

The Platinum 401(k) Retirement Savings Plan

Qualified Default Investment Alternative (QDIA)

Required Annual Employee Notice

We are dedicated to helping you plan and prepare for retirement. The purpose of this notice is to explain how your 401(k) account is invested if you do not provide investment instructions for the investment of your account.

This Qualified Default Investment Alternative (QDIA) Employee Notice:

- 1) Describes when the QDIA is used;
- 2) Provided details regarding the QDIA selected;
- 3) Outlines your right to direct the investment of your plan dollars to other investments available in the Plan or to elect not to have contributions withheld from your pay, if applicable; and
- 4) Explains how you can obtain additional information regarding those additional investment alternatives.

What will happen to my account?

As a participant or beneficiary in the Plan, you have the right to decide how to invest your account. If you do not provide investment instructions, your assets will be invested in the Plan's qualified default investment alternative (QDIA).

Effective 12/31/2018, the Plan's QDIA is the American Funds Target Date Retirement Portfolio. Attached are fund sheets describing the investment objectives, risk and return characteristics and fees and expenses of the QDIA.

If John Hancock has been provided with your date of birth, the QDIA that will be used for your account balance will be the American Funds Target Date Retirement Portfolio that most closely corresponds to your birth year in accordance with the following table:

<u>Birth Year</u>	<u>American Funds Portfolio</u>
1991 -or later	American Funds 2060 Target Date Portfolio
1986 -1990	American Funds 2055 Target Date Portfolio
1981 -1985	American Funds 2050 Target Date Portfolio
1976 -1980	American Funds 2045 Target Date Portfolio
1971 - 1975	American Funds 2040 Target Date Portfolio
1966 - 1970	American Funds 2035 Target Date Portfolio
1961 - 1965	American Funds 2030 Target Date Portfolio
1956 - 1960	American Funds 2025 Target Date Portfolio
1951 - 1955	American Funds 2020 Target Date Portfolio
1946 - 1950	American Funds 2015 Target Date Portfolio
1945 or earlier	American Funds 2010 Target Date Portfolio

If John Hancock has not been provided with your date of birth, the QDIA that is used for your default investment is the American Funds 2010 Portfolio.

What if I don't want my 401(k) money to remain invested in the QDIA?

You do not have to leave your money in the QDIA. If you decide that you want to invest your account differently, you may move all or any part of your account balance to other investment options offered under the Plan.

Your transfer will not be subject to any restrictions, fees or expenses (including redemption fees and similar expenses) during the first 90 days of your first investment in the QDIA or within the period of time it takes to complete your transfer.

After such time period, your transfer from the QDIA will be subject to the same restrictions, fees and expenses as are applicable to other participants who affirmatively elect to invest in the QDIA. Information about these restrictions, fees and expenses are described on the attached fund sheets.

Who can I contact for more information?

To obtain information about the other investment options that are available under your Plan, please visit John Hancock's participant website at

<https://www.jhancockpensions.com>

or call 1-800-395-1113. You can also refer to the "What investment options make up your account" section of your John Hancock participant statement.

For information on how to change your contribution amount or the investment of your account (including transferring out of the QDIA), please contact your employer's Human Resources or payroll department.

W. Michael Montgomery,
Investment Manager, The Platinum 401(k) Retirement Savings Plan
Montgomery Retirement Plan Advisers, Inc.
14502 N. Dale Mabry Highway, Suite 328
Tampa, Florida 33618
813.909.9305

John Hancock USA

All financial obligations under the group annuity contract are the sole obligation of John Hancock Life Insurance Company (U.S.A.).

- ▶ John Hancock is a division of Manulife Financial Corporation, a leading international financial services group that helps people achieve their dreams and aspirations by putting customers' needs first and providing the right advice and solutions. We operate as John Hancock in the United States, and Manulife elsewhere. We provide financial advice, insurance and wealth and asset management solutions for individuals, groups and institutions. Assets under management and administration by Manulife and its subsidiaries were over \$1.1 trillion (US\$849 billion) as of June 30, 2018. Manulife Financial Corporation trades as MFC on the TSX, NYSE, and PSE, and under 945 on the SEHK. Additional information about Manulife can be found at manulife.com.
- ▶ One of the largest life insurers in the United States, John Hancock supports approximately 10 million Americans with a broad range of financial products, including life insurance, annuities, investments, 401(k) plans, college savings plans, and certain forms of business insurance. We also offer advice through Signator, a network of independent financial advisors. Additional information about John Hancock may be found at johnhancock.com.

American Funds Group (American Funds)

- ▶ American Funds, part of Capital GroupSM, has helped investors pursue long-term investment success since 1931. Its consistent approach — in combination with The Capital SystemSM — seeks to achieve superior results over time.
- ▶ The Capital System combines individual accountability with teamwork. Each fund is divided into portions that are managed independently by investment professionals with diverse backgrounds, ages and approaches. An extensive global research effort is the backbone of our system. Investment decisions are based on a long-term perspective, which American Funds believes aligns with the interests of investors.

Allocating assets to only one or a small number of the investment options (other than the Target Date 'Lifecycle' or Target Risk 'Lifestyle' options) should not be considered a balanced investment program. In particular, allocating assets to a small number of options concentrated in particular business or market sectors will subject your account to increased risk and volatility. Examples of business or market sectors where this risk may be particularly high include: a) technology-related businesses, including Internet-related businesses, b) small-cap securities and c) foreign securities. John Hancock does not provide advice regarding appropriate investment allocations.

Risks Applicable to All Funds

Credit and Counterparty Risk. A fund is subject to the risk that the issuer or guarantor of a fixed-income security or other obligation, the counterparty to a derivatives contract or repurchase agreement, or the borrower of a fund's securities will be unable or unwilling to make timely principal, interest, or settlement payments, or to otherwise honor its obligations.

Issuer Risk. An issuer of a security purchased by a fund may perform poorly, and, therefore, the value of its stocks and bonds may decline. Poor performance may be caused by poor management decisions, competitive pressures, breakthroughs in technology, reliance on suppliers, labor problems or shortages, corporate restructurings, fraudulent disclosures, or other factors.

Liquidity Risk. A fund is exposed to liquidity risk when trading volume, lack of a market maker, or legal restrictions impair the fund's ability to sell particular securities or close derivative positions at an advantageous price. Funds with investment strategies that involve securities of companies with smaller market capitalizations, foreign securities, derivatives, or securities with substantial market and/or credit risk tend to have the greatest exposure to liquidity risk.

Manager Risk. The performance of a fund that is actively managed will reflect in part the ability of the manager to make investment decisions that are suited to achieving the fund's investment objective. Depending on the manager's investment decisions, a fund may not reach its investment objective or it could underperform its peers or lose money.

Market Risk. The value of a fund's securities may go down in response to overall stock or bond market movements. Markets tend to move in cycles, with periods of rising prices and periods of falling prices. Stocks tend to go up and down in value more than bonds. If the fund's investments are concentrated in certain sectors, its performance could be worse than the overall market.

Merger and Replacement Transition Risk. In the case of Fund mergers and replacements, the affected Funds that are being merged or replaced may implement the redemption of your interest by payment in cash or by distributing assets in kind. In either case, the redemption of your interest by the affected Fund, as well as the investment of the redemption proceeds by the "new" Fund, may result in transaction costs to the Funds because the affected Funds may find it necessary to sell securities and the "new" Funds will find it necessary to invest the redemption proceeds. Also, the redemption and reinvestment processes, including any transition period that may be involved in completing such mergers and replacements, could be subject to market gains or losses, including those from currency exchange rates. The transaction costs and potential market gains or losses could have an impact on the value of your investment in the affected Fund and in the "new" Fund, and such market gains or losses could also have an impact on the value of any existing investment that you or other investors may have in the "new" Fund. Although there can be no assurances that all risks can be eliminated, John Hancock will use its best efforts to manage and minimize such risks and costs.

Where the redemption of your interest is implemented through a distribution of assets in kind, the effective date of the merger or replacement may vary from the target date due to the transition period, commencing either before or after the date that is required to liquidate or transition the assets for investment in the "new" Fund.

Risk of increase in expenses. Your actual costs of investing in the fund may be higher than the expenses shown in "Annual fund operating expenses" for a variety of reasons. For example, expense ratios may be higher than those shown if a fee limitation is changed or terminated or if average net assets decrease. Net assets are more likely to decrease and fund expense ratios are more likely to increase when markets are volatile.

Risk Disclosures: Additional Risks

Derivatives/Hedging/Strategic Transactions Risk. A fund's use of certain derivative instruments (such as options, futures and swaps) could produce disproportionate gains or losses in excess of the principal amount invested. Derivatives are generally considered more risky than investing directly in securities and, in a down market, could become harder to value or sell at a fair price. The use of derivatives for hedging and other strategic transactions may increase the volatility of a fund and, if the transaction is not successful, could result in a significant loss to a fund.

Emerging Markets Risk. The prices of securities issued by foreign companies and governments located in developing/emerging markets countries may be affected more negatively by inflation, devaluation of their currencies, higher transaction costs, delays in settlement, adverse political developments, the introduction of capital controls, withholding taxes, nationalization of private assets, expropriation, social unrest, war or lack of timely information than those in developed countries.

Foreign Securities Risk. Foreign securities involve special risks, including potentially unfavorable currency exchange rates, limited government regulation (including less stringent investor protection and disclosure standards) and exposure to possible economic, political and social instability. To the extent the fund invests in emerging market countries, its foreign securities risk will be higher.

Fund of Funds Risk. A fund of funds invests in a number of underlying funds. A fund of fund's ability to achieve its investment objective will depend largely on the ability of its investment manager to select the appropriate mix of underlying funds and on the underlying funds ability to meet their investment objectives. A fund of funds is subject to the same risks as the underlying funds in which it invests. Each fund of funds bears its own expenses and indirectly bears its proportionate share of expenses of the underlying funds in which it invests.

Large Cap Risk. The fund's strategy of investing in large cap stocks carries the risk that in certain markets large cap stocks will underperform small cap or mid cap stocks.

Lifecycle/Target Date Portfolio Risk. A Target Date Portfolio is an investment option comprised of "fund of funds" which allocate their investments among multiple asset classes which can include U.S. and foreign equity and fixed income securities. The "target date" in a target date portfolio is the approximate date an investor plans to start withdrawing money. The Portfolio's ability to achieve its investment objective will depend largely on the ability of the sub-adviser to select the appropriate mix of underlying funds and on the underlying funds' ability to meet their investment objectives. The portfolio managers control security selection and asset allocation. There can be no assurance that either a Fund or the underlying funds will achieve their investment objectives. An investor should examine the asset allocation of the fund to ensure it is consistent with their own risk tolerance.

A Fund is subject to the same risks as the underlying funds in which it invests. Because target date funds are managed to specific retirement dates, investors may be taking on greater risk if the actual year of retirement differs dramatically from the original estimated date. Target date funds generally shift to a more conservative investment mix over time. While this may help to manage risk, it does not guarantee earnings growth nor is the fund's principal value guaranteed at any time including at the target date. An investment in a target-date fund is not guaranteed, and you may experience losses, including losses near, at, or after the target date. There is no guarantee that the fund will provide adequate income at and through retirement. Consider the investment objectives, risks, charges, and expenses of the fund carefully before investing.

For a more complete description of these and other risks, please review the fund's prospectus.

Mortgage-Backed and Asset-Backed Securities Risk. When interest rates fall, homeowners are more likely to prepay their mortgage loans. An increased rate of prepayments on the fund's mortgage-backed securities will result in an unforeseen loss of interest income to the fund as the fund may be required to reinvest assets at a lower interest rate. Asset-backed securities include interests in pools of debt securities, commercial or consumer loans, or their receivables. The value of these securities depends on many factors, including changes in interest rates, the availability of information concerning the pool and its structure, the credit quality of the underlying assets, the market's perception of the servicer of the pool, and any credit enhancement provided. In addition, asset-backed securities have prepayment risks similar to mortgage-backed securities.

Small Cap Stock Risk. The fund's investments in smaller companies are subject to more erratic price movements than investments in larger, more established companies. Small cap companies may be developing or marketing new products or services for which markets are not yet and may never become established. Although small, unseasoned companies may offer greater opportunities for capital growth than larger, more established companies, they also involve greater risks and should be considered speculative.

Target Allocation. Target Allocation Risk is the risk that a fund could lose money as a result of less than optimal or poor asset allocation decisions. From time to time, one or more of the underlying funds may experience relatively large redemptions or investments due to reallocations or re-balancings of the assets of a portfolio, which could affect the performance of the underlying funds and, therefore, the performance of the portfolio.

Target Date. There is no guarantee that the subadviser will correctly predict the market or economic conditions and, as with other mutual fund investments, you could lose money even if the fund is at or close to its designated retirement year or in its post-retirement stage.

U.S. Government Securities Risk. U.S. government securities do not involve the degree of credit risk associated with investments in lower quality fixed-income securities. As a result, the yields available from U.S. government securities are generally lower than the yields available from many other fixed-income securities. These securities, like other fixed-income securities, are subject to interest rate risk.

Sub-Account Details

Asset Class/Investment Style

Target Date

Performance**

Returns (as of 9-30-18)

	Fund	Index	Peer Group
1 year	2.87%	4.75%	3.40%
3 year	6.41%	6.85%	6.33%
5 year	5.17%	5.54%	4.87%
10 year	6.09%	6.50%	5.92%

Expense Ratio (as of 9-30-18)****

Expense Ratio****	0.94%
Cost Per \$1,000	\$9.40

Sub-Account Inception Date: March 24, 2016
Underlying fund Inception Date: February 1, 2007

¥See important notes.

****The performance data presented represents past performance. Past performance is no guarantee of future results and current performance may be lower or higher than the performance quoted. An investment in a sub-account will fluctuate in value to reflect the value of the underlying portfolio and, when redeemed, may be worth more or less than original cost. Performance does not reflect any applicable contract-level or certain participant-level charges, or any redemption fees imposed by an underlying fund company. These charges, if included, would otherwise reduce the total return for a participant's account. Performance information current to the most recent month-end is available on our website www.jhpensions.com.**

Performance data for a sub-account for any period prior to the date introduced is shown in bold and is hypothetical based on the performance of the underlying fund.

The Index is S&P Target Date Through 2010.¹⁹⁸

The peer group is Target-Date 2000-2010.¹⁹⁵

Principal risks include: market, Risk of increase in expenses, manager, issuer, Credit and Counterparty, Emerging Markets Risk, foreign securities, target allocation, derivatives, mortgage-backed and asset-backed securities, fund of funds, large cap, U.S. government securities, liquidity, target date, small cap stock, Merger and Replacement Transition Risk and Lifecycle/Target Date Portfolio Risk. For more details, see Risk Disclosures section of this booklet



CAPITAL GROUP® | AMERICAN FUNDS

American Funds 2010 Target Date Retirement Fund^{114,185}

Investing solely in American Funds 2010 Target Date Retirement Fund (Class R6)

Managed by American Funds Group

Ticker Symbol*: RFTTX

Fund Highlights

Investment Objective and Policies ▶ Depending on the proximity to its target date, the fund will seek to achieve the following objectives to varying degrees: growth, income and conservation of capital. The fund will increasingly emphasize income and conservation of capital by investing a greater portion of its assets in bond, equity-income and balanced funds as it approaches and passes its target date. In this way, the fund seeks to balance total return and stability over time.

Why Consider this Fund

- ▶ You want the opportunity to remain in the same portfolio after the target date is reached
- ▶ You want one-step diversification with exposure to domestic stocks, international stocks and fixed-income securities
- ▶ You've considered your risk tolerance and want your asset allocation to become more conservative over time, but still provide growth after your retirement date to protect against longevity risk
- ▶ You want an actively managed asset allocation portfolio investing in actively managed underlying funds

Holdings, Weightings and Allocations of the underlying fund

Note: The Board of Trustees of the underlying fund ("fund") in which the sub-account invests may, in its discretion, determine to combine the fund with another fund if the target allocation of the fund materially matches the target allocation of the other fund. In such event, the fund's investors (including the sub-account that invests in the fund) will become investors of the other fund. To the extent permitted by applicable regulatory requirements, such a combination would be implemented without seeking the approval of the fund's investors. There is no assurance that the Board of Trustees at any point will determine to implement such a combination.

Top Holdings (as of 9-30-18)α

American Funds Interm Bd Fd of Amer R6	12.5%
American Funds Income Fund of Amer R6	12.0%
American Funds Capital Income Bldr R6	12.0%
American Funds Bond Fund of Amer R6	8.0%
American Funds Inflation Linked Bd R6	7.0%
American Funds Mortgage R6	6.0%
American Funds American Mutual R6	5.3%
American Funds Capital World Bond R6	5.0%
American Funds American High-Inc R6	5.0%
American Funds Invmt Co of Amer R6	4.3%
Totals	77.1% of assets

Asset Allocation (as of 9-30-18)α

US Bond	44.3%
US Stock	26.4%
Non US Stock	13.1%
Non US Bond	8.0%
Cash	7.9%
Other	0.2%
Preferred	0.1%

Top Country Holdings (as of 9-30-18)α

United States	70.3%
United Kingdom	4.8%
Canada	2.0%
Japan	1.5%
France	1.3%
Switzerland	1.3%
Netherlands	1.2%
China	0.8%
Germany	0.8%
Spain	0.5%

Top Sector Weightings (as of 9-30-18)α

Financial Services	6.5%
Technology	5.5%
Healthcare	4.9%
Consumer Defensive	4.4%
Industrials	3.9%
Energy	3.8%
Consumer Cyclical	3.6%
Communication Services	2.1%
Utilities	1.9%
Basic Materials	1.7%
Real Estate	1.3%

Key Statistics (as of 9-30-18 unless noted⁵)α

- ▶ **Number of Holdings:** 18
- ▶ **Sharpe Ratio:** 1.42
- ▶ **Beta:** 1.04 (S&P Target Date Through 2010 TR)
- ▶ **R²:** 94.25 (S&P Target Date Through 2010 TR)
- ▶ **Turnover (annualized)⁵:** 5.00
- ▶ **Net Assets:** \$3.0 billion
- ▶ **Underlying fund expense ratios:**
 - Gross⁶ 0.34%
 - Net⁶ 0.34%
- ▶ **Market Cap (millions):** 82106.08

* The Net expense ratio shown is for the underlying fund and reflects any fee waivers or expense reimbursements and is subject to change. Please refer to the underlying fund prospectus for additional information.^A

Sub-Account Details

Asset Class/Investment Style

Target Date

Performance**

Returns (as of 9-30-18)

	Fund	Index	Peer Group
1 year	3.40%	5.62%	4.24%
3 year	6.90%	8.07%	7.04%
5 year	5.62%	6.37%	5.34%
10 year	6.48%	7.12%	6.40%

Expense Ratio (as of 9-30-18)****

Expense Ratio****	0.93%
Cost Per \$1,000	\$9.30

Sub-Account Inception Date: March 24, 2016
Underlying fund Inception Date: February 1, 2007

¥See important notes.

**The performance data presented represents past performance. Past performance is no guarantee of future results and current performance may be lower or higher than the performance quoted. An investment in a sub-account will fluctuate in value to reflect the value of the underlying portfolio and, when redeemed, may be worth more or less than original cost. Performance does not reflect any applicable contract-level or certain participant-level charges, or any redemption fees imposed by an underlying fund company. These charges, if included, would otherwise reduce the total return for a participant's account. Performance information current to the most recent month-end is available on our website www.jhpensions.com.

Performance data for a sub-account for any period prior to the date introduced is shown in bold and is hypothetical based on the performance of the underlying fund.

The Index is S&P Target Date Through 2015.¹⁹⁷

The peer group is Target-Date 2015.⁹³⁶

Principal risks include: market, interest rate, target allocation, foreign securities, Risk of increase in expenses, liquidity, target date, fund of funds, large cap, Credit and Counterparty, Merger and Replacement Transition Risk, issuer, Emerging Markets Risk, derivatives, Lifecycle/Target Date Portfolio Risk, U.S. government securities, manager and mortgage-backed and asset-backed securities. For more details, see Risk Disclosures section of this booklet



CAPITAL GROUP® | AMERICAN FUNDS

American Funds 2015 Target Date Retirement Fund

Investing solely in American Funds 2015 Target Date Retirement Fund (Class R6)

Managed by American Funds Group

Ticker Symbol*: RFJTX

Fund Highlights

Investment Objective and Policies ▶ Depending on the proximity to its target date, the fund will seek to achieve the following objectives to varying degrees: growth, income and conservation of capital. The fund will increasingly emphasize income and conservation of capital by investing a greater portion of its assets in bond, equity-income and balanced funds as it approaches and passes its target date. In this way, the fund seeks to balance total return and stability over time.

Why Consider this Fund

- ▶ You want the opportunity to remain in the same portfolio after the target date is reached
- ▶ You want one-step diversification with exposure to domestic stocks, international stocks and fixed-income securities
- ▶ You've considered your risk tolerance and want your asset allocation to become more conservative over time, but still provide growth after your retirement date to protect against longevity risk
- ▶ You want an actively managed asset allocation portfolio investing in actively managed underlying funds

Holdings, Weightings and Allocations of the underlying fund

Note: The Board of Trustees of the underlying fund ("fund") in which the sub-account invests may, in its discretion, determine to combine the fund with another fund if the target allocation of the fund materially matches the target allocation of the other fund. In such event, the fund's investors (including the sub-account that invests in the fund) will become investors of the other fund. To the extent permitted by applicable regulatory requirements, such a combination would be implemented without seeking the approval of the fund's investors. There is no assurance that the Board of Trustees at any point will determine to implement such a combination.

Top Holdings (as of 9-30-18)α

American Funds Income Fund of Amer R6	11.1%
American Funds Capital Income Bldr R6	11.1%
American Funds Intern Bd Fd of Amer R6	9.0%
American Funds Bond Fund of Amer R6	8.0%
American Funds Inflation Linked Bd R6	7.0%
American Funds American Mutual R6	6.0%
American Funds Mortgage R6	6.0%
American Funds American High-Inc R6	5.0%
American Funds US Government Sec R6	5.0%
American Funds Capital World Bond R6	5.0%

Totals 73.2% of assets

Asset Allocation (as of 9-30-18)α

US Bond	41.7%
US Stock	29.0%
Non US Stock	14.0%
Cash	7.8%
Non US Bond	7.1%
Other	0.2%
Preferred	0.1%

Top Country Holdings (as of 9-30-18)α

United States	70.4%
United Kingdom	4.8%
Canada	2.0%
Japan	1.5%
Switzerland	1.3%
France	1.3%
Netherlands	1.2%
China	0.9%
Germany	0.8%
Spain	0.5%

Top Sector Weightings (as of 9-30-18)α

Financial Services	7.0%
Technology	6.4%
Healthcare	5.4%
Consumer Defensive	4.6%
Industrials	4.3%
Energy	4.1%
Consumer Cyclical	4.0%
Communication Services	2.2%
Utilities	1.9%
Basic Materials	1.9%
Real Estate	1.3%

Key Statistics (as of 9-30-18 unless noted⁵)α

- ▶ Number of Holdings: 20
- ▶ Sharpe Ratio: 1.45
- ▶ Beta: 0.91 (S&P Target Date Through 2015 TR)
- ▶ R²: 93.50 (S&P Target Date Through 2015 TR)
- ▶ Turnover (annualized)⁵: 4.00
- ▶ Net Assets: \$4.8 billion
- ▶ Underlying fund expense ratios:
 - Gross⁶: 0.33%
 - Net⁶: 0.33%
- ▶ Market Cap (millions): 82125.74

* The Net expense ratio shown is for the underlying fund and reflects any fee waivers or expense reimbursements and is subject to change. Please refer to the underlying fund prospectus for additional information.^A

Sub-Account Details

Asset Class/Investment Style

Target Date

Performance**

Returns (as of 9-30-18)

	Fund	Index	Peer Group
1 year	4.57%	6.55%	4.70%
3 year	7.74%	9.19%	7.51%
5 year	6.32%	7.10%	5.59%
10 year	7.06%	7.60%	6.56%

Expense Ratio (as of 9-30-18)****

Expense Ratio****	0.95%
Cost Per \$1,000	\$9.50

Sub-Account Inception Date: March 24, 2016
Underlying fund Inception Date: February 1, 2007

¥See important notes.

****The performance data presented represents past performance. Past performance is no guarantee of future results and current performance may be lower or higher than the performance quoted. An investment in a sub-account will fluctuate in value to reflect the value of the underlying portfolio and, when redeemed, may be worth more or less than original cost. Performance does not reflect any applicable contract-level or certain participant-level charges, or any redemption fees imposed by an underlying fund company. These charges, if included, would otherwise reduce the total return for a participant's account. Performance information current to the most recent month-end is available on our website www.jhpensions.com.**

Performance data for a sub-account for any period prior to the date introduced is shown in bold and is hypothetical based on the performance of the underlying fund.

The Index is S&P Target Date Through 2020.¹⁹⁶

The peer group is Target-Date 2020.¹⁹⁷

Principal risks include: Credit and Counterparty, liquidity, manager, target allocation, large cap, mortgage-backed and asset-backed securities, Risk of increase in expenses, market, issuer, U.S. government securities, Emerging Markets Risk, interest rate, derivatives, small cap stock, foreign securities, Merger and Replacement Transition Risk, target date, Lifecycle/Target Date Portfolio Risk and fund of funds. For more details, see Risk Disclosures section of this booklet



CAPITAL GROUP® | AMERICAN FUNDS

American Funds 2020 Target Date Retirement Fund^{114,185}

Investing solely in American Funds 2020 Target Date Retirement Fund (Class R6)

Managed by American Funds Group

Ticker Symbol*: **RRCTX**

Fund Highlights

Investment Objective and Policies ▶ Depending on the proximity to its target date, the fund will seek to achieve the following objectives to varying degrees: growth, income and conservation of capital. The fund will increasingly emphasize income and conservation of capital by investing a greater portion of its assets in bond, equity-income and balanced funds as it approaches and passes its target date. In this way, the fund seeks to balance total return and stability over time.

Why Consider this Fund

- ▶ You want the opportunity to remain in the same portfolio after the target date is reached
- ▶ You want one-step diversification with exposure to domestic stocks, international stocks and fixed-income securities
- ▶ You've considered your risk tolerance and want your asset allocation to become more conservative over time, but still provide growth after your retirement date to protect against longevity risk
- ▶ You want an actively managed asset allocation portfolio investing in actively managed underlying funds

Holdings, Weightings and Allocations of the underlying fund

Note: The Board of Trustees of the underlying fund ("fund") in which the sub-account invests may, in its discretion, determine to combine the fund with another fund if the target allocation of the fund materially matches the target allocation of the other fund. In such event, the fund's investors (including the sub-account that invests in the fund) will become investors of the other fund. To the extent permitted by applicable regulatory requirements, such a combination would be implemented without seeking the approval of the fund's investors. There is no assurance that the Board of Trustees at any point will determine to implement such a combination.

Top Holdings (as of 9-30-18)α

American Funds Interm Bd Fd of Amer R6	9.0%
American Funds Income Fund of Amer R6	7.4%
American Funds Capital Income Bldr R6	7.4%
American Funds Bond Fund of Amer R6	7.1%
American Funds Inflation Linked Bd R6	6.4%
American Funds American Mutual R6	6.0%
American Funds Mortgage R6	5.7%
American Funds Washington Mutual R6	5.3%
American Funds US Government Sec R6	5.3%
American Funds Invmt Co of Amer R6	5.3%

Totals 64.9% of assets

Asset Allocation (as of 9-30-18)α

US Bond	38.0%
US Stock	31.6%
Non US Stock	15.1%
Cash	8.1%
Non US Bond	6.8%
Other	0.2%
Preferred	0.1%

Top Country Holdings (as of 9-30-18)α

United States	69.4%
United Kingdom	4.5%
Canada	1.9%
Japan	1.8%
France	1.5%
Netherlands	1.3%
Switzerland	1.3%
China	1.1%
Germany	0.8%
South Korea	0.7%

Top Sector Weightings (as of 9-30-18)α

Technology	7.9%
Financial Services	7.5%
Healthcare	6.0%
Consumer Cyclical	5.0%
Industrials	4.7%
Consumer Defensive	4.6%
Energy	4.2%
Communication Services	2.1%
Basic Materials	2.0%
Utilities	1.7%
Real Estate	1.1%

Key Statistics (as of 9-30-18 unless noted⁵)α

- ▶ **Number of Holdings:** 21
- ▶ **Sharpe Ratio:** 1.48
- ▶ **Beta:** 0.88 (S&P Target Date Through 2020 TR)
- ▶ **R²:** 95.64 (S&P Target Date Through 2020 TR)
- ▶ **Turnover (annualized)⁵:** 1.00
- ▶ **Net Assets:** \$13.8 billion
- ▶ **Underlying fund expense ratios:**
 - Gross⁶ 0.35%
 - Net⁶ 0.35%
- ▶ **Market Cap (millions):** 81165.96

* The Net expense ratio shown is for the underlying fund and reflects any fee waivers or expense reimbursements and is subject to change. Please refer to the underlying fund prospectus for additional information.^A

Sub-Account Details

Asset Class/Investment Style

Target Date

Performance**

Returns (as of 9-30-18)

	Fund	Index	Peer Group
1 year	5.94%	7.55%	5.85%
3 year	9.08%	10.26%	8.80%
5 year	7.24%	7.84%	6.39%
10 year	8.00%	8.16%	7.33%

Expense Ratio (as of 9-30-18)****

Expense Ratio****	0.97%
Cost Per \$1,000	\$9.70

Sub-Account Inception Date: March 24, 2016
Underlying fund Inception Date: February 1, 2007

¥See important notes.

****The performance data presented represents past performance. Past performance is no guarantee of future results and current performance may be lower or higher than the performance quoted. An investment in a sub-account will fluctuate in value to reflect the value of the underlying portfolio and, when redeemed, may be worth more or less than original cost. Performance does not reflect any applicable contract-level or certain participant-level charges, or any redemption fees imposed by an underlying fund company. These charges, if included, would otherwise reduce the total return for a participant's account. Performance information current to the most recent month-end is available on our website www.jhpensions.com.**

Performance data for a sub-account for any period prior to the date introduced is shown in bold and is hypothetical based on the performance of the underlying fund.

The Index is S&P Target Date Through 2025.¹⁹⁵

The peer group is Target-Date 2025.¹⁹³

Principal risks include: liquidity, U.S. government securities, manager, Lifecycle/Target Date Portfolio Risk, target allocation, large cap, issuer, small cap stock, market, fund of funds, Risk of increase in expenses, Merger and Replacement Transition Risk, mortgage-backed and asset-backed securities, Emerging Markets Risk, target date, interest rate, Credit and Counterparty and foreign securities. For more details, see Risk Disclosures section of this booklet



CAPITAL GROUP® | AMERICAN FUNDS

American Funds 2025 Target Date Retirement Fund^{114,185}

Investing solely in American Funds 2025 Target Date Retirement Fund (Class R6)

Managed by American Funds Group

Ticker Symbol*: **RFDTX**

Fund Highlights

Investment Objective and Policies ▶ Depending on the proximity to its target date, the fund will seek to achieve the following objectives to varying degrees: growth, income and conservation of capital. The fund will increasingly emphasize income and conservation of capital by investing a greater portion of its assets in bond, equity-income and balanced funds as it approaches and passes its target date. In this way, the fund seeks to balance total return and stability over time.

Why Consider this Fund

- ▶ You want the opportunity to remain in the same portfolio after the target date is reached
- ▶ You want one-step diversification with exposure to domestic stocks, international stocks and fixed-income securities
- ▶ You've considered your risk tolerance and want your asset allocation to become more conservative over time, but still provide growth after your retirement date to protect against longevity risk
- ▶ You want an actively managed asset allocation portfolio investing in actively managed underlying funds

Holdings, Weightings and Allocations of the underlying fund

Note: The Board of Trustees of the underlying fund ("fund") in which the sub-account invests may, in its discretion, determine to combine the fund with another fund if the target allocation of the fund materially matches the target allocation of the other fund. In such event, the fund's investors (including the sub-account that invests in the fund) will become investors of the other fund. To the extent permitted by applicable regulatory requirements, such a combination would be implemented without seeking the approval of the fund's investors. There is no assurance that the Board of Trustees at any point will determine to implement such a combination.

Top Holdings (as of 9-30-18)⌵

American Funds Interm Bd Fd of Amer R6	7.6%
American Funds Washington Mutual R6	6.6%
American Funds US Government Sec R6	6.4%
American Funds Invmt Co of Amer R6	6.3%
American Funds American Mutual R6	6.0%
American Funds American Balanced R6	6.0%
American Funds Global Balanced R6	6.0%
American Funds Fundamental Invs R6	5.3%
American Funds Mortgage R6	5.0%
American Funds Capital World Bond R6	5.0%
Totals 60.2% of assets	

Asset Allocation (as of 9-30-18)⌵

US Stock	36.6%
US Bond	29.0%
Non US Stock	19.7%
Cash	8.2%
Non US Bond	6.2%
Other	0.1%
Preferred	0.1%

Top Country Holdings (as of 9-30-18)⌵

United States	65.5%
United Kingdom	4.8%
Japan	2.4%
Canada	1.8%
France	1.8%
Switzerland	1.6%
China	1.5%
Netherlands	1.5%
Germany	1.0%
South Korea	1.0%

Top Sector Weightings (as of 9-30-18)⌵

Technology	10.3%
Financial Services	9.0%
Healthcare	7.2%
Consumer Cyclical	6.6%
Industrials	5.7%
Consumer Defensive	5.1%
Energy	4.9%
Basic Materials	2.6%
Communication Services	2.2%
Utilities	1.7%
Real Estate	1.0%

Key Statistics (as of 9-30-18 unless noted⁵)⌵

- ▶ **Number of Holdings:** 22
- ▶ **Sharpe Ratio:** 1.51
- ▶ **Beta:** 0.90 (S&P Target Date Through 2025 TR)
- ▶ **R²:** 95.87 (S&P Target Date Through 2025 TR)
- ▶ **Turnover (annualized)⁶:** 0.00
- ▶ **Net Assets:** \$17.6 billion
- ▶ **Underlying fund expense ratios:**
 - Gross⁷: 0.37%
 - Net⁸: 0.37%
- ▶ **Market Cap (millions):** 74850.87

* The Net expense ratio shown is for the underlying fund and reflects any fee waivers or expense reimbursements and is subject to change. Please refer to the underlying fund prospectus for additional information.^A

Sub-Account Details

Asset Class/Investment Style

Target Date

Performance**

Returns (as of 9-30-18)

	Fund	Index	Peer Group
1 year	7.64%	8.60%	6.89%
3 year	10.80%	11.32%	9.88%
5 year	8.33%	8.46%	7.06%
10 year	8.80%	8.61%	7.56%

Expense Ratio (as of 9-30-18)****

Expense Ratio****	0.99%
Cost Per \$1,000	\$9.90

Sub-Account Inception Date: March 24, 2016
Underlying fund Inception Date: February 1, 2007

¥See important notes.

**The performance data presented represents past performance. Past performance is no guarantee of future results and current performance may be lower or higher than the performance quoted. An investment in a sub-account will fluctuate in value to reflect the value of the underlying portfolio and, when redeemed, may be worth more or less than original cost. Performance does not reflect any applicable contract-level or certain participant-level charges, or any redemption fees imposed by an underlying fund company. These charges, if included, would otherwise reduce the total return for a participant's account. Performance information current to the most recent month-end is available on our website www.jhpensions.com.

Performance data for a sub-account for any period prior to the date introduced is shown in bold and is hypothetical based on the performance of the underlying fund.

The Index is S&P Target Date Through 2030.¹⁹⁴

The peer group is Target-Date 2030.¹⁹⁹

Principal risks include: fund of funds, Merger and Replacement Transition Risk, Credit and Counterparty, Lifecycle/Target Date Portfolio Risk, interest rate, market, U.S. government securities, target allocation, manager, small cap stock, mortgage-backed and asset-backed securities, Risk of increase in expenses, foreign securities, issuer, target date, liquidity, large cap, derivatives and Emerging Markets Risk. For more details, see Risk Disclosures section of this booklet



CAPITAL GROUP® | AMERICAN FUNDS

American Funds 2030 Target Date Retirement Fund^{114,185}

Investing solely in American Funds 2030 Target Date Retirement Fund (Class R6)

Managed by American Funds Group

Ticker Symbol*: RFETX

Fund Highlights

Investment Objective and Policies ▶ Depending on the proximity to its target date, the fund will seek to achieve the following objectives to varying degrees: growth, income and conservation of capital. The fund will increasingly emphasize income and conservation of capital by investing a greater portion of its assets in bond, equity-income and balanced funds as it approaches and passes its target date. In this way, the fund seeks to balance total return and stability over time.

Why Consider this Fund

- ▶ You want the opportunity to remain in the same portfolio after the target date is reached
- ▶ You want one-step diversification with exposure to domestic stocks, international stocks and fixed-income securities
- ▶ You've considered your risk tolerance and want your asset allocation to become more conservative over time, but still provide growth after your retirement date to protect against longevity risk
- ▶ You want an actively managed asset allocation portfolio investing in actively managed underlying funds

Holdings, Weightings and Allocations of the underlying fund

Note: The Board of Trustees of the underlying fund ("fund") in which the sub-account invests may, in its discretion, determine to combine the fund with another fund if the target allocation of the fund materially matches the target allocation of the other fund. In such event, the fund's investors (including the sub-account that invests in the fund) will become investors of the other fund. To the extent permitted by applicable regulatory requirements, such a combination would be implemented without seeking the approval of the fund's investors. There is no assurance that the Board of Trustees at any point will determine to implement such a combination.

Top Holdings (as of 9-30-18)α

American Funds Washington Mutual R6	8.0%
American Funds US Government Sec R6	7.4%
American Funds Invmt Co of Amer R6	7.0%
American Funds Global Balanced R6	6.0%
American Funds American Balanced R6	6.0%
American Funds Fundamental Invs R6	6.0%
American Funds American Mutual R6	6.0%
American Funds New Perspective R6	5.5%
American Funds Capital World Gr&Inc R6	5.0%
American Funds Growth Fund of Amer R6	4.6%

Totals 61.5% of assets

Asset Allocation (as of 9-30-18)α

US Stock	42.7%
Non US Stock	24.2%
US Bond	20.7%
Cash	7.8%
Non US Bond	4.4%
Preferred	0.1%
Other	0.1%

Top Country Holdings (as of 9-30-18)α

United States	63.3%
United Kingdom	5.3%
Japan	2.5%
China	2.0%
Canada	2.0%
France	1.9%
Switzerland	1.7%
Netherlands	1.5%
India	1.1%
South Korea	1.1%

Top Sector Weightings (as of 9-30-18)α

Technology	12.6%
Financial Services	10.7%
Healthcare	8.6%
Consumer Cyclical	8.2%
Industrials	6.8%
Consumer Defensive	5.9%
Energy	5.5%
Basic Materials	3.1%
Communication Services	2.5%
Utilities	1.9%
Real Estate	1.1%

Key Statistics (as of 9-30-18 unless noted⁵)α

- ▶ Number of Holdings: 22
- ▶ Sharpe Ratio: 1.50
- ▶ Beta: 0.98 (S&P Target Date Through 2030 TR)
- ▶ R²: 96.62 (S&P Target Date Through 2030 TR)
- ▶ Turnover (annualized)⁸: 0.00
- ▶ Net Assets: \$19.1 billion
- ▶ Underlying fund expense ratios:
 - Gross⁷ 0.39%
 - Net⁷ 0.39%
- ▶ Market Cap (millions): 65877.17

* The Net expense ratio shown is for the underlying fund and reflects any fee waivers or expense reimbursements and is subject to change. Please refer to the underlying fund prospectus for additional information.^A

Sub-Account Details

Asset Class/Investment Style

Target Date

Performance**

Returns (as of 9-30-18)

	Fund	Index	Peer Group
1 year	9.38%	9.45%	8.03%
3 year	12.27%	12.13%	11.01%
5 year	9.14%	8.96%	7.74%
10 year	9.19%	8.90%	8.20%

Expense Ratio (as of 9-30-18)****

Expense Ratio****	1.00%
Cost Per \$1,000	\$10.00

Sub-Account Inception Date: March 24, 2016
Underlying fund Inception Date: February 1, 2007

¥See important notes.

****The performance data presented represents past performance. Past performance is no guarantee of future results and current performance may be lower or higher than the performance quoted. An investment in a sub-account will fluctuate in value to reflect the value of the underlying portfolio and, when redeemed, may be worth more or less than original cost. Performance does not reflect any applicable contract-level or certain participant-level charges, or any redemption fees imposed by an underlying fund company. These charges, if included, would otherwise reduce the total return for a participant's account. Performance information current to the most recent month-end is available on our website www.jhpensions.com.**

Performance data for a sub-account for any period prior to the date introduced is shown in bold and is hypothetical based on the performance of the underlying fund.

The Index is S&P Target Date Through 2035.¹⁹³

The peer group is Target-Date 2035.¹⁴⁰

Principal risks include: foreign securities, Credit and Counterparty, derivatives, mortgage-backed and asset-backed securities, manager, fund of funds, market, Merger and Replacement Transition Risk, target date, Lifecycle/Target Date Portfolio Risk, small cap stock, U.S. government securities, interest rate, target allocation, issuer, large cap, liquidity, Emerging Markets Risk and Risk of increase in expenses. For more details, see Risk Disclosures section of this booklet



CAPITAL GROUP® | AMERICAN FUNDS

American Funds 2035 Target Date Retirement Fund^{114,185}

Investing solely in American Funds 2035 Target Date Retirement Fund (Class R6)

Managed by American Funds Group

Ticker Symbol*: **RFFTX**

Fund Highlights

Investment Objective and Policies ▶ Depending on the proximity to its target date, the fund will seek to achieve the following objectives to varying degrees: growth, income and conservation of capital. The fund will increasingly emphasize income and conservation of capital by investing a greater portion of its assets in bond, equity-income and balanced funds as it approaches and passes its target date. In this way, the fund seeks to balance total return and stability over time.

Why Consider this Fund

- ▶ You want the opportunity to remain in the same portfolio after the target date is reached
- ▶ You want one-step diversification with exposure to domestic stocks, international stocks and fixed-income securities
- ▶ You've considered your risk tolerance and want your asset allocation to become more conservative over time, but still provide growth after your retirement date to protect against longevity risk
- ▶ You want an actively managed asset allocation portfolio investing in actively managed underlying funds

Holdings, Weightings and Allocations of the underlying fund

Note: The Board of Trustees of the underlying fund ("fund") in which the sub-account invests may, in its discretion, determine to combine the fund with another fund if the target allocation of the fund materially matches the target allocation of the other fund. In such event, the fund's investors (including the sub-account that invests in the fund) will become investors of the other fund. To the extent permitted by applicable regulatory requirements, such a combination would be implemented without seeking the approval of the fund's investors. There is no assurance that the Board of Trustees at any point will determine to implement such a combination.

Top Holdings (as of 9-30-18)α

American Funds Washington Mutual R6	8.0%
American Funds US Government Sec R6	7.2%
American Funds New Perspective R6	7.0%
American Funds Invmt Co of Amer R6	7.0%
American Funds AMCAP R6	6.3%
American Funds SMALLCAP World R6	6.3%
American Funds Growth Fund of Amer R6	6.3%
American Funds American Mutual R6	6.0%
American Funds Global Balanced R6	6.0%
American Funds American Balanced R6	6.0%
Totals	66.1% of assets

Asset Allocation (as of 9-30-18)α

US Stock	48.6%
Non US Stock	29.3%
US Bond	12.9%
Cash	6.9%
Non US Bond	2.0%
Other	0.1%
Preferred	0.1%

Top Country Holdings (as of 9-30-18)α

United States	61.5%
United Kingdom	5.7%
China	2.6%
Japan	2.6%
Canada	2.1%
France	2.1%
Switzerland	1.9%
Netherlands	1.7%
India	1.4%
South Korea	1.3%

Top Sector Weightings (as of 9-30-18)α

Technology	15.1%
Financial Services	12.3%
Healthcare	10.2%
Consumer Cyclical	10.2%
Industrials	7.9%
Consumer Defensive	6.6%
Energy	6.0%
Basic Materials	3.6%
Communication Services	2.6%
Utilities	2.0%
Real Estate	1.2%

Key Statistics (as of 9-30-18 unless noted⁵)α

- ▶ **Number of Holdings:** 19
- ▶ **Sharpe Ratio:** 1.55
- ▶ **Beta:** 1.01 (S&P Target Date Through 2035 TR)
- ▶ **R²:** 96.72 (S&P Target Date Through 2035 TR)
- ▶ **Turnover (annualized):** 0.00
- ▶ **Net Assets:** \$15.1 billion
- ▶ **Underlying fund expense ratios:**
 - Gross⁶ 0.40%
 - Net⁶ 0.40%
- ▶ **Market Cap (millions):** 59074.35

* The Net expense ratio shown is for the underlying fund and reflects any fee waivers or expense reimbursements and is subject to change. Please refer to the underlying fund prospectus for additional information.^A

Sub-Account Details

Asset Class/Investment Style

Target Date

Performance**

Returns (as of 9-30-18)

	Fund	Index	Peer Group
1 year	10.02%	10.20%	8.60%
3 year	12.75%	12.79%	11.56%
5 year	9.42%	9.33%	8.07%
10 year	9.37%	9.15%	8.20%

Expense Ratio (as of 9-30-18)****

Expense Ratio****	1.01%
Cost Per \$1,000	\$10.10

Sub-Account Inception Date: March 24, 2016
Underlying fund Inception Date: February 1, 2007

¥See important notes.

****The performance data presented represents past performance. Past performance is no guarantee of future results and current performance may be lower or higher than the performance quoted. An investment in a sub-account will fluctuate in value to reflect the value of the underlying portfolio and, when redeemed, may be worth more or less than original cost. Performance does not reflect any applicable contract-level or certain participant-level charges, or any redemption fees imposed by an underlying fund company. These charges, if included, would otherwise reduce the total return for a participant's account. Performance information current to the most recent month-end is available on our website www.jhpensions.com.**

Performance data for a sub-account for any period prior to the date introduced is shown in bold and is hypothetical based on the performance of the underlying fund.

The Index is S&P Target Date Through 2040.¹⁹²

The peer group is Target-Date 2040.¹⁴¹

Principal risks include: U.S. government securities, target allocation, derivatives, foreign securities, fund of funds, target date, Lifecycle/Target Date Portfolio Risk, Merger and Replacement Transition Risk, manager, market, mortgage-backed and asset-backed securities, interest rate, liquidity, large cap, small cap stock, Risk of increase in expenses, issuer, Emerging Markets Risk and Credit and Counterparty. For more details, see Risk Disclosures section of this booklet



CAPITAL GROUP® | AMERICAN FUNDS

American Funds 2040 Target Date Retirement Fund

Investing solely in American Funds 2040 Target Date Retirement Fund (Class R6)

Managed by American Funds Group

Ticker Symbol*: RFGTX

Fund Highlights

Investment Objective and Policies ▶ Depending on the proximity to its target date, the fund will seek to achieve the following objectives to varying degrees: growth, income and conservation of capital. The fund will increasingly emphasize income and conservation of capital by investing a greater portion of its assets in bond, equity-income and balanced funds as it approaches and passes its target date. In this way, the fund seeks to balance total return and stability over time.

Why Consider this Fund

- ▶ You want the opportunity to remain in the same portfolio after the target date is reached
- ▶ You want one-step diversification with exposure to domestic stocks, international stocks and fixed-income securities
- ▶ You've considered your risk tolerance and want your asset allocation to become more conservative over time, but still provide growth after your retirement date to protect against longevity risk
- ▶ You want an actively managed asset allocation portfolio investing in actively managed underlying funds

Holdings, Weightings and Allocations of the underlying fund

Note: The Board of Trustees of the underlying fund ("fund") in which the sub-account invests may, in its discretion, determine to combine the fund with another fund if the target allocation of the fund materially matches the target allocation of the other fund. In such event, the fund's investors (including the sub-account that invests in the fund) will become investors of the other fund. To the extent permitted by applicable regulatory requirements, such a combination would be implemented without seeking the approval of the fund's investors. There is no assurance that the Board of Trustees at any point will determine to implement such a combination.

Top Holdings (as of 9-30-18)α

American Funds Washington Mutual R6	8.0%
American Funds Invmt Co of Amer R6	7.3%
American Funds SMALLCAP World R6	7.0%
American Funds Growth Fund of Amer R6	7.0%
American Funds New Perspective R6	7.0%
American Funds AMCAP R6	7.0%
American Funds American Mutual R6	6.3%
American Funds Fundamental Invs R6	6.3%
American Funds American Balanced R6	6.0%
American Funds Global Balanced R6	5.7%
Totals	67.6% of assets

Asset Allocation (as of 9-30-18)α

US Stock	50.8%
Non US Stock	30.7%
US Bond	9.4%
Cash	7.0%
Non US Bond	1.9%
Preferred	0.1%
Other	0.1%

Top Country Holdings (as of 9-30-18)α

United States	60.2%
United Kingdom	5.8%
China	2.9%
Japan	2.7%
Canada	2.2%
France	2.1%
Switzerland	1.9%
Netherlands	1.7%
India	1.6%
South Korea	1.4%

Top Sector Weightings (as of 9-30-18)α

Technology	16.0%
Financial Services	12.8%
Consumer Cyclical	10.9%
Healthcare	10.8%
Industrials	8.2%
Consumer Defensive	6.8%
Energy	6.2%
Basic Materials	3.8%
Communication Services	2.7%
Utilities	2.0%
Real Estate	1.2%

Key Statistics (as of 9-30-18 unless noted⁵)α

- ▶ **Number of Holdings:** 18
- ▶ **Sharpe Ratio:** 1.55
- ▶ **Beta:** 0.99 (S&P Target Date Through 2040 TR)
- ▶ **R²:** 96.74 (S&P Target Date Through 2040 TR)
- ▶ **Turnover (annualized)³:** 0.00
- ▶ **Net Assets:** \$13.1 billion
- ▶ **Underlying fund expense ratios:**
 - Gross⁴ 0.41%
 - Net⁴ 0.41%
- ▶ **Market Cap (millions):** 57698.30

* The Net expense ratio shown is for the underlying fund and reflects any fee waivers or expense reimbursements and is subject to change. Please refer to the underlying fund prospectus for additional information.^A

Sub-Account Details

Asset Class/Investment Style

Target Date

Performance**

Returns (as of 9-30-18)

	Fund	Index	Peer Group
1 year	10.41%	10.47%	9.22%
3 year	13.08%	13.12%	12.14%
5 year	9.62%	9.51%	8.42%
10 year	9.45%	9.17%	8.54%

Expense Ratio (as of 9-30-18)****

Expense Ratio****	1.01%
Cost Per \$1,000	\$10.10

Sub-Account Inception Date: March 24, 2016
Underlying fund Inception Date: February 1, 2007

¥See important notes.

****The performance data presented represents past performance. Past performance is no guarantee of future results and current performance may be lower or higher than the performance quoted. An investment in a sub-account will fluctuate in value to reflect the value of the underlying portfolio and, when redeemed, may be worth more or less than original cost. Performance does not reflect any applicable contract-level or certain participant-level charges, or any redemption fees imposed by an underlying fund company. These charges, if included, would otherwise reduce the total return for a participant's account. Performance information current to the most recent month-end is available on our website www.jhpensions.com.**

Performance data for a sub-account for any period prior to the date introduced is shown in bold and is hypothetical based on the performance of the underlying fund.

The Index is S&P Target Date Through 2045.¹⁹¹

The peer group is Target-Date 2045.¹⁹²

Principal risks include: target allocation, Merger and Replacement Transition Risk, large cap, issuer, mortgage-backed and asset-backed securities, small cap stock, foreign securities, target date, liquidity, Emerging Markets Risk, Risk of increase in expenses, Lifecycle/Target Date Portfolio Risk, U.S. government securities, manager, Credit and Counterparty, interest rate, derivatives, market and fund of funds. For more details, see Risk Disclosures section of this booklet



CAPITAL GROUP® | AMERICAN FUNDS

American Funds 2045 Target Date Retirement Fund

Investing solely in American Funds 2045 Target Date Retirement Fund (Class R6)

Managed by American Funds Group

Ticker Symbol*: RFHTX

Fund Highlights

Investment Objective and Policies ▶ Depending on the proximity to its target date, the fund will seek to achieve the following objectives to varying degrees: growth, income and conservation of capital. The fund will increasingly emphasize income and conservation of capital by investing a greater portion of its assets in bond, equity-income and balanced funds as it approaches and passes its target date. In this way, the fund seeks to balance total return and stability over time.

Why Consider this Fund

- ▶ You want the opportunity to remain in the same portfolio after the target date is reached
- ▶ You want one-step diversification with exposure to domestic stocks, international stocks and fixed-income securities
- ▶ You've considered your risk tolerance and want your asset allocation to become more conservative over time, but still provide growth after your retirement date to protect against longevity risk
- ▶ You want an actively managed asset allocation portfolio investing in actively managed underlying funds

Holdings, Weightings and Allocations of the underlying fund

Note: The Board of Trustees of the underlying fund ("fund") in which the sub-account invests may, in its discretion, determine to combine the fund with another fund if the target allocation of the fund materially matches the target allocation of the other fund. In such event, the fund's investors (including the sub-account that invests in the fund) will become investors of the other fund. To the extent permitted by applicable regulatory requirements, such a combination would be implemented without seeking the approval of the fund's investors. There is no assurance that the Board of Trustees at any point will determine to implement such a combination.

Top Holdings (as of 9-30-18)α

American Funds Invmt Co of Amer R6	8.3%
American Funds Washington Mutual R6	8.3%
American Funds Fundamental Invs R6	7.3%
American Funds American Mutual R6	7.3%
American Funds AMCAP R6	7.0%
American Funds Growth Fund of Amer R6	7.0%
American Funds SMALLCAP World R6	7.0%
American Funds New Perspective R6	7.0%
American Funds Capital World Gr&Inc R6	6.3%
American Funds American Balanced R6	5.7%

Totals 71.2% of assets

Asset Allocation (as of 9-30-18)α

US Stock	51.9%
Non US Stock	31.0%
US Bond	8.1%
Cash	7.1%
Non US Bond	1.6%
Preferred	0.1%
Other	0.1%

Top Country Holdings (as of 9-30-18)α

United States	60.0%
United Kingdom	5.7%
China	2.9%
Japan	2.8%
Canada	2.2%
France	2.1%
Switzerland	1.9%
Netherlands	1.8%
India	1.6%
South Korea	1.5%

Top Sector Weightings (as of 9-30-18)α

Technology	16.5%
Financial Services	13.1%
Consumer Cyclical	11.1%
Healthcare	11.0%
Industrials	8.5%
Consumer Defensive	6.8%
Energy	6.3%
Basic Materials	3.9%
Communication Services	2.7%
Utilities	2.0%
Real Estate	1.1%

Key Statistics (as of 9-30-18 unless noted⁵)α

- ▶ **Number of Holdings:** 18
- ▶ **Sharpe Ratio:** 1.56
- ▶ **Beta:** 0.98 (S&P Target Date Through 2045 TR)
- ▶ **R²:** 96.52 (S&P Target Date Through 2045 TR)
- ▶ **Turnover (annualized)⁵:** 0.00
- ▶ **Net Assets:** \$9.4 billion
- ▶ **Underlying fund expense ratios:**
 - Gross⁶ 0.41%
 - Net⁶ 0.41%
- ▶ **Market Cap (millions):** 58168.99

* The Net expense ratio shown is for the underlying fund and reflects any fee waivers or expense reimbursements and is subject to change. Please refer to the underlying fund prospectus for additional information.^A

Sub-Account Details

Asset Class/Investment Style

Target Date

Performance**

Returns (as of 9-30-18)

	Fund	Index	Peer Group
1 year	10.70%	10.68%	9.23%
3 year	13.24%	13.36%	12.16%
5 year	9.69%	9.62%	8.45%
10 year	9.51%	9.28%	8.38%

Expense Ratio (as of 9-30-18)****

Expense Ratio****	1.02%
Cost Per \$1,000	\$10.20

Sub-Account Inception Date: March 24, 2016
Underlying fund Inception Date: February 1, 2007

¥See important notes.

****The performance data presented represents past performance. Past performance is no guarantee of future results and current performance may be lower or higher than the performance quoted. An investment in a sub-account will fluctuate in value to reflect the value of the underlying portfolio and, when redeemed, may be worth more or less than original cost. Performance does not reflect any applicable contract-level or certain participant-level charges, or any redemption fees imposed by an underlying fund company. These charges, if included, would otherwise reduce the total return for a participant's account. Performance information current to the most recent month-end is available on our website www.jhpensions.com.**

Performance data for a sub-account for any period prior to the date introduced is shown in bold and is hypothetical based on the performance of the underlying fund.

The Index is S&P Target Date Through 2050.¹⁹⁰

The peer group is Target-Date 2050.¹⁹³

Principal risks include: derivatives, manager, Credit and Counterparty, market, fund of funds, large cap, issuer, Risk of increase in expenses, mortgage-backed and asset-backed securities, Emerging Markets Risk, target allocation, short sale, Lifecycle/Target Date Portfolio Risk, Merger and Replacement Transition Risk, interest rate, target date, U.S. government securities, foreign securities and liquidity. For more details, see Risk Disclosures section of this booklet



CAPITAL GROUP® | AMERICAN FUNDS

American Funds 2050 Target Date Retirement Fund^{114,185}

Investing solely in American Funds 2050 Target Date Retirement Fund (Class R6)

Managed by American Funds Group

Ticker Symbol*: RFITX

Fund Highlights

Investment Objective and Policies ▶ Depending on the proximity to its target date, the fund will seek to achieve the following objectives to varying degrees: growth, income and conservation of capital. The fund will increasingly emphasize income and conservation of capital by investing a greater portion of its assets in bond, equity-income and balanced funds as it approaches and passes its target date. In this way, the fund seeks to balance total return and stability over time.

Why Consider this Fund

- ▶ You want the opportunity to remain in the same portfolio after the target date is reached
- ▶ You want one-step diversification with exposure to domestic stocks, international stocks and fixed-income securities
- ▶ You've considered your risk tolerance and want your asset allocation to become more conservative over time, but still provide growth after your retirement date to protect against longevity risk
- ▶ You want an actively managed asset allocation portfolio investing in actively managed underlying funds

Holdings, Weightings and Allocations of the underlying fund

Note: The Board of Trustees of the underlying fund ("fund") in which the sub-account invests may, in its discretion, determine to combine the fund with another fund if the target allocation of the fund materially matches the target allocation of the other fund. In such event, the fund's investors (including the sub-account that invests in the fund) will become investors of the other fund. To the extent permitted by applicable regulatory requirements, such a combination would be implemented without seeking the approval of the fund's investors. There is no assurance that the Board of Trustees at any point will determine to implement such a combination.

Top Holdings (as of 9-30-18)α

American Funds Washington Mutual R6	9.0%
American Funds Invmt Co of Amer R6	9.0%
American Funds Fundamental Invs R6	8.0%
American Funds American Mutual R6	8.0%
American Funds SMALLCAP World R6	7.0%
American Funds Growth Fund of Amer R6	7.0%
American Funds New Perspective R6	7.0%
American Funds AMCAP R6	7.0%
American Funds Capital World Gr&Inc R6	7.0%
American Funds US Government Sec R6	5.1%

Totals 74.1% of assets

Asset Allocation (as of 9-30-18)α

US Stock	52.9%
Non US Stock	31.0%
Cash	7.2%
US Bond	7.2%
Non US Bond	1.5%
Preferred	0.1%
Other	0.1%

Top Country Holdings (as of 9-30-18)α

United States	60.1%
United Kingdom	5.6%
China	3.0%
Japan	2.8%
Canada	2.2%
France	2.1%
Switzerland	1.9%
Netherlands	1.8%
India	1.6%
South Korea	1.5%

Top Sector Weightings (as of 9-30-18)α

Technology	16.8%
Financial Services	13.2%
Healthcare	11.3%
Consumer Cyclical	11.2%
Industrials	8.6%
Consumer Defensive	6.8%
Energy	6.3%
Basic Materials	3.9%
Communication Services	2.7%
Utilities	2.0%
Real Estate	1.0%

Key Statistics (as of 9-30-18 unless noted⁵)α

- ▶ **Number of Holdings:** 16
- ▶ **Sharpe Ratio:** 1.57
- ▶ **Beta:** 0.96 (S&P Target Date Through 2050 TR)
- ▶ **R²:** 96.42 (S&P Target Date Through 2050 TR)
- ▶ **Turnover (annualized)⁵:** 0.00
- ▶ **Net Assets:** \$7.7 billion
- ▶ **Underlying fund expense ratios:**
 - Gross⁶ 0.42%
 - Net⁶ 0.42%
- ▶ **Market Cap (millions):** 58796.59

* The Net expense ratio shown is for the underlying fund and reflects any fee waivers or expense reimbursements and is subject to change. Please refer to the underlying fund prospectus for additional information.^A

Sub-Account Details

Asset Class/Investment Style

Target Date

Performance**

Returns (as of 9-30-18)

	Fund	Index	Peer Group
1 year	10.65%	10.70%	9.51%
3 year	13.21%	13.42%	12.41%
5 year	9.67%	9.63%	8.71%
Since inception	10.68%	n/a	n/a

Expense Ratio (as of 9-30-18)****

Expense Ratio****	1.02%
Cost Per \$1,000	\$10.20

Sub-Account Inception Date: March 24, 2016
Underlying fund Inception Date: February 1, 2010

¥See important notes.

****The performance data presented represents past performance. Past performance is no guarantee of future results and current performance may be lower or higher than the performance quoted. An investment in a sub-account will fluctuate in value to reflect the value of the underlying portfolio and, when redeemed, may be worth more or less than original cost. Performance does not reflect any applicable contract-level or certain participant-level charges, or any redemption fees imposed by an underlying fund company. These charges, if included, would otherwise reduce the total return for a participant's account. Performance information current to the most recent month-end is available on our website www.jhpensions.com.**

Performance data for a sub-account for any period prior to the date introduced is shown in bold and is hypothetical based on the performance of the underlying fund.

The Index is S&P Target Date Through 2055.¹¹⁸⁹

The peer group is Target-Date 2055.¹¹⁸⁹

Principal risks include: issuer, small cap stock, interest rate, market, foreign securities, Credit and Counterparty, Risk of increase in expenses, target date, fund of funds, derivatives, manager, U.S. government securities, Merger and Replacement Transition Risk, Emerging Markets Risk, mortgage-backed and asset-backed securities, liquidity, target allocation, large cap and Lifecycle/Target Date Portfolio Risk. For more details, see Risk Disclosures section of this booklet



CAPITAL GROUP® | AMERICAN FUNDS

American Funds 2055 Target Date Retirement Fund^{114,185}

Investing solely in American Funds 2055 Target Date Retirement Fund (Class R6)

Managed by American Funds Group

Ticker Symbol*: **RFKTX**

Fund Highlights

Investment Objective and Policies ▶ Depending on the proximity to its target date, the fund will seek to achieve the following objectives to varying degrees: growth, income and conservation of capital. The fund will increasingly emphasize income and conservation of capital by investing a greater portion of its assets in bond, equity-income and balanced funds as it approaches and passes its target date. In this way, the fund seeks to balance total return and stability over time.

Why Consider this Fund

- ▶ You want the opportunity to remain in the same portfolio after the target date is reached
- ▶ You want one-step diversification with exposure to domestic stocks, international stocks and fixed-income securities
- ▶ You've considered your risk tolerance and want your asset allocation to become more conservative over time, but still provide growth after your retirement date to protect against longevity risk
- ▶ You want an actively managed asset allocation portfolio investing in actively managed underlying funds

Holdings, Weightings and Allocations of the underlying fund

Note: The Board of Trustees of the underlying fund ("fund") in which the sub-account invests may, in its discretion, determine to combine the fund with another fund if the target allocation of the fund materially matches the target allocation of the other fund. In such event, the fund's investors (including the sub-account that invests in the fund) will become investors of the other fund. To the extent permitted by applicable regulatory requirements, such a combination would be implemented without seeking the approval of the fund's investors. There is no assurance that the Board of Trustees at any point will determine to implement such a combination.

Top Holdings (as of 9-30-18)¹¹⁸⁹

American Funds Invmt Co of Amer R6	9.0%
American Funds Washington Mutual R6	9.0%
American Funds American Mutual R6	8.0%
American Funds Fundamental Invs R6	8.0%
American Funds SMALLCAP World R6	7.0%
American Funds New Perspective R6	7.0%
American Funds Growth Fund of Amer R6	7.0%
American Funds Capital World Gr&Inc R6	7.0%
American Funds AMCAP R6	7.0%
American Funds US Government Sec R6	5.1%

Totals 74.1% of assets

Asset Allocation (as of 9-30-18)¹¹⁸⁹

US Stock	52.9%
Non US Stock	31.0%
Cash	7.2%
US Bond	7.2%
Non US Bond	1.5%
Other	0.1%
Preferred	0.1%

Top Country Holdings (as of 9-30-18)¹¹⁸⁹

United States	60.1%
United Kingdom	5.6%
China	3.0%
Japan	2.8%
Canada	2.2%
France	2.1%
Switzerland	1.9%
Netherlands	1.8%
India	1.6%
South Korea	1.5%

Top Sector Weightings (as of 9-30-18)¹¹⁸⁹

Technology	16.8%
Financial Services	13.2%
Healthcare	11.3%
Consumer Cyclical	11.2%
Industrials	8.6%
Consumer Defensive	6.8%
Energy	6.3%
Basic Materials	3.9%
Communication Services	2.7%
Utilities	2.0%
Real Estate	1.0%

Key Statistics (as of 9-30-18 unless noted⁵)¹¹⁸⁹

- ▶ **Number of Holdings:** 16
- ▶ **Sharpe Ratio:** 1.57
- ▶ **Beta:** 0.95 (S&P Target Date Through 2055 TR)
- ▶ **R²:** 96.39 (S&P Target Date Through 2055 TR)
- ▶ **Turnover (annualized)⁵:** 1.00
- ▶ **Net Assets:** \$3.9 billion
- ▶ **Underlying fund expense ratios:**
 - Gross⁶ 0.42%
 - Net⁶ 0.42%
- ▶ **Market Cap (millions):** 58795.95

* The Net expense ratio shown is for the underlying fund and reflects any fee waivers or expense reimbursements and is subject to change. Please refer to the underlying fund prospectus for additional information.^A

Sub-Account Details

Asset Class/Investment Style

Target Date

Performance**

Returns (as of 9-30-18)

	Fund	Index	Peer Group
1 year	10.59%	10.90%	9.74%
3 year	13.20%	13.49%	12.66%
Since inception	9.01%	n/a	n/a

Expense Ratio (as of 9-30-18)****

Expense Ratio****	1.05%
Cost Per \$1,000	\$10.50

Sub-Account Inception Date: March 24, 2016
Underlying fund Inception Date: March 27, 2015

¥See important notes.

****The performance data presented represents past performance. Past performance is no guarantee of future results and current performance may be lower or higher than the performance quoted. An investment in a sub-account will fluctuate in value to reflect the value of the underlying portfolio and, when redeemed, may be worth more or less than original cost. Performance does not reflect any applicable contract-level or certain participant-level charges, or any redemption fees imposed by an underlying fund company. These charges, if included, would otherwise reduce the total return for a participant's account. Performance information current to the most recent month-end is available on our website www.jhpensions.com.**

Performance data for a sub-account for any period prior to the date introduced is shown in bold and is hypothetical based on the performance of the underlying fund.

The Index is S&P Target Date Through 2060+. ¹²³⁴

The peer group is Target-Date 2060+. ^{p71}

Principal risks include: target date, Risk of increase in expenses, target allocation, mortgage-backed and asset-backed securities, issuer, market, liquidity, manager, Credit and Counterparty, large cap, derivatives, Merger and Replacement Transition Risk, Emerging Markets Risk, interest rate, short sale, fund of funds, foreign securities, U.S. government securities and Lifecycle/Target Date Portfolio Risk. For more details, see Risk Disclosures section of this booklet



CAPITAL GROUP® | AMERICAN FUNDS

American Funds 2060 Target Date Retirement Fund ^{114,185}

Investing solely in American Funds 2060 Target Date Retirement Fund (Class R6)

Managed by American Funds Group

Ticker Symbol*: RFUTX

Fund Highlights

Investment Objective and Policies ▶ Depending on the proximity to its target date, the fund will seek to achieve the following objectives to varying degrees: growth, income and conservation of capital. The fund will increasingly emphasize income and conservation of capital by investing a greater portion of its assets in bond, equity-income and balanced funds as it approaches and passes its target date. In this way, the fund seeks to balance total return and stability over time.

Why Consider this Fund

- ▶ You want the opportunity to remain in the same portfolio after the target date is reached
- ▶ You want one-step diversification with exposure to domestic stocks, international stocks and fixed-income securities
- ▶ You've considered your risk tolerance and want your asset allocation to become more conservative over time, but still provide growth after your retirement date to protect against longevity risk
- ▶ You want an actively managed asset allocation portfolio investing in actively managed underlying funds

Holdings, Weightings and Allocations of the underlying fund

Note: The Board of Trustees of the underlying fund ("fund") in which the sub-account invests may, in its discretion, determine to combine the fund with another fund if the target allocation of the fund materially matches the target allocation of the other fund. In such event, the fund's investors (including the sub-account that invests in the fund) will become investors of the other fund. To the extent permitted by applicable regulatory requirements, such a combination would be implemented without seeking the approval of the fund's investors. There is no assurance that the Board of Trustees at any point will determine to implement such a combination.

Top Holdings (as of 9-30-18)α

American Funds Washington Mutual R6	9.0%
American Funds Invmt Co of Amer R6	9.0%
American Funds Fundamental Invs R6	8.0%
American Funds American Mutual R6	8.0%
American Funds Capital World Gr&Inc R6	7.0%
American Funds Growth Fund of Amer R6	7.0%
American Funds New Perspective R6	7.0%
American Funds SMALLCAP World R6	7.0%
American Funds AMCAP R6	7.0%
American Funds US Government Sec R6	5.0%

Totals 74.0% of assets

Asset Allocation (as of 9-30-18)α

US Stock	52.9%
Non US Stock	31.0%
US Bond	7.2%
Cash	7.2%
Non US Bond	1.5%
Other	0.1%
Preferred	0.1%

Top Country Holdings (as of 9-30-18)α

United States	60.1%
United Kingdom	5.6%
China	3.0%
Japan	2.8%
Canada	2.2%
France	2.1%
Switzerland	1.9%
Netherlands	1.8%
India	1.6%
South Korea	1.5%

Top Sector Weightings (as of 9-30-18)α

Technology	16.8%
Financial Services	13.2%
Healthcare	11.3%
Consumer Cyclical	11.2%
Industrials	8.6%
Consumer Defensive	6.9%
Energy	6.3%
Basic Materials	3.9%
Communication Services	2.7%
Utilities	2.0%
Real Estate	1.0%

Key Statistics (as of 9-30-18 unless noted⁵)α

- ▶ **Number of Holdings:** 16
- ▶ **Sharpe Ratio:** 1.58
- ▶ **Beta:** 0.95 (S&P Target Date Through 2060* TR USD)
- ▶ **R²:** 96.47 (S&P Target Date Through 2060* TR USD)
- ▶ **Turnover (annualized)⁵:** 4.00
- ▶ **Net Assets:** \$1.0 billion
- ▶ **Underlying fund expense ratios:**
 - Gross* 0.49%
 - Net* 0.45%
- ▶ **Market Cap (millions):** 58793.51

* The Net expense ratio shown is for the underlying fund and reflects any fee waivers or expense reimbursements and is subject to change. Please refer to the underlying fund prospectus for additional information.^A

¥ Important notes

Please call 1-800-395-1113 to obtain the Fund Sheet for the group annuity investment option sub-accounts and/or to obtain a prospectus (or Offering Memorandum/Trust Document) for the sub-accounts' underlying fund, that are available on request. The prospectuses (or Offering Memorandum/Trust Documents) for the sub-accounts' underlying funds contain complete details on investment objectives, risks, fees, charges and expenses as well as other information about the underlying funds which should be carefully considered before investing.

Fees and expenses are only one of several factors that you should consider when making investment decisions. The cumulative effect of fees and expenses can substantially reduce the growth of your retirement account. You can visit the Employee Benefit Security Administration's Web site for an example demonstrating the long-term effect of fees and expenses.

Contributions under a group annuity contract issued by John Hancock Life Insurance Company (U.S.A.) (John Hancock USA) are allocated to investment options which: (a) invest solely in shares of an underlying mutual fund, collective trust, or ETF; (b) invest in a combination of these; or (c) are Guaranteed Interest Accounts and which will be held in the John Hancock USA general account. For more information on a particular investment option, please refer to John Hancock USA's Fund sheets, available through the Web site or your John Hancock USA representative.

Allocating assets to only one or a small number of the investment options (other than an asset allocation investment option such as a target date or target risk option) should not be considered a balanced investment program. In particular, allocating assets to a small number of investment options concentrated in particular business or market sectors could subject an account to increased risk and volatility.

* When contributions are allocated to Funds under your employer's group annuity contract with John Hancock, they will be held in a sub-account (also referred to as "Fund"), which invests in shares of the specified underlying mutual fund, collective trust, ETF or a combination of these. The ticker symbols shown are for the underlying mutual fund, collective trusts or ETFs in which sub-accounts are invested. The ticker symbols do not directly apply to the John Hancock sub-account and therefore any public information accessed using these symbols will not reflect the unit value of the subaccount, nor will such information reflect sub-account, contract-level or participant-level charges under your plan's group annuity contract.

Information Concerning John Hancock's Short-Term Trading Policy

The group annuity contract is not designed for short-term trading. The effect of short-term trading may disrupt or be potentially disruptive to the management of the fund underlying an investment option and may thereby adversely impact the underlying fund's performance, either by impacting fund management practices or by increasing fund transaction costs. These impacts are absorbed by other fund investors, including retirement plan participants. For the protection of the participants, account changes are subject to the following short-term trading guidelines when exchanging investment options under your company's qualified retirement plan account with John Hancock. Requests may be cancelled if not within our guidelines.

Participants are allowed a **maximum of two exchanges per calendar month**. An exchange is defined as the full rebalance of a participant's account, or single or multiple fund-to-fund transfers that involve multiple investment options (also referred to as "inter-account transfers") on one day, and may be made over the Web, by fax, courier or mail, through our toll-free participant services line, or with a client account representative.

Recognizing that there may be extreme market or other circumstances requiring a participant to make a further change, John Hancock will allow a participant to move **100% of their assets to a Money Market or Stable Value Fund (as available under the contract after the exchange limit has been reached; no subsequent exchanges may be made for 30 days)**. Once the 30-day hold has

expired, participants can trade again in accordance with the above guidelines.

The guidelines **do not** apply to regular allocations, loans, or withdrawals

In addition, on an ongoing basis, participant account activity is reviewed for trading activity that, though within the monthly exchange limit, could be detrimental to an underlying fund and/or contrary to its exchange policies, as described in the fund's prospectus. As a result of this review, or if requested by a fund company, additional restrictions may be imposed on a participant's retirement account, including but not limited to:

- Applying redemption fees and/or trade restrictions as requested by the underlying fund manager. Such trade restrictions may be more restrictive than the above guidelines
- Restricting the number of exchanges made during a defined period
- Restricting the dollar amount of exchange
- Restricting the method used to submit exchanges (e.g., requiring exchange requests to be submitted in writing via U.S. mail)
- Restricting exchanges into and out of certain investment options

Participants can read about the short-term trading policy at www.jhpnensions.com or www.jhnpensions.com (for plans domiciled in New York) under the "modify your account - change account" feature. Redemption fees or market value adjustments associated with exchanges from particular investment options are described on applicable fund sheets, which are available online. For more information or to order prospectuses for the underlying investments, call 1-800-395-1113 and speak to a client account representative.

± Weightings - Applicable to only the Target Date and Target Risk (Lifestyle Portfolios)

Each Target Risk/Target Date Portfolio has a target percentage allocation designed to meet the investment objectives of a corresponding investment orientation. Allocation percentages may vary or be adjusted due to market or economic conditions or other reasons as set out in the prospectus. Due to abnormal market conditions or redemption activity the fund may temporarily invest in cash and cash equivalents.

The underlying mutual fund, collective trust, or ETF has the right to restrict trade activity without prior notice if a participant's trading is determined to be in excess of their exchange policy, as stated in the prospectus or offering memorandum.

□ The information shown is based on the most recent available information for the underlying mutual fund, collective trust, or ETF (collectively referred to as underlying fund) as of the date of printing and is subject to change. Listed holdings do not represent all of the holdings in the underlying fund.

1A. Your company's qualified retirement plan offers participants the opportunity to contribute to investment options available under a group annuity contract with John Hancock Life Insurance Company (U.S.A.) (John Hancock USA). These investment options may be sub-accounts (pooled funds) investing directly in underlying mutual fund, collective trusts, or ETFs, or they may be Guaranteed Interest Accounts.

The Funds offered on the JH Signature platform are classified into five risk categories. The risk category in which a Fund is placed is determined based on where the 10 year Standard Deviation (defined below) of the underlying fund's Morningstar Category falls on the following scale: if the 10 year Standard Deviation of the underlying fund's Morningstar Category is 17.00 or higher, the Fund is classified as "Aggressive;" between 11.50 and 16.99 as "Growth;" between 6.50 and 11.49 as "Growth & Income;" between 2.50 and 6.49 as "Income;" and 2.49 and below as "Conservative." If a 10 year Standard Deviation is not available for a Morningstar Category, then the 5 year Standard Deviation of the underlying fund's Morningstar Category is used to determine the Fund's risk

category. If a 5 year Standard Deviation is not available for a Morningstar Category, then the 5 year Standard Deviation of the underlying fund's Morningstar Category Index is used to determine the Fund's risk category. Standard Deviation is defined by Morningstar as a statistical measurement of dispersion about an average, which, for an underlying fund, depicts how widely the returns varied over a certain period of time.

The placement of each investment option's risk/return category is subject to change. This information is not intended as investment advice and there can be no assurance that any investment option will achieve its objectives or experience less volatility than another.

2A. Manager or Sub-Adviser refers to the manager of the underlying fund, or to the sub-adviser of the underlying John Hancock Trust, John Hancock Funds II, or John Hancock Funds III fund in which the sub-account invests. "Underlying fund" includes the underlying mutual fund, collective trust, or ETF in which a sub-account invests.

3A. Date sub-account or Guaranteed Interest Account first available under group annuity contract. The class introduction date is the same as the sub-account Inception Date.

4A. The performance data for a sub-account for any period prior to the sub-account Inception Date is hypothetical based on the performance of the underlying investment since inception of the underlying investment. All other performance data is actual (except as otherwise indicated). Returns for any period greater than one year are annualized. Performance data reflects changes in the prices of a sub-account's investments (including the shares of an underlying mutual fund, collective trust, or ETF), reinvestment of dividends and capital gains and deductions for the sub-account charges.

The performance data presented represents past performance. Past performance is no guarantee of future results and current performance may be lower or higher than the performance quoted. An investment in a sub-account will fluctuate in value to reflect the value of the sub-account's underlying fund and, when redeemed, may be worth more or less than original cost. Performance does not reflect any applicable contract-level or participant-level charges, fees for guaranteed benefits if elected by participant, or any redemption fees imposed by an underlying mutual fund, collective trust or ETF. These charges, if included, would otherwise reduce the total return for a participant's account. Performance current to the most recent month-end is available at www.jhpensions.com.

****Expense Ratio (ER),

This material shows expenses for a specific unit class for investment options available under a John Hancock group annuity contract. The Expense Ratio ("ER") shown represents the total annual operating expenses for the investment options made available by John Hancock. It is made up of John Hancock's (i) "Revenue from Sub-account", and (ii) the expenses of the underlying fund (based on expense ratios reported in the most recent prospectuses available as of the date of printing; "FER"). In the case where an underlying fund has either waived a portion of, or capped, its fees, the FER used to determine the ER of the sub-account that invests in the underlying fund is the net expense ratio of the underlying fund. "Underlying fund" or "fund" refers to the underlying mutual fund, collective trust, or exchanged traded fund ("ETF") in which the investment option invests. The FER is determined by the underlying fund and is subject to fluctuation. Any change in the FER of an underlying fund will affect the Expense Ratio of the investment option which invests in the underlying fund.

The ER applies daily at a rate equivalent to the annual rate shown, and may vary to reflect changes in the expenses of an underlying fund and other factors. For Expense Ratio information current as of the most recent quarter end, please refer to the monthly "Return and Fees" listing available from John Hancock upon request. For more information, please contact your financial representative.

** Performance of the sub-account

The performance data for a sub-account for any period prior to the sub-account Inception Date is hypothetical based on the performance of the underlying portfolio.* The class introduction date is the same as the sub-account Inception

Date. Returns for any period greater than one year are annualized. Performance data reflects changes in the prices of a sub-account's investments (including the shares of an underlying fund), reinvestment of dividends and capital gains and deductions for the Expense Ratio (ER). Performance does not reflect any applicable contract-level or certain participant-level charges, fees for guaranteed benefits if elected by participant under the group annuity contract or redemption fees imposed by the underlying Portfolio. These charges, if included, would otherwise reduce the total return for a participant's account. All performance calculations shown have been prepared solely by John Hancock USA. The underlying fund company has not reviewed the sub-account's performance.

6A. Morningstar Category:

© 2018 Morningstar. All Rights Reserved. The information contained herein: (1) is proprietary to Morningstar and/or its content providers; (2) may not be copied or distributed; and (3) is not warranted to be accurate, complete or timely. Neither Morningstar nor its content providers are responsible for any damages or losses arising from any use of this information. Past performance is no guarantee of future results.

Morningstar assigns categories by placing funds into peer groups based on their underlying holdings. The underlying securities in each portfolio are the primary factor Morningstar uses as the investment objective and investment strategy stated in a fund's prospectus may not be sufficiently detailed for our proprietary classification methodology. Funds are placed in a category based on their portfolio statistics and compositions over the past three years. Analysis of performance and other indicative facts are also considered. If the fund is new and has no portfolio history, Morningstar estimates where it will fall before giving it a permanent category assignment. Categories may be changed based on recent changes to the portfolio.

***Morningstar Portfolio Ratings

All Morningstar data is © 2018 by Morningstar, Inc. All rights reserved. The information contained herein: (1) is proprietary to Morningstar and/or its content providers; (2) may not be copied or distributed; and (3) is not warranted to be accurate, complete or timely. Neither Morningstar nor its content providers are responsible for any damages or losses arising from any use of this information. For each underlying fund with at least a three-year history, Morningstar calculates a Morningstar Rating™ based on a Morningstar Risk-Adjusted Return measure that accounts for variation in the underlying fund's monthly performance (does not include the effects of sales charges, loads, and redemption fees), placing more emphasis on downward variations and rewarding consistent performance. Exchange traded funds and open-ended mutual funds are considered a single population for comparative purposes. Funds with scores in the top 10% of each category receive 5 stars (highest); the next 22.5%, 4 stars (above average); the next 35%, 3 stars (average); the next 22.5%, 2 stars (below average); and the bottom 10%, 1 star (lowest). Morningstar ratings are applicable to the underlying only and reflect historical risk-adjusted performance as of the most recent calendar quarter-end. Although gathered from reliable sources, the information is not represented or warranted by Morningstar to be accurate, correct, complete or timely.

*The amounts displayed below represent the gross and net expense ratios of the underlying fund in which the sub-account invests. Where the figures are different, the underlying fund has either waived a portion of, or capped its fees, and the result of such fee waiver or cap is reflected in the net expense ratio. The waiver or cap is subject to expiration, in which case the Expense Ratio and performance of the sub account may be impacted. Refer to the prospectus of the underlying fund for details.

When calculating the Expense Ratio of the sub-account, the net expense ratio of the underlying fund is used. Returns shown reflect the Expense Ratio of the sub-account.

^A The amounts displayed below represent the gross and net expense ratios of the underlying fund in which the sub-account invests. Where the figures are different, the underlying fund has either waived a portion of, or capped its fees, and the result of such fee waiver or cap is reflected in the net expense ratio.

¥ Important notes CONTINUED

The waiver or cap is subject to expiration, in which case the Expense Ratio and performance of the sub account may be impacted. Refer to the prospectus of the underlying fund for details. When calculating the Expense Ratio of the sub-account, the net expense ratio of the underlying fund is used. Returns shown reflect the Expense Ratio of the sub-account.

114. If John Hancock has been provided with your date of birth and no investment instructions at the time of enrollment, then, on the date of your enrollment, you will be default enrolled into a Target Date (Lifecycle Portfolio) based on your year of birth and a retirement age of 67, and subject to the Target Date then in existence.

185. This sub-account previously invested in a different share class of the same underlying portfolio. It began investing in the current share class effective on or about November 3, 2017. Performance shown for periods prior to that date is based on the performance of the old share class.

Index Performance:

With respect to the Funds that display an index performance. Index performance shown is for a broad-based securities market index. Indexes are unmanaged and cannot be invested in directly. Index returns were prepared using Morningstar Direct. The performance of an Index does not include any portfolio or insurance-related charges. If these charges were reflected, performance would be lower. Past performance is not a guarantee of future results.

i234. S&P Target Date Through 2060⁺: The S&P Target Date Style Indices are designed to help defined contribution plan sponsors screen, select and monitor appropriate target date funds.

Peer Group Performance:

With respect to the Funds that display a Peer Group Performance. Source: Morningstar Direct for Mutual Funds, as of the most recent month end. Morningstar data is ©2018 by Morningstar, Inc. All rights reserved. Although gathered from reliable sources, the information is not represented or warranted by Morningstar to be accurate, correct, complete or timely. Peer groups are unmanaged and cannot be invested in directly.

p71. Target-Date 2060⁺: 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 2060⁺) 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.

Key Statistics

[§]The Turnover Ratio shown is based on the most recent available financial statements for the underlying mutual fund, collective trust, or ETF as of the date of printing and is subject to change.

Wrap Provider Exposure[†]

S&P

Credit ratings of AA- or better are considered to be high credit quality; credit ratings of BBB- are good credit quality and the lowest category of investment grade; credit ratings BB⁺ and below are lower-rated securities ("junk bonds"); and credit ratings of CCC⁺ or below have high default risk. The credit quality breakdown does not give effect to the impact of any credit derivative investments made by the fund.

Moody's

The rating scale, running from a high of Aaa to a low of C, comprises 21 notches. It is divided into two sections, investment grade and speculative grade. The lowest investment-grade rating is Baa3. The highest speculative-grade rating is Ba1. Moody's appends numerical modifiers 1, 2, and 3 to each generic rating classification from Aa through Caa.

Fund availability subject to regulatory approval and may vary from state to state. The availability of products, Funds and contract features may be subject to Broker-Dealer Firm approval, State approval, Broker Licensing requirements, tax law requirements, or other contract-related requirements. From time to time, changes are made to Funds, and the availability of these changes may be subject to State approvals or other compliance requirements. Please confirm with your local John Hancock Representative if you have any questions about product, Fund or contract feature availability.