securities investments include the risk that a bond issuer will default by failing to repay principal and interest in a timely manner (credit risk) and/or the risk that the value of their bonds will decline when interest rates increase (interest rate risk). Risks of investing in inflation-protected bond investments include credit risk and interest rate risk. Neither the bond investment nor its yield is guaranteed by the U.S. government.

High-yield bond investments are generally subject to greater market fluctuations and risk of loss of income and principal than lower-yielding debt securities investments. Investments that track a benchmark index are professionally managed. However, the benchmark index itself is unmanaged and does not incur fees or expenses and cannot be purchased independently. Investments in value stocks may remain undervalued for extended periods of time, and the market may not recognize the intrinsic value of these securities. Investments in growth stocks may experience price volatility due to their sensitivity to market fluctuations and dependence on future earnings expectations. Investments in companies with small or mid market capitalization ("small caps" or "mid caps") may be subject to special risks given their characteristic narrow markets, limited financial resources, and less liquid stocks, all of which may cause price volatility. International/global investing can involve special risks, such as political changes and currency fluctuations. These risks are heightened in emerging markets.

A significant percentage of the underlying investments in aggressive asset allocation portfolio investments have a higher than average risk exposure. Investors should consider their risk tolerance carefully before choosing such a strategy.

An investment with multiple underlying investments (which may include Morningstar-rated investments) by J.P. Morgan and any other offered proprietary or non-managed aggressive asset allocation, lifestyle (risk based), lifecycle (target date) or custom blended investments may be subject to the expenses of those underlying investments in addition to those of the investment itself.

Investments may reside in the specialty category due to 1) the level of asset allocation flexibility it precludes classification in standard asset categories and/or 2) investment concentration in a limited group of securities or industry sectors. Investments in this category may be more volatile than less-flexible and/or less-concentrated investments and may be appropriate as only a minor component in an investor's overall portfolio.

Participants with a large ownership interest in a company or employer stock investment may have the potential to manipulate the value of units of this investment option through their trading practices. As a result, special transfer restrictions may apply. This type of investment option presents a higher degree of risk than diversified investment options under the plan because it invests in the securities of a single company.

Investments that invest more of their assets in a single issuer or industry sector (such as company stock or sector investments) involve additional risks, including unit price fluctuations, because of the increased concentration of holdings within the plan.

A participant will be prohibited from transferring into most mutual funds and similar investments if they have transferred into and out of the same investment within the previous 60 days. Certain stable value, guaranteed interest, fixed income and other investments are not subject to this rule. This rule does not prohibit participants from transferring out of any investment at any time.

Target Date (lifecycle)

Generally these investment options are designed to be held beyond the presumed retirement date to offer a continuing investment option for the investor in retirement. The year is not guaranteed to reflect the year in which the investor option name refers to the approximate year an investor in the option would retire and likely would stop making new contributions to the investment option.

However, investors may choose a date other than their presumed retirement date to be more conservative or aggressive depending on their own risk tolerance. They are designed for participants who plan to withdraw the value of their accounts gradually after retirement. Each of these options follows its own asset allocation path (“glide path”) to progressively reduce its equity exposure and become more conservative over time. Options may not reach their most conservative allocation until after their target date. Others may reach their most conservative allocation in their target date year. Investors should consider their own personal risk tolerance, circumstances and financial situation. These options should not be selected solely on a single factor such as age or retirement date. Please consult the prospectus (if applicable) pertaining to the options to determine if their glide path is consistent with your long-term financial plan. Target retirement date investment options’ stated asset allocation may be subject to change.

Investments in these options are not guaranteed and you may experience losses, including losses near, at, or after the target date. Additionally, there is no guarantee that the options will provide adequate income at and through retirement.

Investors should consider an investment’s objectives, risks, charges and expenses carefully before investing. For this and other information, see a fact sheet (investment profile) or the prospectus, if applicable. You may obtain a prospectus or fact sheet from your plan sponsor or visiting www.morningstar.com. Read it carefully before investing.
Investment Objective & Strategy

The investment seeks the highest total return over time consistent with an emphasis on both capital growth and income. The fund invests in a diversified portfolio of other T. Rowe Price stock and bond funds that represent various asset classes and sectors. Its allocation between T. Rowe Price stock and bond funds will change over time in relation to its target retirement date. The fund is managed based on the specific retirement year (target date 2055) included in its name and assumes a retirement age of 65.

Fees and Expenses as of 10-01-19

Prospectus Net Expense Ratio 0.72%
Total Annual Operating Expense 0.72%
Maximum Sales Charge —
12b-1 Fee —
Redemption Fee/Term —

Operations and Management

Fund Inception Date 12-29-06
Portfolio Manager(s) Jerome A. Clark, CFA, Wyatt A. Lee, CFA
Name of Issuer T. Rowe Price
Telephone 800-638-5660
Web Site www.troweprice.com

Benchmark Description: Morningstar Lifetime Mod 2055 TR USD
The index measures the performance of a portfolio of global equities, bonds and traditional inflation hedges such as commodities and TIPS. This portfolio is held in proportions appropriate for a US investor who has a target maturity date of 2055. The Moderate risk profile is for investors who are comfortable with average exposure to equity market volatility.

Category Description: Target-Date 2055
Target-date portfolios provide a diversified exposure to stocks, bonds, and cash for those investors who have a specific date in mind (in this case, the years 2051-2055) for retirement. These portfolios aim to provide investors with an optimal level of return and risk, based solely on the target date. Management adjusts the allocation among asset classes to more-conservative mixes as the target date approaches, following a preset glide path. A target-date portfolio is part of a series of funds offering multiple retirement dates to investors.

Allocation of Assets

Performance

Trailing Returns
Investment Return % YTD 25.38 1 Year 25.38 3 Year 12.32 5 Year 8.86 10 Year 10.46 Since Inception 7.14
Benchmark Return % YTD 25.05 1 Year 25.05 3 Year 11.41 5 Year 8.19 10 Year 9.50 —
Category Average % YTD 24.91 1 Year 24.91 3 Year 11.38 5 Year 8.01 10 Year 9.19 —

Morningstar Rating™
# of Funds in Category —
191
149
15

Quarter End Returns as of 09-30-19
Fund Return % YTD 25.38 1 Year 25.38 3 Year 12.32 5 Year 8.86 10 Year 10.46 Since Inception 7.14
Standardized Return % YTD 25.38 1 Year 25.38 3 Year 12.32 5 Year 8.86 10 Year 10.46 —

Performance Disclosure: The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor’s shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end please visit the website listed under Operations and Management on this page.

Portfolio Analysis as of 09-30-19

Composition as of 09-30-19

| % Assets | U.S. Stocks | 55.8 |
| — | — | — |
| — | Non-U.S. Stocks | 31.7 |
| — | Bonds | 9.8 |
| — | Cash | 2.5 |
| — | Other | 0.2 |

Top 10 Holdings as of 09-30-19

| % Assets | T. Rowe Price Growth Stock | 19.22 |
| — | T. Rowe Price Value | 19.01 |
| — | T. Rowe Price Overseas Stock | 7.91 |
| — | T. Rowe Price International Stock | 7.74 |
| — | T. Rowe Price Equity Index 500 | 6.81 |
| — | T. Rowe Price International Value Eq | 6.77 |
| — | T. Rowe Price Emerging Markets Stock | 4.67 |
| — | T. Rowe Price New Income | 4.47 |
| — | T. Rowe Price Mid-Cap Growth | 4.11 |
| — | T. Rowe Price Mid-Cap Value | 3.66 |

Principal Risks as of 09-30-19

Credit and Counterparty, Foreign Securities, Loss of Money, Not FDIC Insured, Interest Rate, Equity Securities, Restricted/Illiquid Securities, Management, Target Date, Small Cap, Mid-Cap