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
the principal value of an investment will fluctuate;
so an investor's shares/units, when redeemed, may
be worth more or less than their original cost. Investment
portfolio statistics change over time. The investment
is not FDIC-insured, may lose value and is not
guaranteed by a bank or other financial institution.
Some plan investments may be made available through an
unregistered group annuity contract issued to your plan by
the Massachusetts Mutual Life Insurance Company
(“MassMutual”). If that is the case, those plan investments
1.) may be in a separate investment account of MassMutual
that purchases shares/units of one or more underlying
investments, or2.) may be invested directly
in the investment via a separate arrangement between your plan
and a trust company.

Performance

These funds do not reflect performance without adjusting for sales
charges or the effects of taxation. They are adjusted, however, to reflect all actual ongoing fund expenses and
assure reinvestment of dividends and capital gains. Returns are
compared to an appropriate benchmark peer group to help investors evaluate performance. The investment's
performance is generally compared with that of an index. The
index is an unmanaged portfolio of specified securities and
does not reflect any initial or ongoing expenses nor can it be
invested in directly. An investment's portfolio may differ significantly
from the securities in the index. The Index may not be the same as the comparable index noted in the
investment's prospectus (if applicable).

Gross Expense Ratio/Net Expense Ratio

Expense ratios reflect the percentage of the investment's assets paid for operating expenses and management fees. In
contrast to net expense ratios, gross expense ratios do not reflect any fee waivers in effect during the time period, which
are typically disclosed alongside the expense ratios themselves. Net expense ratios reflect the fees actually
borne by investors during the period they are in effect. Investment expense information (including waiver
information) is pulled from an investment's most recent
annual report to Morningstar.

Utilized Plan Fund

If this is a unitized plan fund, it will invest in shares of the
referenced underlying investment. Depending on the level of
demand information is consolidated in the
year-end performance ratio, MassMutual will make adjustments
to the unitized plan fund’s expense to cause each unitized
plan fund to produce ASR equal to the target ASR. If the ASR
MassMutual receives from the underlying investment is more than
MassMutual’s target ASR, MassMutual will allocate with
the unitized plan fund to produce target ASR for the year
period. The reported expense ratio will be the sum of the
reported expenses for the underlying investment and MassMutual’s
target ASR for the plan. If that is the case, that plan ASR
may be in a separate investment account of MassMutual
that purchases shares/units of one or more underlying
investments or, as a separate arrangement between your plan
and a trust company.

Pre-inception Returns

For newer share classes, Morningstar may provide adjusted
historical returns based on the oldest surviving share class of
a fund with at least three years of performance history. This
enables investors to evaluate the historical performance of an investment. Morningstar calculates these returns by
adjusting the initial share class performance for any
difference in fee structure. However, if using the expenses of
the newer share class rather than the expenses of the older
share class would result in better performance, then pre-
inception performance represents that of the older share
class rather than the newer adjustment. The fees and
expenses are referenced in the report’s Operations section.

Adjusted historical returns are not actual returns. Calculation
methodologies utilized by Morningstar may differ from those
applied by other entities, including the investment itself.

Performance

These funds may not reflect performance without adjusting for sales
charges or the effects of taxation. They are adjusted, however, to reflect all actual ongoing fund expenses and
assure reinvestment of dividends and capital gains. Returns are
compared to an appropriate benchmark peer group to help investors evaluate performance. The investment's
performance is generally compared with that of an index. The
index is an unmanaged portfolio of specified securities and
does not reflect any initial or ongoing expenses nor can it be
invested in directly. An investment's portfolio may differ significantly
from the securities in the index. The Index may not be the same as the comparable index noted in the
investment's prospectus (if applicable).

Gross Expense Ratio/Net Expense Ratio

Expense ratios reflect the percentage of the investment's assets paid for operating expenses and management fees. In
contrast to net expense ratios, gross expense ratios do not reflect any fee waivers in effect during the time period, which
are typically disclosed alongside the expense ratios themselves. Net expense ratios reflect the fees actually
borne by investors during the period they are in effect. Investment expense information (including waiver
information) is pulled from an investment's most recent
annual report to Morningstar.

Utilized Plan Fund

If this is a unitized plan fund, it will invest in shares of the
referenced underlying investment. Depending on the level of
demand information is consolidated in the
year-end performance ratio, MassMutual will make adjustments
to the unitized plan fund’s expense to cause each unitized
plan fund to produce ASR equal to the target ASR. If the ASR
MassMutual receives from the underlying investment is more than
MassMutual’s target ASR, MassMutual will allocate with
the unitized plan fund to produce target ASR for the year
period. The reported expense ratio will be the sum of the
reported expenses for the underlying investment and MassMutual’s
target ASR for the plan. If that is the case, that plan ASR
may be in a separate investment account of MassMutual
that purchases shares/units of one or more underlying
investments or, as a separate arrangement between your plan
and a trust company.

Pre-inception Returns

For newer share classes, Morningstar may provide adjusted
historical returns based on the oldest surviving share class of
a fund with at least three years of performance history. This
enables investors to evaluate the historical performance of an investment. Morningstar calculates these returns by
adjusting the initial share class performance for any
difference in fee structure. However, if using the expenses of
the newer share class rather than the expenses of the older
share class would result in better performance, then pre-
inception performance represents that of the older share
class rather than the newer adjustment. The fees and
expenses are referenced in the report’s Operations section.

Adjusted historical returns are not actual returns. Calculation
methodologies utilized by Morningstar may differ from those
applied by other entities, including the investment itself.

Performance

These funds may not reflect performance without adjusting for sales
charges or the effects of taxation. They are adjusted, however, to reflect all actual ongoing fund expenses and
assure reinvestment of dividends and capital gains. Returns are
compared to an appropriate benchmark peer group to help investors evaluate performance. The investment's
performance is generally compared with that of an index. The
index is an unmanaged portfolio of specified securities and
does not reflect any initial or ongoing expenses nor can it be
invested in directly. An investment's portfolio may differ significantly
from the securities in the index. The Index may not be the same as the comparable index noted in the
investment's prospectus (if applicable).

Gross Expense Ratio/Net Expense Ratio

Expense ratios reflect the percentage of the investment's assets paid for operating expenses and management fees. In
contrast to net expense ratios, gross expense ratios do not reflect any fee waivers in effect during the time period, which
are typically disclosed alongside the expense ratios themselves. Net expense ratios reflect the fees actually
borne by investors during the period they are in effect. Investment expense information (including waiver
information) is pulled from an investment's most recent
annual report to Morningstar.
Target-date portfolios provide diversified exposure to stocks, bonds, and cash for those investors who have a specific date in mind (in this case, the years 2036-2040) 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.

### Investment Objective & Strategy

The investment seeks the highest total return over time consistent with 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 2040) included in its name and assumes a retirement age of 65.

### Allocation of Assets

<table>
<thead>
<tr>
<th>Years Until Retirement</th>
<th>% Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td></td>
</tr>
<tr>
<td>80</td>
<td></td>
</tr>
<tr>
<td>60</td>
<td></td>
</tr>
<tr>
<td>40</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td></td>
</tr>
<tr>
<td>-10</td>
<td></td>
</tr>
<tr>
<td>-20</td>
<td></td>
</tr>
<tr>
<td>-30</td>
<td></td>
</tr>
</tbody>
</table>

### Performance

<table>
<thead>
<tr>
<th>Period</th>
<th>Return %</th>
</tr>
</thead>
<tbody>
<tr>
<td>YTD</td>
<td>24.68</td>
</tr>
<tr>
<td>1 Year</td>
<td>24.68</td>
</tr>
<tr>
<td>3 Year</td>
<td>12.14</td>
</tr>
<tr>
<td>5 Year</td>
<td>8.74</td>
</tr>
<tr>
<td>10 Year</td>
<td>10.39</td>
</tr>
<tr>
<td>Since Inception</td>
<td>9.68</td>
</tr>
</tbody>
</table>

### Portfolio Analysis

**Composition as of 09-30-19**

- U.S. Stocks: 53.6%
- Non-U.S. Stocks: 30.1%
- Bonds: 13.6%
- Cash: 2.5%
- Other: 0.2%

**Top 10 Holdings as of 09-30-19**

<table>
<thead>
<tr>
<th>Holding</th>
<th>% Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>T. Rowe Price Growth Stock</td>
<td>17.60</td>
</tr>
<tr>
<td>T. Rowe Price Value</td>
<td>17.50</td>
</tr>
<tr>
<td>T. Rowe Price Equity Index 500</td>
<td>8.04</td>
</tr>
<tr>
<td>T. Rowe Price Overseas Stock</td>
<td>7.54</td>
</tr>
<tr>
<td>T. Rowe Price International Stock</td>
<td>7.39</td>
</tr>
<tr>
<td>T. Rowe Price International Value Eq</td>
<td>6.46</td>
</tr>
<tr>
<td>T. Rowe Price New Income</td>
<td>6.23</td>
</tr>
<tr>
<td>T. Rowe Price Emerging Markets Stock</td>
<td>4.46</td>
</tr>
<tr>
<td>T. Rowe Price Mid-Cap Growth</td>
<td>3.92</td>
</tr>
<tr>
<td>T. Rowe Price Mid-Cap Value</td>
<td>3.47</td>
</tr>
</tbody>
</table>

**Principal Risks as of 09-30-19**

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