

John Hancock Multimanager 2020 Lifetime Portfolio

Class I/JHRVX

ANNUAL SHAREHOLDER REPORT | AUGUST 31, 2025

This annual shareholder report contains important information about the John Hancock Multimanager 2020 Lifetime Portfolio (the fund) for the period of September 1, 2024 to August 31, 2025. You can find additional information about the fund at jhinvestments.com/documents. You can also request this information by contacting us at 800-225-5291.

What were the fund costs during the last year?

(Based on a hypothetical \$10,000 investment)

Fund (Class)	Costs of a \$10,000 investment	Costs paid as a percentage of a \$10,000 investment
Multimanager 2020 Lifetime Portfolio (Class I/JHRVX)	\$11	0.11%

Management’s Discussion of Fund Performance

SUMMARY OF RESULTS

Multimanager 2020 Lifetime Portfolio (Class I/JHRVX) returned 7.77% for the year ended August 31, 2025. The world financial markets produced robust total returns in the 12-month period that ended on August 31, 2025. Investor sentiment was well supported by the combination of positive global growth, strong corporate earnings, and accommodative central bank policies. Equities logged double-digit gains, albeit with a stretch of volatility in March-April 2025 caused by concerns about the United States’ implementation of tariffs. Bonds also performed well, with the strongest returns coming from higher-yielding market segments.

TOP PERFORMANCE CONTRIBUTORS

The equity allocation made the largest contribution | With the exception of the dedicated sector portfolio, all major equity categories—including large-, mid-, and small-cap U.S. stocks, international equities, defensive equities, and the real assets portfolio—delivered positive absolute returns.

The fixed-income allocation also contributed | The bond portfolio registered a gain, with notable contributions coming from intermediate-term bonds, short-term bonds, short-term U.S. Treasury Inflation Protected Securities and emerging-markets debt.

TOP PERFORMANCE DETRACTORS

U.S. Treasury STRIPS (Separate Trading of Registered Interest and Principal of Securities) | Yields on longer-term government bonds rose in the period, weighing on the performance of STRIPS.

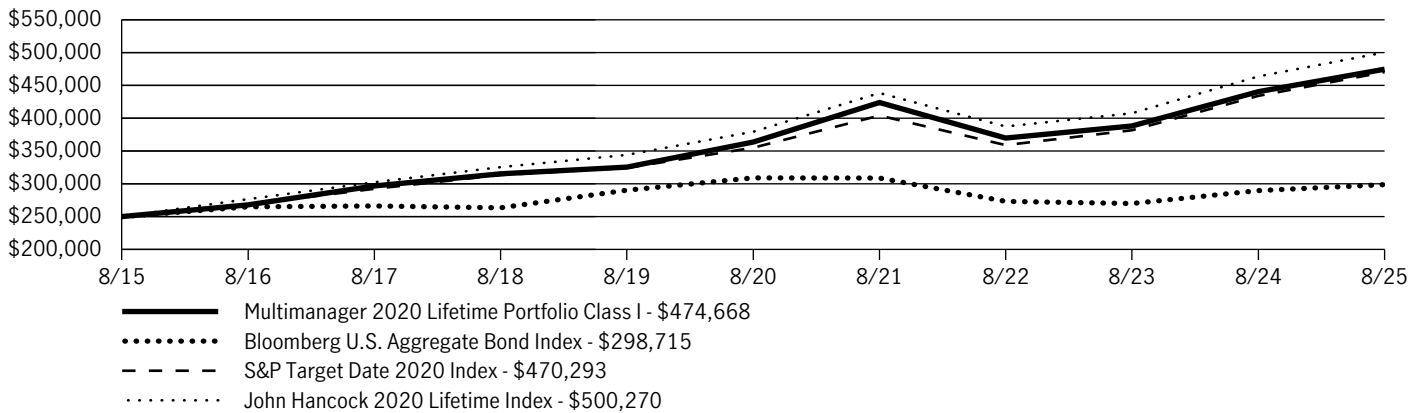
The absolute return portfolio | This portion of the fund, which is intended to provide an alternative source of return with lower sensitivity to the performance of the broader financial markets, posted a loss.

The views expressed in this report are those of the portfolio management team and are subject to change. They are not meant as investment advice.

Fund Performance

The following graph compares the initial and subsequent account values at the end of each of the most recently completed 10 fiscal years of the fund (or for the life of the fund, if shorter). It assumes a \$250,000 initial investment in the fund and in an appropriate, broad-based securities market index for the same period.

GROWTH OF \$250,000



AVERAGE ANNUAL TOTAL RETURN	1 Year	5 Years	10 Years
Multimanager 2020 Lifetime Portfolio (Class I/JHRVX)	7.77%	5.47%	6.62%
Bloomberg U.S. Aggregate Bond Index	3.14%	(0.68)%	1.80%
S&P Target Date 2020 Index	8.35%	5.78%	6.52%
John Hancock 2020 Lifetime Index	7.88%	5.68%	7.18%

Performance figures assume all distributions have been reinvested and reflect the beneficial effect of any expense reductions. Past performance does not guarantee future results. The return and principal value of an investment will fluctuate so that shares, when redeemed, may be worth more or less than their original cost. Due to market volatility and other factors, the fund's current performance may be higher or lower than the performance shown and can be found at jhinvestments.com/investments or by calling 800-225-5291. The graph and table do not reflect the deduction of taxes that a shareholder would pay on fund distributions or redemption of fund shares. It is not possible to invest directly in an index.

Fund Statistics

Fund net assets	\$362,655,777
Total number of portfolio holdings	97
Total advisory fees paid (net)	\$0
Portfolio turnover rate	21%

Graphical Representation of Holdings

The table below shows the investment makeup of the fund, representing a percentage of the total net assets of the fund.

ASSET ALLOCATION

Affiliated investment companies	91.3%
Equity	35.2%
International equity	14.0%
Large blend	9.3%
U.S. large cap	9.0%
U.S. mid cap	2.1%
U.S. small cap	0.5%
Emerging-market equity	0.3%
Fixed income	49.1%
Intermediate bond	25.2%
Short-term bond	8.1%
Multi-sector bond	4.8%
Emerging-market debt	4.7%
High yield bond	3.5%
Bank loan	2.8%
Alternative and specialty	7.0%
Sector equity	5.3%
Absolute return	1.7%
Unaffiliated investment companies	2.6%
Equity	2.6%
U.S. Government	6.1%

Holdings may not have been held by the fund for the entire period and are subject to change without notice. Portfolio composition is subject to review in accordance with the fund's investment strategy and may vary in the future. Current and future portfolio holdings are subject to risk and may change at any time.

The fund is subject to various risks as described in the fund's prospectus. For more information, please refer to the "Principal risks" section of the prospectus.

Availability of Additional Information



At jhinvestments.com/documents, you can find additional information about the fund, including the fund's:

- Prospectus
- Financial information
- Fund holdings
- Proxy voting information

You can also request this information by contacting us at 800-225-5291.

This report is for the information of the shareholders in this fund. It is not authorized for distribution to prospective investors unless preceded or accompanied by the fund's prospectus.



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