404a-5 Plan & Investment Notice

JOHN HANCOCK DEMO CONTRACT FOR ILLUSTRATION PURPOSES

As of August 19, 2019

This disclosure statement contains important information regarding your retirement plan that we, as Plan Sponsor, are required to provide under ERISA Reg. section 404a-5. You are receiving this disclosure because you are eligible to participate in the plan or you have the right to direct the investment of an account under the plan. In this document, you will find information about how the plan works, the expenses that may be charged, and information that will help you make informed decisions when selecting and managing the investment of your account.

General Plan Information

The following provides an explanation of how you may direct investments in the Plan and outlines the restrictions and policies that apply to the investment options available under your Plan:

HOW TO PROVIDE YOUR INVESTMENT INSTRUCTIONS

You can direct your Plan investments using any of the following:

- · Enrollment form
- Investment change form
- Participant website at www.jhpensions.com
- Participant services toll-free line at 800-395-1113 or 800-363-0530 for Spanish

You may direct the investment of the funds held in your plan account to any of the investment options outlined in the attached Investment Comparative Chart.

TIMELINES REGARDING YOUR INVESTMENT INSTRUCTIONS

Investment Instructions:

- Can be given using the options outlined above.
- Can be given at any time unless you are provided an addendum that states restrictions on the times at which you may provide investment instructions.
- Are generally processed on the same business day, provided they are received by John Hancock before 4 p.m. EST (or before the New York Stock Exchange closes, if earlier). If received on or after 4 p.m. EST, they will be processed the next business day.

SHORT-TERM TRADING POLICY

Changes to your investments under your qualified retirement plan account are subject to the following short-term trading guidelines of John Hancock and may be cancelled if not within these guidelines:

- Investment exchanges can be made up to a maximum of two exchanges per calendar month.
- In the event that there may be extreme market or personal circumstances requiring you to make an additional change, you may move 100% of your assets to the Money Market Fund after the exchange limit has been reached; no subsequent exchanges may be made for 30 days. Once the 30-day hold has expired, you can then trade again in accordance with the above guideline.
- At the request of the fund company of an underlying fund, and as outlined in their prospectus, the following additional restrictions may be imposed on your account, including but not limited to:
 - Applying redemption fees and/or trade restrictions which may be more restrictive than the above quidelines,
 - Restricting the number of exchanges made during a defined period,
 - Restricting the dollar amount of exchanges,
 - Restricting the method used to submit exchanges (i.e. requiring exchange requests to be submitted in writing via U.S. mail),
 - Restricting exchanges into and out of certain investment options.

REDEMPTION FEES

An underlying mutual fund may apply a redemption fee or other fee for certain investment transfers.

- This fee is deducted from your account.
- For a list of the funds that have redemption fees, refer to the Investment Comparative Chart or go to the investment options tab at www.jhpensions.com for the most recent listing.

RESTRICTIONS REGARDING INVESTING IN THE GUARANTEED INTEREST ACCOUNTS

If you choose to invest in a Guaranteed Interest Account, the following restrictions apply:

- In each reporting year, you may transfer at book value up to 20% of your opening account balance of each Guaranteed Interest Account to any investment option outlined in the Investment Comparative Chart on the following dates Jan 1, Apr 1, Jul 1, Oct 1. All transfers from any Guaranteed Interest Account to the Money Market Fund may be subject to a Market Value Adjustment (lesser of book or market value).
- Any transfer that is in excess of the 20% limit (and any Guaranteed Interest Account transfer made on a date other than the dates specified above) may be subject to a Market Value Adjustment (lesser of book or market value).
- A market value formula will apply to the following withdrawals which may result in a Market Value Adjustment (lesser of book or market value):
 - Plan Discontinuances
 - In-service Withdrawals
 - Pre-retirement withdrawals at 59 1/2
 - Withdrawals of employee voluntary (after-tax) monies
- Hardship Withdrawals issued from the Guaranteed Interest Accounts will be at book value.
- Loans issued from the Guaranteed Interest Accounts will be at book value.
- For questions or more details on whether a market value adjustment will be applied, call the John Hancock participant services toll free line at 800-395-1113 or 800-363-0530 for Spanish.

Note: Transfers between Guaranteed Interest Accounts (e.g. 3-yr to 5-yr) are not permitted.

DESIGNATED INVESTMENT ALTERNATIVES

Your Plan provides designated investment alternatives into which you can direct the investment of your account balance.

- For a full listing of these Funds, including applicable important information, refer to the attached Investment Comparative Chart.
- A listing of the Funds available for selection can also be accessed under the investment options tab on the Participant website at www.jhpensions.com.

DESIGNATED INVESTMENT MANAGER

The Plan has designated John Smith at ABC Company as the investment manager on the Plan in order to provide investment management services. This individual may be contacted at ABC Company, 123 Any Street Suite 100, San Francisco, CA, 90210-1234, 555 555 5555 Ext. 555555 or 555@555.cxx. Office only open on Tuesday's.

Administrative Expenses

The following administrative charges are applied to your account for services related to the operation of the plan. Percentage-based expenses shown below are annual charges which will be converted to a monthly rate and applied to your month-end account balance (i.e. calculated on a 'pro-rata' basis). Dollar-based expenses are annual amounts which will be converted to a monthly charge unless specified otherwise (i.e. calculated on a 'per participant' basis). Expenses that are actually deducted from your account will appear on your quarterly benefit statements.

- Your plan has engaged John Hancock to provide record-keeping services such as educational resources, transaction processing, investment platform, quarterly statements and website tools. Dollar-based charges* are currently waived. Percentage-based charges*, if applicable, are offset by credits that have been negotiated by your plan sponsor. As a result, a credit of 0.05%** is currently being applied to your account on a pro-rata basis. Any charges and/or credits will appear on your quarterly benefit statements.
 - * Charges may fluctuate or be waived based on the total assets in the plan, according to a pre-set fee schedule and other conditions agreed to by your plan sponsor and John Hancock.
 - **The credit rate is an annual rate which will be converted to a monthly rate and applied to your month-end account balance. The rate may vary depending on the applicable percentage-based charges.
- The ongoing administration and management of your plan requires additional services such as fund selection and monitoring, consulting, plan compliance, plan
 reporting, and other administrative services. Charges will be applied to your account as follows: 0.05% on a pro-rata basis.

If you have any questions, please contact your plan sponsor.

Individual Expenses

The following transaction fees apply. These fees will be deducted from your account at the time the transaction is processed. Fees deducted from your account will appear on your quarterly benefit statements.

As of August 19, 2019 the fees listed below apply if you use any of the services or features below:

Fee Type	Amount	Special Notes
Loan Fee	\$2.00	Per loan, per month
Mailed Detailed Statement Fee	\$1.00	Per statement per quarter
Plan Consultant Fees		
Withdrawal of Automatic Contributions	\$10.00	
Loan Maintenance	\$50.00	
Loan Set-up	\$125.00	
Mandatory Distribution (Involuntary)	\$20.00	
Retirement Withdrawal	\$125.00	
Withdrawal of Voluntary Contributions	\$125.00	
^additional testing	\$125.00	special testing charge
^Death or Disability Withdrawal	\$62.00	
^Lost Participant	\$100.00	Charge between \$25.00 - \$100.00
^Special Administrative Fee	\$100.00	This is a one time testing charge

[^]If this fee is deducted it may not show exactly as above on your quarterly statement.

This material is for information purposes only. John Hancock USA does not provide investment, tax, plan design or legal advice. Please consult your own independent advisor as to any investment, tax, plan design-related or legal statements made herein.

Group annuity contracts and recordkeeping agreements are issued by John Hancock Life Insurance Company (U.S.A.), Boston, MA (not licensed in New York). John Hancock Life Insurance Company (U.S.A.) makes available a platform of investment alternatives to sponsors or administrators of retirement plans without regard to the individualized needs of any plan. Unless otherwise specifically stated in writing, John Hancock Life Insurance Company (U.S.A.) does not, and is not undertaking to, provide impartial investment advice or give advice in a fiduciary capacity.

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Investment Comparative Chart

JOHN HANCOCK DEMO CONTRACT FOR ILLUSTRATION PURPOSES

This document includes important information to help you compare the investment options available under your retirement plan. If you would like to receive additional investment-related information about any of the investment options listed below - including performance data and the option's principal risks - go to the Fund's corresponding website address (shown in the table) or to www.jhpensions.com.

To obtain more information, or to receive a paper copy (at no cost) of the information available on the websites, contact Functional Expert Team at (703) 400-0040 and 200 Bloor St (Mailingl), Toronto, ON,

Canada M4W 1F5

DOCUMENT OVERVIEW

This document is comprised of two sections; Performance Information and Fee and Expense Information.

Performance Information

This section outlines your retirement plan investment options, how they have performed over time and allows you to compare with an appropriate benchmark for the same time period. Benchmark returns are shown for comparative purposes only. Benchmark returns represent the performance of market indices, which cannot be invested in directly, and their returns are calculated without taking into account any investment fees and/or expenses. Hypothetical Returns are shown in bold.

The data presented represents past performance and does not guarantee future performance. 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 securities 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 mutual fund company. These charges, if included, would otherwise reduce the total return for a participant's account. Participants can call 1-800-395-1113 or visit www.jhpensions.com for more information.

Fee and Expense Information

This section shows fee and expense information for the investment options available under your contract. Total Annual Operating Expenses and Shareholder-type Fees (if applicable) are outlined as they relate to each investment option. Total Annual Operating Expenses are expenses that reduce the rate of return of the investment option. It is important to understand that the investment rate of return, as set out in the Performance Information section, is calculated net of the Total Annual Operating Expenses of the investment option. However, such returns do not take into account any applicable Shareholder-type fees, which are in addition to the Total Annual Operating Expenses of the investment option.

The Total Annual Operating Expenses ("TAOE") is made up in part by the expenses of the underlying fund based on the underlying fund's expense ratios reported in the most recent prospectuses available as of the date of printing; "FER"). The underlying fund is the mutual fund, collective trust, or exchange traded fund in which the sub-account invests. § The underlying fund of this sub-account has either waived a portion of, or capped, its fees. The TAOE is that of the sub account and reflects the net expense ratio of the underlying fund after such expense waiver or cap is applied. Please see the Fund Sheet for details, including gross expenses.

The cumulative effect of fees and expenses can substantially reduce the growth of your retirement savings. Visit the Department of Labor's website for an example showing the long-term effect of fees and expenses at https://www.dol.gov/sites/default/files/ebsa/about-ebsa/our-activities/resource-center/publications/maximize-your-retirement-savings.pdf. Fees and expenses are only one of many factors to consider when you decide to invest in an option. You may also want to think about whether an investment in a particular option, along with your other investments, will help you achieve your financial goals.

Investment Options as of Aug/19/2019 Page 4 of 24

VARIABLE RETURN INVESTMENTS*

The table below focuses on the performance of investment options that do not have a fixed or stated rate of return.

Name/Type of Option	Return YTD as of	Aver		ual Total F 2/31/2018		Benchmark YTD as of		Benchmark [†] Return as of 12/31/2018	Operating	Annual J Expenses /31/2019	Shareholder-Type Fees		
	07/31/2019	1 yr.	5 yr.	10 yr.	Since Inception	07/31/2019				Since Inception	As a %	Per \$1,000	
EQUITY FUNDS						•				,			
AMG Managers Fairpointe Mid Cap Fund (AOM) ^{87,103,178} Mid Cap Value http://www.viewjhfunds.com/usa/C00/aoma/ index.html	17.05%	-18.33%	2.38%	13.88%	11.29%	19.37%	-11.08%	6.02% S&P Mid	13.68% Cap 400 TR	11.31%	0.83%	\$8.30	N/A
Vanguard Mid-Cap Value ETF (VOE) ^{118,119,123,139} Mid Cap Value http://www.viewjhfunds.com/usa/C00/voea/ index.html	19.13%	-12.45%	5.39%	13.29%	7.21%	19.32%	-12.42%		13.66% Iid Cap Valu	7.29% ue	0.13%	\$1.30	N/A
DFA U.S. Targeted Value Fund (DUT) ²⁵ Small Cap Value http://www.viewjhfunds.com/usa/C00/duta/ index.html	14.02%	-15.78%	2.59%	11.93%	10.16%	13.64%	-12.86%		10.39% 000 Value Ti	8.89% R	0.37%	\$3.70	N/A
DFA US Small Cap Fund (SCP) ^{31,54} Small Cap Blend http://www.viewjhfunds.com/usa/C00/scpa/ index.html	15.30%	-13.13%	3.86%	13.38%	10.15%	17.65%	-11.01%	4.41% Russel	11.97% I 2000 TR	8.99%	0.37%	\$3.70	N/A
Royce Pennsylvania Mutual Fund (RPM) ⁹⁷ Small Cap Blend http://www.viewjhfunds.com/usa/C00/rpma/index.html	19.36%	-9.48%	3.36%	11.56%	8.23%	17.65%	-11.01%		11.97% I 2000 TR	N/A	0.72%	\$7.20	N/A
§ Small Cap Index Fund (SCI) ^{13,22,29,91} Small Cap Blend http://www.viewjhfunds.com/usa/C00/scia/index.html	17.67%	-11.03%	4.58%	12.16%	7.19%	17.65%	-11.01%		11.97% I 2000 TR	7.19%	0.08%	\$0.80	N/A
§ Small Cap Value Fund (SMV) ^{13,22,23,53,91} Small Cap Blend http://www.viewjhfunds.com/usa/C00/smva/index.html	16.47%	-12.07%	3.83%	12.08%	11.82%	13.64%	-12.86%		10.39% 000 Value Ti	8.54% R	0.70%	\$7.00	N/A
T. Rowe Price Small Cap Value Fund (MSO) ^{12,99,130} Small Cap Blend http://www.viewjhfunds.com/usa/C00/msoa/ index.html	19.53%	-11.36%	4.46%	11.96%	11.37%	13.64%	-12.86%		10.39% 000 Value Ti	9.94% R	0.70%	\$7.00	N/A
Invesco Small Cap Growth Fund (SCO) ^{57,67,130} Small Cap Growth http://www.viewjhfunds.com/usa/C00/scoa/index.html	22.48%	-8.37%	6.72%	14.70%	10.55%	20.24%	-4.38%	8.49% S&P	13.11% 500 TR	8.55%	0.46%	\$4.60	N/A







Name/Type of Option	Return YTD as of	Aver		ual Total F 2/31/2018		Benchmark YTD as of	as of 12/31/2018	Operating	Annual g Expenses 7/31/2019	Shareholder-Type Fees		
	07/31/2019			10 yr.	Since Inception	07/31/2019	1 yr. 5 yr.		Since Inception	As a %	Per \$1,000	
Wells Fargo Small Company Growth Fund (WFA) ^{71,138,163,194} Small Cap Growth http://www.viewjhfunds.com/usa/C00/wfaa/ index.html	19.35%	-3.46%	5.56%	15.87%	9.20%	21.54%	-9.30% 5.13% Russell 200	13.52% 00 Growth TF	8.98%	0.78%	\$7.80	N/A
Dodge & Cox International Stock Fund (DCI) ⁹⁷ International/Global Value http://www.viewjhfunds.com/usa/C00/dcia/ index.html	9.79%	-17.90%	-0.38%	7.82%	6.48%	12.57%	-13.79% 0.53% MSCI	6.31% EAFE TR	3.96%	0.53%	\$5.30	N/A
International Value Fund (ITV) ^{9,13,23} International/Global Value http://www.viewjhfunds.com/usa/C00/itva/index.html	2.33%	-14.87%	-1.52%	6.38%	4.28%	12.57%	-13.79% 0.53% 6.31% 3.27% MSCI EAFE TR		0.41%	\$4.10	N/A	
Lazard International Equity Fund (LAZ) ¹³⁸ International/Global Blend http://www.viewjhfunds.com/usa/C00/laza/ index.html	13.41%	-13.44%	-0.03%	6.48%	5.60%	12.57%	-13.79% 0.53% MSCI	6.31% EAFE TR	4.15%	0.61%	\$6.10	N/A
T. Rowe Price Overseas Stock Fund (TRO) ^{138,194} International/Global Blend http://www.viewjhfunds.com/usa/C00/troa/ index.html	10.23%	-14.86%	0.83%	7.49%	1.82%	12.57%	-13.79% 0.53% MSCI	6.31% EAFE TR	1.26%	0.66%	\$6.60	N/A
EuroPacific Growth Fund (EPG) ^{38,40,41,61,65} International/Global Growth http://www.viewjhfunds.com/usa/C00/epga/index.html	16.62%	-14.91%	1.86%	7.70%	10.43%	12.22%	-14.19% 0.67% MSCI All Country	6.57% World Index	N/A ex U.S.	0.48%	\$4.80	N/A
§ Invesco International Growth Fund (IOF) ^{53,57,110} International/Global Growth http://www.viewjhfunds.com/usa/C00/iofa/index.html	19.30%	-14.53%	0.77%	6.44%	4.16%	12.22%	-14.19% 0.67% MSCI All Country	6.57% World Index	5.66% ex U.S.	0.63%	\$6.30	N/A
§ Oppenheimer International Growth Fund (OIG) ^{3,99,128,129} International/Global Growth http://www.viewjhfunds.com/usa/C00/oiga/ index.html	17.38%	-19.15%	-0.47%	8.40%	5.49%	12.22%	-14.19% 0.67% MSCI All Country	6.57% World Index	4.01% ex U.S.	0.60%	\$6.00	N/A
§ Equity Income Fund (EIF) ^{13,31,54,99} Large Cap Value http://www.viewjhfunds.com/usa/C00/eifa/ index.html	17.56%	-9.18%	5.09%	11.11%	8.79%	17.20%	-8.26% 5.94% Russell 10	11.17% 000 Value TR	9.20%	0.29%	\$2.90	N/A











Name/Type of Option	Return YTD as of	Avei		ual Total I 2/31/2018		Benchmark YTD as of	as of 12/31/2018	Operating	Annual g Expenses //31/2019	Shareholder-Type Fees			
	07/31/2019	1 yr.	5 yr.	10 yr.	Since Inception	07/31/2019	1 yr.		10 yr.	Since Inception	As a %	Per \$1,000	
Franklin Mutual Beacon Fund (MCV) ^{41,61} Large Cap Value http://www.viewjhfunds.com/usa/C00/mcva/ index.html	15.58%	-8.01%	4.79%	10.48%	8.45%	17.55%	-8.71%	4.55% MSCI	9.66% World TR	N/A	0.56%	\$5.60	N/A
§ John Hancock Disciplined Value Fund (DVA) ^{87,106,123,130} Large Cap Value http://www.viewjhfunds.com/usa/C00/dvaa/ index.html	14.39%	-9.06%	5.91%	12.32%	12.86%	17.20%	Russell 1000 Value TR		0.27%	\$2.70	N/A		
T. Rowe Price Equity Income Fund (D&G) ^{31,54,130} Large Cap Value http://www.viewjhfunds.com/usa/C00/d_ga/ index.html	17.33%	-9.16%	4.90%	10.83%	10.55%	17.20%	Russell 1000 Value TR		0.49%	\$4.90	N/A		
§ 500 Index Fund (IND) ^{9,13,22,76,91,110,187} Large Cap Blend http://www.viewjhfunds.com/usa/C00/inda/ index.html	20.21%	-4.44%	8.46%	13.09%	8.94%	20.24%	-4.38% 8.49% 13.11% 9.08% S&P 500 TR		0.04%	\$0.40	N/A		
Domini Impact Equity Fund (SOC) ^{20,43,64,180} Large Cap Blend http://www.viewjhfunds.com/usa/C00/soca/index.html	20.73%	-8.68%	4.72%	11.44%	8.30%	20.24%	-4.38%	8.49% S&P	13.11% 500 TR	9.38%	0.67%	\$6.70	Redemption fee of 2.000% on all exchanges within a 30 day period. See Important Notes for details. ⁴³
§ JPMorgan U.S. Equity Fund (JPE) ^{138,147} Large Cap Blend http://www.viewjhfunds.com/usa/C00/jpea/ index.html	20.06%	-5.70%	8.05%	13.57%	9.15%	20.24%	-4.38%	8.49% S&P	13.11% 500 TR	7.62%	0.34%	\$3.40	N/A
MFS Massachusetts Investors Fund (MIF) ^{33,201} Large Cap Blend http://www.viewjhfunds.com/usa/C00/mifa/ index.html	23.88%	-4.84%	7.73%	12.59%	9.62%	20.24%	-4.38% 8.49% 13.11% N/A S&P 500 TR		0.21%	\$2.10	N/A		
Washington Mutual Investors Fund (WMI) ^{38,40,61,65,194} Large Cap Blend http://www.viewjhfunds.com/usa/C00/wmia/ index.html	16.05%	-2.66%	8.30%	12.49%	8.43%	20.24%	-4.38% 8.49% 13.11% N/A S&P 500 TR		0.27%	\$2.70	N/A		
§ Blue Chip Growth Fund (BCF) ^{13,57,90,117,153} Large Cap Growth http://www.viewjhfunds.com/usa/C00/bcfa/ index.html	22.82%	2.39%	11.70%	17.46%	9.31%	20.24%	-4.38% 8.49% 13.11% 9.11% S&P 500 TR		0.34%	\$3.40	N/A		













Name/Type of Option	dS 01 dS 01						Operating	Annual g Expenses /31/2019	Shareholder-Type Fees				
, ,	07/31/2019			10 yr.	Since Inception	07/31/2019	1 yr.			Since Inception	As a %	Per \$1,000	
[§] Capital Appreciation Fund (CPA) ^{12,13,15,57,106,115} Large Cap Growth http://www.viewjhfunds.com/usa/C00/cpaa/ index.html	22.08%	-0.49%	10.81%	15.81%	6.18%	24.23%		10.40% ussell 100	15.28% 00 Growth	5.23% TR	0.29%	\$2.90	N/A
ClearBridge Aggressive Growth Fund (STW) ^{8,19,160,163} Large Cap Growth http://www.viewjhfunds.com/usa/C00/stwa/ index.html	14.53%	-7.50%	4.49%	13.81%	10.06%	24.04%		Russell 3000 Growth TR		0.62%	\$6.20	N/A	
Fidelity Advisor New Insights Fund (FNI) ^{7,120,137} Large Cap Growth http://www.viewjhfunds.com/usa/C00/fnia/ index.html	22.68%	-3.93%	8.33%	13.14%	10.76%	20.24%	S&P 500 TR		0.54%	\$5.40	N/A		
Fidelity Contra Fund (CON) Large Cap Growth http://www.viewjhfunds.com/usa/C00/cona/ index.html	22.05%	-1.92%	9.57%	14.05%	12.96%	20.24%	-4.38% 8.49% 13.11% 11.18% S&P 500 TR			0.57%	\$5.70	N/A	
[§] John Hancock U.S. Quality Growth Fund (JSG) ^{13,190,202,205} Large Cap Growth http://www.viewjhfunds.com/usa/C00/jsga/ index.html	25.55%	-0.20%	9.32%	N/A	14.13%	24.23%			15.28% 00 Growth	14.66% TR	0.66%	\$6.60	N/A
[§] Mid Cap Index Fund (MCI) ^{13,22,48,57,91,183} Mid Cap Blend http://www.viewjhfunds.com/usa/C00/mcia/ index.html	19.28%	-11.10%	6.00%	13.68%	8.45%	19.37%		6.02% S&P Mid0	13.68% Cap 400 TR	8.46%	0.06%	\$0.60	N/A
American Century Heritage Fund (HER) ^{54,87} Mid Cap Growth http://www.viewjhfunds.com/usa/C00/hera/ index.html	31.82%	-4.83%	5.99%	13.27%	11.25%	29.02%				0.66%	\$6.60	N/A	
[§] Franklin Small-Mid Cap Growth Fund (SCG) Mid Cap Growth http://www.viewjhfunds.com/usa/C00/scga/ index.html	29.98%	-4.12%	5.51%	13.66%	10.33%	29.02%	-4.75% 7.41% 15.12% 9.20% Russell Midcap Growth TR		0.43%	\$4.30	N/A		
Vanguard Mid-Cap Growth ETF (VOT) ^{118,119,123,139} Mid Cap Growth http://www.viewjhfunds.com/usa/C00/vota/ index.html	27.07%	-5.56%	6.32%	13.90%	7.57%	27.55%	-5.56% 6.70% 13.89% 8.26% CRSP US Mid Cap Growth		0.13%	\$1.30	N/A		







BOND FUNDS

Name/Type of Option	Return YTD as of	Avei		ual Total F 2/31/2018		Benchmark YTD as of	as of 12/31/2018				Operatin	Annual g Expenses 7/31/2019	Shareholder-Type Fees
	07/31/2019			10 yr.	Since Inception	07/31/2019				Since Inception	As a %	Per \$1,000	
⁵ Federated Institutional High Yield Bond Fund (FHY) ^{87,88} Low Quality Short Term Fixed Income http://www.viewjhfunds.com/usa/C00/fhya/ index.html	10.92%	-2.79%	3.89%	10.52%	8.27%	10.55%	-2.08%		11.14% Capital U.S 2% Issuer C		0.45%	\$4.50	N/A
[§] High Yield Fund (HYF) ^{13,45,54,115} Low Quality Short Term Fixed Income http://www.viewjhfunds.com/usa/C00/hyfa/ index.html	11.79%	-3.36%	2.54%	10.80%	5.70%	10.55%	-2.08%	Barclays	11.14% Capital U.S 2% Issuer C		0.28%	\$2.80	N/A
[§] Templeton Global Bond Fund (TGB) ^{87,143} Global Short Term Fixed Income http://www.viewjhfunds.com/usa/C00/tgba/ index.html	4.44%	1.78%	1.89%	5.71%	7.68%	4.87%	-0.84% Citigro	0.77% oup World	1.52% Governmen	5.74% nt Bond	0.44%	\$4.40	N/A
PIMCO Global Bond Opportunities Fund (PFB) ^{34,143,201} Global Intermediate Term Fixed Income http://www.viewjhfunds.com/usa/C00/pfba/ index.html	4.10%	-3.83%	1.57%	4.61%	5.51%	5.27%	-1.19%	1.08% arCap Glo	2.48% bal Aggreg	4.73% ate	0.72%	\$7.20	N/A
Capital World Bond Fund (CWB) ^{37,61,65,99} Global Long Term Fixed Income http://www.viewjhfunds.com/usa/C00/cwba/ index.html	6.36%	-1.12%	1.42%	3.31%	6.18%	5.27%	-1.19% B	1.08% arCap Glo	2.48% bal Aggreg	N/A ate	0.53%	\$5.30	N/A
[§] Core Bond Fund (COR) ^{13,53,106} High Quality Intermediate Term Fixed Income http://www.viewjhfunds.com/usa/C00/cora/ index.html	6.38%	-0.04%	2.75%	4.63%	4.44%	6.34%	0.01% BarC	2.52% Sap U.S. Ag	3.47% ggregate Bo	3.88% and TR	0.16%	\$1.60	N/A
Fidelity Advisor Total Bond Fund (FBF) ^{138,147} Medium Quality Intermediate Term Fixed Income http://www.viewjhfunds.com/usa/C00/fbfa/ index.html	7.63%	-0.57%	3.07%	5.62%	4.74%	6.34%	0.01% BarC	2.52% Cap U.S. Aq	3.47% ggregate Bo	4.02% and TR	0.25%	\$2.50	N/A
§ JPMorgan Core Bond Fund (JPB) ^{128,138} Medium Quality Intermediate Term Fixed Income http://www.viewjhfunds.com/usa/C00/jpba/ index.html	6.41%	0.44%	2.74%	4.25%	6.18%	6.34%	0.01% BarC		3.47% ggregate Bo	5.43% and TR	0.25%	\$2.50	N/A
T. Rowe Price Spectrum Income Fund (INC) Low Quality Intermediate Term Fixed Income http://www.viewjhfunds.com/usa/C00/inca/ index.html	8.52%	-2.48%	2.94%	6.14%	6.81%	6.34%	0.01% BarC	2.52% Cap U.S. Ag	3.47% ggregate Bo	5.82% and TR	0.47%	\$4.70	N/A
PIMCO Real Return Fund (PRR) ^{38,99,124} Medium Quality Long Term Fixed Income http://www.viewjhfunds.com/usa/C00/prra/ index.html	6.71%	-1.97%	1.48%	4.34%	5.40%	6.52%	-1.26% Bar		3.64% reasury U.S.	5.14% TIPS	0.98%	\$9.80	N/A











Name/Type of Option	Return YTD as of	Avei	age Annu as of 12	ual Total 2/31/2018		Benchmark YTD as of		Benchma as of 12	rk [†] Retur 2/31/2018		Operating	Annual g Expenses //31/2019	Shareholder-Type Fees
	07/31/2019			10 yr.	Since Inception		1 yr.	5 yr.	10 yr.	Since Inception	As a %	Per \$1,000	
§ Money Market Fund (MMR) ^{13,22,83,91,142,143,158,166} High Quality Short Term Fixed Income http://www.viewjhfunds.com/usa/C00/mmra/ index.html	1.36%	1.87%	0.67%	0.50%	3.57%	1.41%	1.86% 0.60% 0.35% 3.37% FTSE Treasury Bill 3-Month		0.07%	\$0.70	N/A		

The current 7-day yield is 2.36% as of the performance date indicated above. The current yield quotation more closely reflects the current earnings of the Money Market Fund as of the date this report was prepared while the Annualized returns above refer to a specific past holding period reflecting the period covered by this report. Although the fund strives to maintain a positive yield, there is no quarantee the fund will be able to do so. The subaccount's actual current yield may be lower or higher than that of the underlying trust. An investment in the underlying Money Market fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The underlying fund seeks to preserve a value of \$1.00 per share but it is possible to lose money by investing in the Money Market Fund that invests in the underlying fund. The Sponsor of the underlying fund has no legal obligation to provide financial support, and you should not expect that the Sponsor will provide financial support to the underlying fund at any time.

Vanguard Short-Term Federal Fund (GOV) ^{15,83,99,120,125,142,143} High Quality Short Term Fixed Income http://www.viewjhfunds.com/usa/C00/gova/ index.html	2.88%	1.37%	1.11%	1.54%	4.71%	2.91%	1.52% 1.06% 1.39% 4.86% BarCap 1-5 Yr Government		\$1.00	N/A
OTHER FUNDS										
§ American Century One Choice 2060 (ACK) ^{114,157} Target Date http://www.viewjhfunds.com/usa/C00/acka/ index.html	16.99%	-7.82%	N/A	N/A	6.85%	15.83%	-8.10% 5.16% N/A 7.81% S&P Target Date Through 2055+	0.57%	\$5.70	N/A
§ American Century One Choice 2055 (ACJ) ^{114,126} Target Date http://www.viewjhfunds.com/usa/C00/acja/index.html	16.71%	-7.71%	5.13%	N/A	6.91%	14.92%	-7.64% 4.72% N/A 6.78% S&P Target Date To 2055+	0.57%	\$5.70	N/A
§ American Century One Choice 2050 (ACI) ^{114,126} Target Date http://www.viewjhfunds.com/usa/C00/acia/index.html	16.52%	-7.39%	5.03%	10.23%	5.60%	14.84%	-7.53% 4.64% 9.80% N/A S&P Target Date To 2050	0.57%	\$5.70	N/A
§ American Century One Choice 2045 (ACH) ^{114,126} Target Date http://www.viewjhfunds.com/usa/C00/acha/ index.html	15.71%	-6.83%	4.93%	10.06%	5.52%	14.62%	-7.30% 4.55% 9.61% N/A S&P Target Date To 2045	0.54%	\$5.40	N/A
§ American Century One Choice 2040 (ACG) ^{114,126} Target Date http://www.viewjhfunds.com/usa/C00/acga/ index.html	14.78%	-6.20%	4.68%	9.74%	5.55%	14.13%	-6.95% 4.45% 9.23% 4.72% S&P Target Date To 2040	0.51%	\$5.10	N/A
American Century One Choice 2035 (ACF) ^{114,126} Target Date http://www.viewjhfunds.com/usa/C00/acfa/index.html	13.99%	-5.77%	4.41%	9.21%	6.75%	13.30%	-6.25% 4.24% 8.74% N/A S&P Target Date To 2035	0.49%	\$4.90	N/A











Name/Type of Option	Return YTD as of	Aver		ual Total F 2/31/2018		Benchmark YTD as of	Benchmark [†] Return as of 12/31/2018	Operatin	Annual g Expenses 7/31/2019	Shareholder-Type Fees
	07/31/2019	1 yr.	5 yr.	10 yr.	Since Inception	07/31/2019	1 yr. 5 yr. 10 yr. Since Inception	As a %	Per \$1,000	
American Century One Choice 2030 (ACE) ^{114,126} Target Date http://www.viewjhfunds.com/usa/C00/acea/index.html	13.16%	-5.21%	4.18%	8.69%	5.06%	12.14%	-5.29% 4.15% 8.26% 4.51% S&P Target Date To 2030	0.46%	\$4.60	N/A
Sharrican Century One Choice 2025 (ACD) ^{114,126} Target Date http://www.viewjhfunds.com/usa/C00/acda/index.html	12.39%	-4.62%	3.95%	8.17%	6.25%	10.92%	-4.26% 3.94% 7.66% N/A S&P Target Date To 2025	0.44%	\$4.40	N/A
SAmerican Century One Choice 2020 (ACC) ^{114,126} Target Date http://www.viewjhfunds.com/usa/C00/acca/index.html	11.58%	-3.97%	3.75%	7.75%	4.85%	9.54%	-3.21% 3.72% 7.00% 4.26% S&P Target Date To 2020	0.42%	\$4.20	N/A
American Century One Choice In Retirement (ACA) ^{114,126,136} Target Date http://www.viewjhfunds.com/usa/C00/acaa/ index.html	11.44%	-3.83%	3.51%	6.98%	5.39%	8.93%	-2.53% 3.06% 5.31% 4.33% S&P Target Date Retirement Income	0.42%	\$4.20	N/A
American Funds 2060 Target Date Retirement Fund (AFM) ^{114,151,185} Target Date http://www.viewjhfunds.com/usa/C00/afma/index.html	15.59%	-5.64%	N/A	N/A	5.72%	15.90%	-8.10% 5.17% N/A 4.56% S&P Target Date Through 2060	0.44%	\$4.40	N/A
American Funds 2055 Target Date Retirement Fund (AFL) ^{114,151,185} Target Date http://www.viewjhfunds.com/usa/C00/afla/ index.html	15.60%	-5.65%	6.18%	N/A	9.58%	15.83%	-8.10% 5.16% N/A 9.10% S&P Target Date Through 2055+	0.42%	\$4.20	N/A
American Funds 2050 Target Date Retirement Fund (AFK) ^{114,151,185} Target Date http://www.viewjhfunds.com/usa/C00/afka/ index.html	15.58%	-5.60%	6.21%	11.29%	6.25%	15.81%	-8.01% 5.19% 10.22% N/A S&P Target Date Through 2050	0.41%	\$4.10	N/A
American Funds 2045 Target Date Retirement Fund (AFJ) ^{114,151,185} Target Date http://www.viewjhfunds.com/usa/C00/afja/ index.html	15.40%	-5.58%	6.16%	11.26%	6.24%	15.68%	-7.93% 5.15% 10.13% N/A S&P Target Date Through 2045	0.40%	\$4.00	N/A
American Funds 2040 Target Date Retirement Fund (AFG) ^{114,151,185} Target Date http://www.viewjhfunds.com/usa/C00/afga/ index.html	15.20%	-5.52%	6.04%	11.19%	6.19%	15.42%	-7.63% 5.11% 10.09% N/A S&P Target Date Through 2040	0.40%	\$4.00	N/A











Name/Type of Option	Return YTD as of	Aver		ual Total F 2/31/2018		Benchmark YTD as of	as of 12/31/2018	Operatir	Annual ng Expenses 7/31/2019	Shareholder-Type Fees	
	07/31/2019	1 yr.		10 yr.	Since Inception	07/31/2019	1 yr. 5 yr.	10 yr. Sinc		Per \$1,000	
American Funds 2035 Target Date Retirement Fund (AFF) ^{114,151,185} Target Date http://www.viewjhfunds.com/usa/C00/affa/ index.html	14.53%	-5.15%	5.96%	11.09%	6.10%	14.75%	-7.06% 5.01% S&P Target Da	9.85% N/A	0.39%	\$3.90	N/A
American Funds 2030 Target Date Retirement Fund (AFE) ^{114,151,185} Target Date http://www.viewjhfunds.com/usa/C00/afea/index.html	12.64%	-4.16%	5.64%	10.87%	5.97%	14.02%	-6.52% 4.81% S&P Target Da	9.52% N/A	0.38%	\$3.80	N/A
American Funds 2025 Target Date Retirement Fund (AFD) ^{114,151,185}	11.30%	-3.47%	5.01%	10.21%	5.49%	12.91%	-5.72% 4.57% 9.05% N/A S&P Target Date Through 2025		0.36%	\$3.60	N/A
Target Date http://www.viewjhfunds.com/usa/C00/afda/index.html	11.50 /0	3.47 /0	3.0170	10.21 /0	3.43 /0	12.51/0	S&P Target Da	ite Through 2025	0.30 /0	\$5.00	IVA
American Funds 2020 Target Date Retirement Fund (AFC) ^{114,151,185}	9.97%	-2.69%	4.69%	9.22%	4.96%	11.93%	-4.90% 4.28% 8.44% N/A		0.34%	\$3.40	N/A
Target Date http://www.viewjhfunds.com/usa/C00/afca/index.html	3.37 70	-2.03 /0	4.03 /0	3.22 /0	4.90 /0	11.95 /0	S&P Target Da	ite Through 2020	0.54 /0	\$3.40	IVA
American Funds 2015 Target Date Retirement Fund (AFB) ^{114,151,185} Target Date http://www.viewjhfunds.com/usa/C00/afba/index.html	9.45%	-2.72%	4.29%	8.43%	4.71%	10.68%	-3.89% 4.04% S&P Target Da	7.81% N/ <i>F</i> ate Through 2015	0.33%	\$3.30	N/A
American Funds 2010 Target Date Retirement Fund (AFA) ^{114,151,185}	8.79%	-2.50%	4.14%	7.96%	4.47%	10.11%	-3.40% 3.57%	6.98% N/A	0.33%	\$3.30	N/A
Target Date http://www.viewjhfunds.com/usa/C00/afaa/index.html	0./970	-2.30%	4.1470	7.30%	4.4770	TU.1170	S&P Target Da	ite Through 2010	0.55%	\$3.30	IV/A
§ John Hancock Multimanager 2060 Lifetime	16.26%	-8.70%	N/A	N/A	7.13%	20.24%	-4.38% 8.49%	13.11% 9.51	0.39%	\$3.90	N/A
Portfolio (LXL) ^{13,114,157,179} Target Date http://www.viewjhfunds.com/usa/C00/lxla/index.html	10.20%	-0./0%	IW/A	IN/A	7.13%	20.24%	S&P	500 TR	0.39%	\$3.90	IV/A
Portfolio (LXK) ^{13,114,126,179} Parget Date http://www.viewjhfunds.com/usa/C00/lxka/index.html	16.26%	-8.77%	N/A	N/A	5.08%	20.24%	-4.38% 8.49% S&P	13.11% 8.60 500 TR	0.40%	\$4.00	N/A













Name/Type of Option	Return YTD as of	Aver		ual Total F 2/31/2018		Benchmark YTD as of	as of 12/31/2018			Operating	Annual g Expenses //31/2019	Shareholder-Type Fees	
	07/31/2019			10 yr.	Since Inception	07/31/2019				Since Inception	As a %	Per \$1,000	
§ John Hancock Multimanager 2050 Lifetime Portfolio (LXJ) ^{13,97,111,114,125,179} Target Date http://www.viewjhfunds.com/usa/C00/lxja/index.html	16.30%	-8.77%	4.96%	N/A	6.56%	20.24%	-4.38%	8.49% S&P	13.11% 500 TR	10.60%	0.41%	\$4.10	N/A
§ John Hancock Multimanager 2045 Lifetime Portfolio (LXI) ^{13,111,114,125,179} Target Date http://www.viewjhfunds.com/usa/C00/lxia/index.html	16.25%	-8.69%	4.97%	10.92%	5.62%	20.24%	S&P 500 TR		0.39%	\$3.90	N/A		
§ John Hancock Multimanager 2040 Lifetime Portfolio (LXH) ^{13,111,114,125,179} Target Date http://www.viewjhfunds.com/usa/C00/lxha/index.html	16.17%	-8.62%	4.97%	10.91%	5.63%	20.24%	-4.38%	8.49% S&P	13.11% 500 TR	7.39%	0.39%	\$3.90	N/A
§ John Hancock Multimanager 2035 Lifetime Portfolio (LXG) ^{13,111,114,125,179} Target Date http://www.viewjhfunds.com/usa/C00/lxga/index.html	15.42%	-8.06%	4.85%	10.85%	5.57%	20.24%	-4.38%	-4.38% 8.49% 13.11% 7.39% S&P 500 TR		0.40%	\$4.00	N/A	
Solution John Hancock Multimanager 2030 Lifetime Portfolio (LXF) ^{13,111,114,125,179} Target Date http://www.viewjhfunds.com/usa/C00/lxfa/index.html	14.70%	-7.19%	4.72%	10.59%	5.36%	20.24%	-4.38%	8.49% S&P	13.11% 500 TR	7.39%	0.38%	\$3.80	N/A
S John Hancock Multimanager 2025 Lifetime Portfolio (LXE) ^{13,111,114,125,179} Target Date http://www.viewjhfunds.com/usa/C00/lxea/index.html	13.63%	-6.16%	4.51%	10.24%	5.24%	20.24%	-4.38%	8.49% S&P	13.11% 500 TR	7.39%	0.37%	\$3.70	N/A
§ John Hancock Multimanager 2020 Lifetime Portfolio (LXD) ^{13,111,114,125,179} Target Date http://www.viewjhfunds.com/usa/C00/lxda/index.html	12.56%	-5.28%	4.17%	9.70%	5.10%	20.24%	-4.38%	8.49% S&P	13.11% 500 TR	7.39%	0.37%	\$3.70	N/A
Portfolio (LXC) ^{13,111,114,125,179} Target Date http://www.viewjhfunds.com/usa/C00/lxca/index.html	11.45%	-4.55%	3.84%	9.10%	4.91%	20.24%	-4.38%	8.49% S&P	13.11% 500 TR	7.39%	0.37%	\$3.70	N/A











Name/Type of Option	Return YTD as of	Aver		ual Total F 2/31/2018		Benchmark YTD as of	as of 12/31/2018			Operating	Annual g Expenses //31/2019	Shareholder-Type Fees	
	07/31/2019		5 yr.	10 yr.	Since Inception	07/31/2019	1 yr.			Since Inception	As a %	Per \$1,000	
§ John Hancock Multimanager 2010 Lifetime Portfolio (LXB) 13,57,111,114,125,179 Target Date http://www.viewjhfunds.com/usa/C00/lxba/index.html	10.84%	-4.03%	3.60%	8.56%	4.82%	6.34%	0.01% Bar	2.52% Cap U.S. Ag	3.47% ggregate Bo	3.94% and TR	0.37%	\$3.70	N/A
S John Hancock Multi-Index 2060 Lifetime Portfolio (LYA) ^{13,114,157,179} Target Date http://www.viewjhfunds.com/usa/C00/lyaa/index.html	16.00%	-8.08%	N/A	N/A	7.16%	20.24%	-4.38%	8.49% S&P	13.11% 500 TR	9.51%	0.17%	\$1.70	N/A
§ John Hancock Multi-Index 2055 Lifetime Portfolio (LXZ) ^{13,114,126,179} Target Date http://www.viewjhfunds.com/usa/C00/lxza/index.html	16.08%	-8.18%	N/A	N/A	5.60%	20.24%	-4.38%	8.49% S&P	13.11% 500 TR	8.60%	0.17%	\$1.70	N/A
Solohn Hancock Multi-Index 2050 Lifetime Portfolio (LXY) ^{13,114,126,179} Target Date http://www.viewjhfunds.com/usa/C00/lxya/index.html	16.11%	-8.14%	5.37%	N/A	6.18%	20.24%	-4.38%	8.49% S&P	13.11% 500 TR	9.22%	0.17%	\$1.70	N/A
Solohn Hancock Multi-Index 2045 Lifetime Portfolio (LXX) ^{13,114,126,179} Target Date http://www.viewjhfunds.com/usa/C00/lxxa/index.html	16.07%	-8.16%	5.33%	N/A	6.14%	20.24%	-4.38%	8.49% S&P	13.11% 500 TR	9.22%	0.17%	\$1.70	N/A
S John Hancock Multi-Index 2040 Lifetime Portfolio (LXW) ^{13,114,126,179} Target Date http://www.viewjhfunds.com/usa/C00/lxwa/index.html	15.76%	-7.95%	5.41%	N/A	6.21%	20.24%	-4.38%	8.49% S&P	13.11% 500 TR	9.22%	0.17%	\$1.70	N/A
S John Hancock Multi-Index 2035 Lifetime Portfolio (LXV) ^{13,114,126,179} Target Date http://www.viewjhfunds.com/usa/C00/lxva/index.html	15.27%	-7.44%	5.23%	N/A	6.02%	20.24%	-4.38%		13.11% 500 TR	9.22%	0.17%	\$1.70	N/A
Portfolio (LXU) ^{13,114,126,179} Target Date http://www.viewjhfunds.com/usa/C00/lxua/index.html	14.44%	-6.56%	5.05%	N/A	5.78%	20.24%	-4.38%	8.49% S&P	13.11% 500 TR	9.22%	0.18%	\$1.80	N/A











Name/Type of Option	Return YTD as of	Aver	age Annu as of 12	ıal Total I 2/31/2018		Benchmark YTD as of	Benchmark [†] Return as of 12/31/2018				Expenses	Shareholder-Type Fees	
	07/31/2019	1 yr.	5 yr.	10 yr.	Since Inception	Cinco		As a %	Per \$1,000				
§ John Hancock Multi-Index 2025 Lifetime Portfolio (LXT) ^{13,114,126,179} Target Date http://www.viewjhfunds.com/usa/C00/lxta/index.html	13.48%	-5.62%	4.77%	N/A	5.43%	20.24%	-4.38%	8.49% S&P	13.11% 500 TR	9.22%	0.20%	\$2.00	N/A
§ John Hancock Multi-Index 2020 Lifetime Portfolio (LXS) ^{13,114,126,179} Target Date http://www.viewjhfunds.com/usa/C00/lxsa/index.html	12.34%	-4.52%	4.44%	N/A	4.97%	20.24%	-4.38%	8.49% S&P	13.11% 500 TR	9.22%	0.21%	\$2.10	N/A
§ John Hancock Multi-Index 2015 Lifetime Portfolio (LXR) 13,114,126,179 Target Date http://www.viewjhfunds.com/usa/C00/lxra/index.html	11.69%	-3.74%	4.06%	N/A	4.48%	20.24%	-4.38%	8.49% S&P	13.11% 500 TR	9.22%	0.22%	\$2.20	N/A
Solution Solution	10.99%	-3.29%	3.88%	N/A	4.20%	6.34%	0.01% Bar	2.52% Cap U.S. Ag	3.47% ggregate Bo	2.33% and TR	0.22%	\$2.20	N/A
§ John Hancock Multi-Index 2060 Preservation Portfolio (CZL) ^{13,114,157,179} Target Date http://www.viewjhfunds.com/usa/C00/czla/ index.html	14.74%	-7.09%	N/A	N/A	6.92%	20.24%	-4.38%	8.49% S&P	13.11% 500 TR	9.51%	0.18%	\$1.80	N/A
S John Hancock Multi-Index 2055 Preservation Portfolio (CZK) 13,114,126,179 Target Date http://www.viewjhfunds.com/usa/C00/czka/index.html	14.80%	-7.08%	N/A	N/A	5.28%	20.24%	-4.38%	8.49% S&P	13.11% 500 TR	8.60%	0.19%	\$1.90	N/A
S John Hancock Multi-Index 2050 Preservation Portfolio (CZJ) ^{13,97,111,114,125,179} Target Date http://www.viewjhfunds.com/usa/C00/czja/index.html	14.86%	-7.11%	5.07%	N/A	6.63%	20.24%	-4.38%	8.49% S&P	13.11% 500 TR	10.60%	0.19%	\$1.90	N/A
§ John Hancock Multi-Index 2045 Preservation Portfolio (CZI) ^{2,13,111,114,125,179} Target Date http://www.viewjhfunds.com/usa/C00/czia/index.html	14.77%	-7.00%	5.06%	N/A	7.55%	20.24%	-4.38%	8.49% S&P	13.11% 500 TR	11.10%	0.18%	\$1.80	N/A











Name/Type of Option	Return YTD as of	Aver		ual Total F 2/31/2018		Benchmark YTD as of	Benchmark [†] Return as of 12/31/2018		as of 12/31/2018						Shareholder-Type Fees
	07/31/2019		5 yr.	10 yr.	Since Inception	07/31/2019 1 yr. 5 yr. 10 yr. Since Inception		As a %	Per \$1,000						
§ John Hancock Multi-Index 2040 Preservation Portfolio (CZH) ^{2,13,111,114,125,179} Target Date http://www.viewjhfunds.com/usa/C00/czha/ index.html	14.29%	-6.63%	4.99%	N/A	7.51%	20.24%	-4.38%	8.49% S&P	13.11% 500 TR	11.10%	0.17%	\$1.70	N/A		
§ John Hancock Multi-Index 2035 Preservation Portfolio (CZG) ^{2,13,111,114,125,179} Target Date http://www.viewjhfunds.com/usa/C00/czga/ index.html	13.47%	-5.96%	4.81%	N/A	7.26%	20.24%	-4.38%	8.49% S&P	13.11% 500 TR	11.10%	0.17%	\$1.70	N/A		
§ John Hancock Multi-Index 2030 Preservation Portfolio (CZF) ^{2,13,111,114,125,179} Target Date http://www.viewjhfunds.com/usa/C00/czfa/ index.html	11.92%	-4.67%	4.51%	N/A	6.83%	20.24%	-4.38%	8.49% S&P	13.11% 500 TR	11.10%	0.17%	\$1.70	N/A		
§ John Hancock Multi-Index 2025 Preservation Portfolio (CZE) ^{2,13,111,114,125,179} Target Date http://www.viewjhfunds.com/usa/C00/czea/ index.html	9.95%	-2.97%	3.93%	N/A	6.03%	20.24%	-4.38%	8.49% S&P	13.11% 500 TR	11.10%	0.16%	\$1.60	N/A		
§ John Hancock Multi-Index 2020 Preservation Portfolio (CZD) ^{2,13,111,114,125,179} Target Date http://www.viewjhfunds.com/usa/C00/czda/ index.html	7.79%	-1.37%	3.17%	N/A	4.92%	6.34%	0.01% Bar	2.52% Cap U.S. A	3.47% ggregate Bo	3.03% and TR	0.16%	\$1.60	N/A		
§ John Hancock Multi-Index Income Preservation Portfolio (CZC) ^{2,13,111,114,125,153,155,179} Target Date http://www.viewjhfunds.com/usa/C00/czca/ index.html	6.52%	-0.04%	2.57%	N/A	3.85%	6.34%	0.01% Bar	2.52% Cap U.S. A	3.47% ggregate Bo	3.03% and TR	0.19%	\$1.90	N/A		
John Hancock Multimanager Aggressive Lifestyle Portfolio (ALS) ^{13,125,179} Target Risk http://www.viewjhfunds.com/usa/C00/alsa/ index.html	17.00%	-9.45%	4.83%	10.94%	5.25%	20.24%	-4.38%	8.49% S&P	13.11% 500 TR	6.61%	0.54%	\$5.40	N/A		
John Hancock Multimanager Growth Lifestyle Portfolio (GLS) ^{13,123,125,179} Target Risk http://www.viewjhfunds.com/usa/C00/glsa/ index.html	15.23%	-7.84%	4.50%	10.36%	5.79%	20.24%	-4.38%	8.49% S&P	13.11% 500 TR	6.61%	0.50%	\$5.00	N/A		











Name/Type of Option	Return YTD as of	Aver		ual Total F 2/31/2018		Benchmark YTD as of	as of 12/31/2018		as of 12/31/2018 Operating Expenses as of 07/31/2019		g Expenses	Shareholder-Type Fees
	07/31/2019			10 yr.	Since Inception	07/31/2019			As a %	Per \$1,000		
John Hancock Multimanager Balanced Lifestyle Portfolio (BLS) ^{9,13,123,125,179,199} Target Risk http://www.viewjhfunds.com/usa/C00/blsa/index.html	13.48%	-6.02%	4.08%	9.45%	6.00%	20.24%	-4.38% 8.49% S&P	13.11% 500 TR	6.61%	0.48%	\$4.80	N/A
John Hancock Multimanager Moderate Lifestyle Portfolio (MLS) ^{13,31,125,179} Target Risk http://www.viewjhfunds.com/usa/C00/mlsa/index.html	11.37%	-4.46%	3.51%	8.28%	5.94%	6.34%	0.01% 2.52% BarCap U.S. A	3.47% ggregate Bo	4.80% nd TR	0.46%	\$4.60	N/A
John Hancock Multimanager Conservative Lifestyle Portfolio (CLS) ^{13,125,179} Target Risk http://www.viewjhfunds.com/usa/C00/clsa/index.html	9.13%	-2.84%	2.91%	6.79%	5.75%	6.34%	0.01% 2.52% BarCap U.S. A	3.47% ggregate Bo	4.80% nd TR	0.46%	\$4.60	N/A
§ DFA Emerging Markets Value Fund (DEM) Specialty http://www.viewjhfunds.com/usa/C00/dema/index.html	2.72%	-11.93%	1.85%	8.18%	10.50%	9.22%	-14.57% 1.64% MSCI Eme	8.01% rging Marke	N/A ts	0.54%	\$5.40	N/A
New World Fund (ANW) ^{37,61,65,185,200,204} Specialty http://www.viewjhfunds.com/usa/C00/anwa/index.html	18.46%	-11.97%	2.21%	8.67%	7.60%	16.56%	-9.41% 4.25% MSCI All (9.45% Country Worl	4.39% d	0.62%	\$6.20	N/A
Oppenheimer Developing Markets Fund (DMK) ^{56,71,99} Specialty http://www.viewjhfunds.com/usa/C00/dmka/ index.html	14.05%	-11.72%	1.20%	10.44%	11.76%	9.22%	-14.57% 1.64% MSCI Eme	8.01% rging Market	N/A ts	0.76%	\$7.60	N/A
§ Financial Industries Fund (FSF) ^{12,13,15,22,91} Sector http://www.viewjhfunds.com/usa/C00/fsfa/index.html	22.61%	-14.07%	5.00%	11.23%	5.00%	20.24%	-4.38% 8.49% S&P	13.11% 500 TR	6.10%	0.41%	\$4.10	N/A
§ Real Estate Securities Fund (REF) ^{13,57,193} Sector http://www.viewjhfunds.com/usa/C00/refa/index.html	20.71%	-2.93%	8.75%	12.86%	10.17%	19.24%	-4.56% 7.79% Morgan	12.17% Stanley REIT	N/A	0.31%	\$3.10	N/A
T. Rowe Price New Era Fund (TRE) ^{196,199,200} Sector http://www.viewjhfunds.com/usa/C00/trea/index.html	10.99%	-16.05%	-2.72%	4.87%	8.87%	20.24%	-4.38% 8.49% S&P	13.11% 500 TR	9.19%	0.54%	\$5.40	N/A











Name/Type of Option	Return YTD as of	Aver		ual Total F 2/31/2018		Benchmark YTD as of	Benchmark [†] Return as of 12/31/2018		Total Annual Operating Expenses as of 07/31/2019		Shareholder-Type Fees			
	07/31/2019			10 yr.	Since Inception	07/31/2019		5 yr.		Since Inception	As a %	Per \$1,000		
T. Rowe Price Science & Technology Fund (SCT) Sector http://www.viewjhfunds.com/usa/C00/scta/index.html	30.21%	-6.85%	12.29%	18.28%	11.79%	20.24%	-4.38%	8.49% S&P	13.11% 500 TR	9.19%	0.66%	\$6.60	N/A	
Vanguard Energy Fund (VEN) ^{34,120,125} Sector http://www.viewjhfunds.com/usa/C00/vena/index.html	9.82%	-17.08%	-5.13%	3.69%	9.90%	10.34%	-12.63%	-3.75% MSCI AG	3.60% CWI/Energy	N/A	0.29%	\$2.90	N/A	
Franklin Founding Funds Allocation Fund (TFF) ^{7,61} Balanced http://www.viewjhfunds.com/usa/C00/tffa/index.html	10.60%	-9.37%	2.43%	9.02%	6.18%	20.24%	-4.38%	8.49% S&P	13.11% 500 TR	8.43%	0.48%	\$4.80	N/A	
The Income Fund of America (IFA) ^{37,61,65,177} Balanced http://www.viewjhfunds.com/usa/C00/ifaa/index.html	11.20%	-4.87%	5.19%	9.78%	10.94%	20.24%	-4.38% 8.49% 13.11% 10.73% S&P 500 TR		0.28%	\$2.80	N/A			
American Balanced Fund (ABF) ^{31,38,40,61,65,160} Balanced http://www.viewjhfunds.com/usa/C00/abfa/index.html	11.89%	-2.43%	6.52%	10.69%	10.69%	20.24%	-4.38% 8.49% 13.11% 11.00% S&P 500 TR		0.28%	\$2.80	N/A			
§ BlackRock Global Allocation Fund (BGA) ^{3,57,63} Balanced http://www.viewjhfunds.com/usa/C00/bgaa/index.html	10.33%	-7.13%	2.36%	6.45%	9.63%	17.09%	-8.76%	4.91% FTSE	10.13% World	N/A	0.56%	\$5.60	N/A	
Capital Income Builder (CIB) ^{37,61,65,154,204} Balanced http://www.viewjhfunds.com/usa/C00/ciba/index.html	10.07%	-6.75%	3.58%	7.69%	9.07%	16.56%	-9.41%	4.25% MSCI All C	9.45% Jountry Wor	6.04% Id	0.29%	\$2.90	N/A	
§ T. Rowe Price Capital Appreciation Fund (TCP) ⁸⁷ Balanced http://www.viewjhfunds.com/usa/C00/tcpa/ index.html	18.23%	0.77%	8.40%	12.73%	11.19%	20.24%	-4.38%	8.49% S&P	13.11% 500 TR	9.85%	0.56%	\$5.60	N/A	











FIXED RETURN INVESTMENTS

The table below focuses on the performance as well as the fees and expenses of investment options that have a fixed or stated return. The table also shows the annual 'new money' rate for each Guaranteed Interest Account, the term or length of the option, and other information relevant to performance.

Name/Type of Option	Return as of 08/01/2019	Term	Other	Operating	Annual g Expenses //31/2019	Shareholder-Type Fees
				As a %	Per \$1,000	
3-Year Guaranteed (3YC) ^{66,71,78,83,142,143,166} Three Year Guaranteed Interest Account http://www.viewjhfunds.com/usa/C00/giaa/index.html	1.50%	3-year	"Return" shown represents the annual interest rates that is established on the first day of the month indicated. That interest rate is applied to all contributions made to the account in that month. John Hancock may		N/A	Transfers between a Guaranteed Interest Account and other investment options (except for transfers between Guaranteed Interest Accounts) may be permitted (at book
5-Year Guaranteed (5YC) ^{66,71,78,83,142,143,166} Five Year Guaranteed Interest Account http://www.viewihfunds.com/usa/C00/qiaa/	1.60%	5-year	adjust the rate of return prospectively, as each month, a new rate is declared and applied to contributions made that month. You may call	N/A	N/A	value) under the terms of your plan's contract with John Hancock. Some conditions apply, including limitations as to permitted transfer dates, noted on your quarterly statement, if applicable. Transfers that are initiated on dates other
index.html			At the end of each reporting year, a "composite interest rate" is	N/A	N/A	than those specified in the contract may be subject to a
10-Year Guaranteed (10YC) ^{66,71,78,83,142,143,166} Ten Year Guaranteed Interest Account http://www.viewjhfunds.com/usa/C00/giaa/index.html	1.70%	rate of all contributions to that Guaranteed 10-year reporting year. A separate composite intere GIA term and each reporting year, if applica	determined. The composite interest rate is a dollar-weighted average rate of all contributions to that Guaranteed Interest Account during that reporting year. A separate composite interest rate is calculated for each GIA term and each reporting year, if applicable. For example, separate composite interest rates would be calculated for deposits made to the 3-			market value adjustment. Similarly, withdrawals taken from Guaranteed Interest Accounts prior to the end of the guarantee period, may be subject to a market value adjustment. Book value transfers are subject to an annual 20% book value transfer limit for each Guaranteed Interest.
			year and 10-year GIAs. Further, separate composite interest rates would be calculated for the 3-year GIAs from one reporting year to another. The GIA balance will continue to earn that reporting year's composite interest rate until the end of the guaranteed term. Participants with assets in a Guaranteed Interest Account can obtain more information on the composite interest rate that applies to their account by calling Participant Services at 1-800-395-1113 or viewing their most current Participant Statement.			Account balance. Transfers in excess of this limit are made at the lesser of book and market value.

Please visit www.ps.jhancockpensions.com/assets/pdfs/SPARK_Glossary.pdf for a glossary of investment terms relevant to the investment options under this plan.







IMPORTANT NOTES

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 or collective trust), reinvestment of dividends and capital gains and deductions for the expense ratio.

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 funds, 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.

[†]Index Performance: Index performance shown is for a broad-based securities market index. Indices are unmanaged and cannot be invested in directly. Index returns were prepared using Morningstar, Inc. software and data. 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.

⁸The underlying fund changed its name effective on or about May 10, 2010. Performance shown for periods prior to that date reflect the results under its former name. The name of this sub-account changed effective on or about May 10, 2010 to more accurately reflect the name of the underlying fund.

⁹Account balance reported may include assets transferred from another Fund, which was permanently closed on or about April 30, 2007. Contact your John Hancock representative for more information.

¹³The total revenue John Hancock receives on this Fund is higher than those advised or sub-advised exclusively by unaffiliated entities. John Hancock and its affiliates provide exclusive advisory and sub-advisory services for the underlying fund. For these services, John Hancock and its affiliates receive additional fees which are included in the underlying fund expense ratio (i.e. Fund Expense Ratio or FER).

¹⁵Account balance reported for this Fund may include assets transferred from another Fund, which will be permanently closed on or about April 26, 2010. Consult your John Hancock representative for more information.

¹⁹This 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 May 7, 2007. Performance shown for periods prior to that date is based on the performance of the current share class.

²⁰The manager for the underlying fund and its objectives changed effective on or about November 30, 2006. Performance shown for periods prior to that date reflect the results under its former manager.

²²The underlying fund changed its name effective on or about May 9, 2011. Performance shown for periods prior to that date reflect the results under its former name.

²³Account balance reported may include assets transferred from another Fund, which was permanently closed on or about October 29, 2007. Consult your John Hancock representative for more information.

²⁵This sub-account was recently introduced on November 5, 2007 and may not be available in all states. Contact your John Hancock representative to determine if this sub-account is available to your plan.

³³This sub-account was introduced May 29, 2009.

³⁴This sub-account was introduced September 6, 2002.

³⁷This sub-account was introduced July 25, 2008.

³⁸This sub-account was introduced May 2, 2003.

⁴⁰This 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 July 28, 2008. Performance shown for periods prior to that date is based on the performance of the current share class.

⁴¹Account balance reported may include assets transferred from another Fund, which was permanently closed on or about October 27, 2008. Contact your John Hancock representative for more information.

⁴³Important Redemption Fee Information: Domini Social Equity Fund
- Effective August 18, 2008, the underlying fund will impose a 2%
redemption fee on all selling/exchanges of the fund over \$25,000 within
a thirty-day period. The "First-In/First-Out" ("FIFO") method was used to
determine whether the shares have been held for the prescribed holding
period and, therefore, whether the redemption fee will be applied.

⁴⁵The portfolio concentrates its investments in high yield/high risk fixed income securities, also known as junk bonds, which carry a much greater risk of default and tend to be more volatile than higher rated bonds.

⁴⁸Account balance reported may include assets transferred from another Fund, which was permanently closed on or about October 25, 2010. Please contact your John Hancock representative for more information.

⁵³This sub-account was introduced on or about May 6, 2005.

⁵⁴Account balance reported may include assets transferred from another Fund, which was permanently closed on or about April 18, 2011. Please contact your John Hancock representative for more information.

⁵⁶This 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 10, 2008. Performance shown for periods prior to that date is based on the performance of the current share class.

⁵⁷Account balance reported may include assets transferred from another Fund, which was permanently closed on or about October 26, 2009. Contact your John Hancock representative for more information.

⁶¹This sub-account previously invested in a different share class of the same underlying portfolio. It began investing in the current share class effective

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²This sub-account was introduced May 7, 2010.

³This sub-account was introduced November 7, 2008.

⁷This sub-account was introduced May 2, 2008.

¹²This sub-account was introduced April 27, 2001.

²⁹This sub-account was introduced August 21, 2000.

³¹Account balance reported may include assets transferred from another Fund, which was permanently closed on or about April 27, 2009. Contact your John Hancock representative for more information.

on or about November 9, 2009. Performance shown for periods prior to that date is based on the performance of the current share class.

⁶³The underlying fund share class was recently renamed on June 1, 2009. There was no impact to the share class pricing or any material impact to the underlying fund as a result of this renaming.

⁶⁴This 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 8, 2010. Performance shown for periods prior to that date is based on the performance of the current share class.

⁶⁵This 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 June 1, 2009. Performance shown for periods prior to that date is based on the performance of the current share class.

⁶⁶Effective November 5, 2012, these Funds will no longer be available to New Business. Please contact your John Hancock representative for more details.

⁶⁷The underlying fund changed its name effective on or about November 8, 2010. Performance shown for periods prior to that date reflect the results under its former name. The name of this sub-account changed effective on or about November 8, 2010 to more accurately reflect the name of the underlying fund.

⁷¹Only available under certain limited circumstances. Consult your John Hancock representative for more information.

⁷⁶Indexes are unmanaged and the performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index. Like all mutual funds, index funds are subject to market risks and will fluctuate in value. Index funds are designed to track the performance of its target index but may underperform due to fees, expenses or tracking errors. These investments are not actively managed and do not necessarily attempt to manage volatility or protect against losses in declining markets.

None of the index funds are sponsored, endorsed, managed, advised, sold or promoted by any of the respective companies that sponsor the broadbased securities market index, and none of these companies make any representation regarding the advisability of investing in any index mutual fund.

⁷⁸Guaranteed Interest rates shown are gross ARA rates and assume the issuance of a contract at the beginning of each period shown. Actual return may vary depending on the administrative expense and, if applicable, the Sales and Service fee for the contract. The sales and service fee for the contract is the same as that shown for the sub-accounts under the contract. For regular ongoing contributions, interest rates are published at the beginning of each month and apply to all such contributions in that

month. For other types of contributions, interest rates may change during the month. An investment in a guaranteed interest account is not insured or guaranteed by The Federal Deposit Insurance Corporation or any other government agency. Although the guaranteed interest accounts seek to preserve the value of an investment, it is possible to lose money by investing in these portfolios. Guaranteed interest rates are based upon the claims paying ability of the issuing company.

⁸³This investment option is deemed a "Competing" investment option with the John Hancock Stable Value Fund and may not be available. An investment in this portfolio is not insured or guaranteed by The Federal Deposit Insurance Corporation or any other government agency. Although the underlying portfolio seeks to preserve the value of an investment, it is possible to lose money by investing in this portfolio.

⁸⁷This sub-account was introduced November 5, 2010.

⁸⁸Important Redemption Fee Information: Federated Institutional High Yield Bond Fund - Effective November 5, 2010, the underlying fund will impose a 2% redemption fee on all selling/exchanges of the fund within a 90-day period. The "First-In/First-Out" ("FIFO") method will be used to determine whether the shares have been held for the prescribed holding period and, therefore, whether the redemption fee will be applied. Note: At the end of day on June 28th, 2019, this redemption fee will no longer apply.

⁹⁰Account balance reported may include assets transferred from another Fund, which was permanently closed on or about April 28, 2008. Contact your John Hancock representative for more information.

⁹¹The underlying John Hancock Variable Insurance Trust portfolio is not a retail mutual fund and is only available under variable annuity contracts, variable life policies or through participation in tax qualified retirement plans. Although the portfolios' investment adviser or sub-advisers may manage retail mutual funds with similar names and investment objectives, no representation is made, and no assurance is given, that any portfolio's investment results will be comparable to the investment results of any other fund, including other funds with the same investment adviser or sub-adviser. Past performance is no quarantee of future results.

⁹⁷This sub-account was introduced May 6, 2011.

⁹⁹While viewing this report online, click on the name of the sub-account for additional details about the changes. If you have questions, contact your local John Hancock representative.

¹⁰³The underlying fund changed its name effective on or about November 7, 2011. Performance shown for periods prior to that date reflect the results under its former name. The name of this sub-account changed effective on or about November 7, 2011 to more accurately reflect the name of the underlying fund.

¹⁰⁶Account balance reported may include assets transferred from another Fund, which was permanently closed on or about April 23, 2012. Please contact your John Hancock representative for more information.

¹¹⁰This sub-account previously invested in a different underlying portfolio. It began investing in the current underlying portfolio effective November 2, 2012. Performance shown for periods prior to that date is based on the performance of the previous underlying portfolio/sub-account. The name of this sub-account may change effective on or about November 2, 2012 to more accurately reflect the name of the underlying fund.

¹¹¹The underlying fund changed its name effective on or about November 2, 2012. Performance shown for periods prior to that date reflect the results under its former name. The name of this sub-account changed effective on or about November 2, 2012 to more accurately reflect the name of the underlying fund.

¹¹⁴If 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.

¹¹⁵Account balance reported may include assets transferred from another Fund, which was permanently closed on or about April 22, 2013. Please contact your John Hancock representative for more information.

¹¹⁷Account balance reported may include assets transferred from another Fund, which was permanently closed on or about October 21, 2013. Please contact your John Hancock representative for more information.

¹¹⁸This sub-account was introduced November 8, 2013.

¹¹⁹The underlying fund expense ratio shown includes an annualized charge of 0.06% accrued daily, and deducted monthly out of the unitized version of the underlying fund provided by and traded through the trading platform of an unaffiliated third party.

¹²⁰This 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 8, 2013. Performance shown for periods prior to that date is based on the performance of the current share class.

¹²³Account balance reported may include assets transferred from another Fund, which was permanently closed on or about April 11, 2014. Please contact your John Hancock representative for more information.

¹²⁴This 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 May 3, 2014. Performance shown for periods prior to that date is based on the performance of the current share class.

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 ^{125}The name of this sub-account changed effective on or about May 3, 2014.

¹²⁶This sub-account was introduced May 3, 2014.

¹²⁸The indicated separate account is operated by John Hancock Life Insurance Company (U.S.A.), which has claimed an exclusion from the definition of the term 'Commodity Pool Operator' under the Commodity Exchange Act and, therefore, is not subject to registration or regulation as a pool operator under such Act.

¹²⁹Account balance reported may include assets transferred from another Fund, which was permanently closed on or about October 17, 2014. Please contact your John Hancock representative for more information.

¹³⁰This 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 8, 2014. Performance shown for periods prior to that date is based on the performance of the old share class.

¹³⁶Account balance reported may include assets transferred from another Fund, which was permanently closed on or about April 17, 2015. Please contact your John Hancock representative for more information.

¹³⁷This 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 May 8, 2015. Performance shown for periods prior to that date is based on the performance of the old share class.

¹³⁸This sub-account was recently introduced on May 8, 2015 and may not be available in all states. Contact your John Hancock representative to determine if this sub-account is available to your plan.

¹³⁹The returns of the sub-account may differ from the returns of the ETF in which the sub-account invests (referred to as 'tracking error'). Tracking error results from certain fees and transaction expenses incurred by the sub-account, from differences between the timing of purchases and redemptions of sub-account shares and corresponding transactions in the shares of the underlying ETF, and from the fact that the sub-account holds a small amount of cash (less than 1% of the value of the sub-account) in addition to shares of the ETF.

¹⁴²This investment option is deemed a 'Competing' investment option with the Reliance Trust New York Life Anchor Account and may not be available if the Reliance Trust New York Life Anchor Account is selected. For further details, please refer to the Offering Statement and Declaration of Trust. Contact your John Hancock representative if you wish to obtain a copy.

¹⁴³This investment option is deemed a 'Competing' investment option with the Federated Capital Preservation Fund and may not be available if the Federated Capital Preservation Fund is selected. For further details, please

refer to the Offering Circular and Declaration of Trust. Contact your John Hancock representative if you wish to obtain a copy.

¹⁴⁷Account balance reported may include assets transferred from another Fund, which was permanently closed on or about October 16, 2015. Please contact your John Hancock representative for more information.

¹⁵¹This sub-account was recently introduced on March 25, 2016 and may not be available in all states. Contact your John Hancock representative to determine if this sub-account is available to your plan.

¹⁵³Account balance reported may include assets transferred from another Fund, which was permanently closed on or about April 22, 2016. Please contact your John Hancock representative for more information.

¹⁵⁴This 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 June 11, 2016. Performance shown for periods prior to that date is based on the performance of the current share class.

¹⁵⁵The underlying fund changed its name and objectives effective on or about June 11, 2016. Performance shown for periods prior to that date reflect the results under its former name. The name of this sub-account changed effective on or about June 11, 2016 to more accurately reflect the name of the underlying fund.

¹⁵⁷This sub-account was recently introduced on June 11, 2016 and may not be available in all states. Contact your John Hancock representative to determine if this sub-account is available to your plan.

¹⁵⁸Effective April 6, 2016, the underlying holdings of the Money Market Fund were modified in order to comply with the definition of a Government money market fund as set out by the SEC. That ruling takes effect October 14, 2016.

¹⁶⁰This 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 4, 2016. Performance shown for periods prior to that date is based on the performance of the old share class.

 163 The name of this sub-account changed effective on or about November 4, 2016.

¹⁶⁶This investment option is deemed a 'Competing' investment option with the Reliance MetLife Stable Value Fund and may not be available if the Reliance MetLife Stable Value Fund is selected. For further details, please refer to the Offering Circular and Declaration of Trust. Contact your John Hancock representative if you wish to obtain a copy.

¹⁷⁷This 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 May 6, 2017. Performance shown for periods prior to that date is based on the performance of the old share class.

¹⁷⁸The underlying fund changed its name effective on or about October 1, 2016. Performance shown for periods prior to that date reflect the results under its former name. The name of this sub-account changed effective on or about May 6, 2017 to more accurately reflect the name of the underlying fund.

¹⁷⁹The underlying fund changed its name effective on or about February 1, 2017. Performance shown for periods prior to that date reflect the results under its former name. The name of this sub-account changed effective on or about May 6, 2017 to more accurately reflect the name of the underlying fund.

¹⁸⁰The underlying fund changed its name effective on or about November 30, 2016. Performance shown for periods prior to that date reflect the results under its former name. The name of this sub-account changed effective on or about May 6, 2017 to more accurately reflect the name of the underlying fund.

¹⁸³Account balance reported may include assets transferred from another Fund, which was permanently closed on or about October 20, 2017. Please contact your John Hancock representative for more information.

¹⁸⁵This 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.

¹⁸⁷The underlying fund changed its name effective on or about November 3, 2017. Performance shown for periods prior to that date reflect the results under its former name.

¹⁹⁰This sub-account was recently introduced on November 3, 2017 and may not be available in all states. Contact your John Hancock representative to determine if this sub-account is available to your plan.

¹⁹³Account balance reported may include assets transferred from another Fund, which was permanently closed on or about April 20, 2018. Please contact your John Hancock representative for more information.

¹⁹⁴This 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 May 4, 2018. Performance shown for periods prior to that date is based on the performance of the old share class.

¹⁹⁶This sub-account was recently introduced on May 4, 2018 and may not be available in all states. Contact your John Hancock representative to determine if this sub-account is available to your plan.

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¹⁹⁹Account balance reported may include assets transferred from another Fund, which was permanently closed on or about October 19, 2018. Please contact your John Hancock representative for more information.

²⁰⁰This 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 2, 2018. Performance shown for periods prior to that date is based on the performance of the old share class.

²⁰¹The sub-account and underlying fund changed its name effective on or about November 2, 2018. Performance shown for periods prior to that date reflect the results under its former name.

²⁰²Account balance reported may include assets transferred from another Fund, which was permanently closed on or about April 12, 2019. Please contact your John Hancock representative for more information.

²⁰⁴This 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 May 3, 2019. Performance shown for periods prior to that date is based on the performance of the old share class.

²⁰⁵The sub-account and underlying fund changed its name effective on or about May 3, 2019. Performance shown for periods prior to that date reflect the results under its former name.

[§]The Total Annual Operating Expenses ("TAOE") 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"). The underlying fund of this sub-account has either waived a portion of, or capped, its fees; the FER used to determine the TAOE of the sub-account that invests in the underlying fund is the net expense ratio of the underlying fund. Refer to the Fund Sheet for details.

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o obtain group annuity investment option Fund sheets and prospectuses for each sub-account's underlying investment vehicle call 1-800-395-1113. These documents contain complete details on investment objectives, risks, fees, harges and expenses as well as other information about the underlying investment vehicle, which should be carefully considered. Please read these documents carefully prior to investing.
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