Manulife Investments | John Hancock

John Hancock Multimanager 2045 Lifetime Portfolio

Class A/JLJAX

ANNUAL SHAREHOLDER REPORT | AUGUST 31, 2026

This annual shareholder report contains important information about the John Hancock Multimanager 2045 Lifetime Portfolio (the fund) for the period of September 1, 2025 to August 31, 2026. 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 2045 Lifetime Portfolio (Class A/JLJAX)	$45	0.41%

Management's Discussion of Fund Performance

SUMMARY OF RESULTS

Multimanager 2045 Lifetime Portfolio (Class A/JLJAX) returned 18.91% (excluding sales charges) for the year ended August 31, 2026. Global equities produced sizable gains in the 12-month period that ended on August 31, 2026. Investors were encouraged by the favorable combination of healthy economic growth trends, robust corporate earnings, and generally supportive central bank policies, together with optimism about artificial intelligence. While technology stocks performed very well, the value style outpaced growth on a global basis and contributed meaningfully to the markets' strong showing. Emerging market equities also posted outsized returns. Bonds registered more modest gains, led by credit-oriented investments. Income was the primary contributor to total returns for fixed income instruments, as prices came under pressure from concerns about persistent inflation, global conflicts, energy prices, and mounting government debt across the developed world.

TOP PERFORMANCE CONTRIBUTORS

Equity allocation | U.S. equities made a significant contribution to absolute performance, led by large cap equities. International developed market equities further helped results, as did emerging market stocks. Defensive equities also generated positive returns. The real assets portfolio was an additional contributor with strong returns for energy stocks and the metals & mining sector.

Bond funds | The fixed-income allocation contributed positively, led by intermediate-term bonds and emerging markets debt. Holdings in high yield bonds and short-term bonds aided returns as well.

TOP PERFORMANCE DETRACTORS

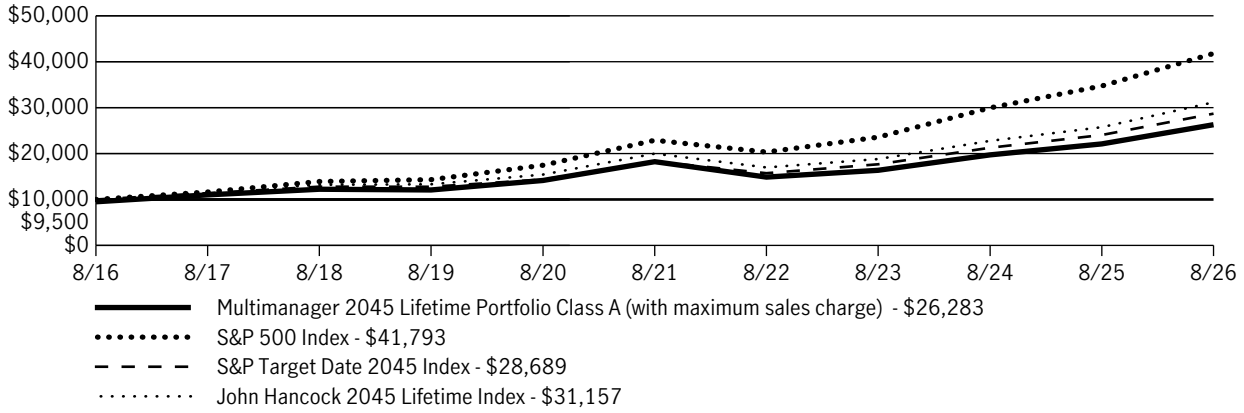
Specific positions | At a time of positive returns for most segments of the financial markets, the majority of the fund's holdings recorded a gain. However, small positions in U.S. Treasury STRIPS (Separate Trading of Registered Interest and Principal of Securities) were adversely affected by rising yields.

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 $10,000 initial investment in the fund and in an appropriate, broad-based securities market index for the same period.

GROWTH OF $10,000



AVERAGE ANNUAL TOTAL RETURN	1 Year	5 Years	10 Years
Multimanager 2045 Lifetime Portfolio (Class A/JLJAX)	12.96%	6.49%	10.15%
Multimanager 2045 Lifetime Portfolio (Class A/JLJAX)—excluding sales charge	18.91%	7.59%	10.71%
S&P 500 Index	20.38%	12.79%	15.37%
S&P Target Date 2045 Index	19.33%	9.45%	11.11%
John Hancock 2045 Lifetime Index	21.02%	9.28%	12.03%

Performance figures assume all distributions have been reinvested and reflect the beneficial effect of any expense reductions. Figures reflect maximum sales charge on Class A shares of 5.00%. 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	$1,024,345,141
Total number of portfolio holdings	85
Total advisory fees paid (net)	$0
Portfolio turnover rate	20%

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	**93.6%**
Equity	**81.1%**
International equity	26.9%
U.S. large cap	26.0%
Large blend	15.3%
U.S. mid cap	7.4%
Emerging-market equity	4.3%
U.S. small cap	1.2%
Fixed income	**11.0%**
Intermediate bond	6.3%
Short-term bond	2.3%
Emerging-market debt	1.4%
High yield bond	1.0%
Alternative and specialty	**1.5%**
Sector equity	1.0%
Absolute return	0.5%
Unaffiliated investment companies	**5.8%**
Equity	5.8%
U.S. Government	**0.6%**

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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