

Janus Henderson Flexible Bond Portfolio

Ticker: N/A Service Shares

SUMMARY PROSPECTUS DATED APRIL 30, 2021

Before you invest, you may want to review the Portfolio's Prospectus, which contains more information about the Portfolio and its risks. You can find the Portfolio's Prospectus, reports to shareholders, and other information about the Portfolio online at janushenderson.com/VIT. You can also get this information at no cost by calling a Janus Henderson representative at 1-877-335-2687 or by sending an email request to prospectusrequest@janushenderson.com.

INVESTMENT OBJECTIVE

Janus Henderson Flexible Bond Portfolio ("Flexible Bond Portfolio") seeks to obtain maximum total return, consistent with preservation of capital.

FEES AND EXPENSES OF THE PORTFOLIO

This table describes the fees and expenses that you may pay if you buy and hold Shares of the Portfolio. **Owners of variable insurance contracts that invest in the Shares should refer to the variable insurance contract prospectus for a description of fees and expenses, as the following table and examples do not reflect deductions at the separate account level or contract level for any charges that may be incurred under a contract. Inclusion of these charges would increase the fees and expenses described below.**

ANNUAL FUND OPERATING EXPENSES

(expenses that you pay each year as a percentage of the value of your investment)

Management Fees	0.50%
Distribution/Service (12b-1) Fees	0.25%
Other Expenses	0.10%
Total Annual Fund Operating Expenses	0.85%
Fee Waiver ⁽¹⁾	0.03%
Total Annual Fund Operating Expenses After Fee Waiver ⁽¹⁾	0.82%

(1) Janus Capital has contractually agreed to waive its investment advisory fee and/or reimburse Portfolio expenses to the extent that the Portfolio's total annual fund operating expenses (excluding fees payable pursuant to a Rule 12b-1 plan, shareholder servicing fees, such as transfer agency fees (including out-of-pocket costs and expenses payable pursuant to the Transfer Agency Agreement), brokerage commissions, interest, dividends, taxes, acquired fund fees and expenses, and extraordinary expenses) exceed 0.52% for at least a one-year period commencing on April 30, 2021. The contractual waiver may be terminated or modified prior to this date only at the discretion of the Portfolio's Board of Trustees.

EXAMPLE:

The following Example is based on expenses without waivers. The Example is intended to help you compare the cost of investing in the Portfolio with the cost of investing in other mutual funds. The Example assumes that you invest \$10,000 in the Portfolio for the time periods indicated, reinvest all dividends and distributions, and then redeem all of your Shares at the end of each period. The Example also assumes that your investment has a 5% return each year and that the Portfolio's operating expenses without waivers remain the same. Although your actual costs may be higher or lower, based on these assumptions your costs would be:

	1 Year	3 Years	5 Years	10 Years
Service Shares	\$ 87	\$ 271	\$ 471	\$ 1,049

Portfolio Turnover: The Portfolio pays transaction costs, such as commissions, when it buys and sells securities (or "turns over" its portfolio). A higher portfolio turnover rate may indicate higher transaction costs. These costs, which are not reflected in annual fund operating expenses or in the Example, affect the Portfolio's performance. During the most recent fiscal year, the Portfolio's turnover rate was 139% of the average value of its portfolio.

PRINCIPAL INVESTMENT STRATEGIES

The Portfolio pursues its investment objective by primarily investing, under normal circumstances, at least 80% of its net assets (plus any borrowings for investment purposes) in bonds. Bonds include, but are not limited to, government notes and bonds, corporate bonds, commercial and residential mortgage-backed securities, and asset-backed securities. The Portfolio may also invest in money market instruments and commercial loans (such as bank loans). The Portfolio may invest in fixed

and floating rate obligations with varying durations. The Portfolio's average portfolio duration may normally range from 3 years to 7 years. As of December 31, 2020, the Portfolio's average portfolio duration was 6.4 years.

The Portfolio will invest at least 65% of its net assets in investment grade debt securities. The Portfolio will limit its investment in high-yield/high-risk bonds (also known as "junk" bonds) to 35% or less of its net assets. The Portfolio generates total return from a combination of current income and capital appreciation, but income is usually the dominant portion. The Portfolio may enter into "to be announced" or "TBA" commitments when purchasing mortgage-backed securities or other securities. The Portfolio may also invest in securities that cannot be offered for public resale unless registered under the applicable securities laws or that have a contractual restriction that prohibits or limits their resale (these are known as "restricted securities"). The Portfolio may also invest in foreign securities, which may include investments in emerging market securities. Due to the nature of the securities in which the Portfolio invests, it may have relatively high portfolio turnover compared to other portfolios.

Additionally, the Portfolio may invest its assets in derivatives, which are instruments that have a value derived from, or directly linked to, an underlying asset, such as fixed-income securities, commodities, currencies, interest rates, or market indices. In particular, the Portfolio may use interest rate swaps and futures, including Treasury bond futures, to manage interest rate risk, yield curve positioning, and country exposure. The Portfolio may also use index credit default swaps for hedging purposes (to offset risks associated with an investment exposure, or market conditions), to increase or decrease the Portfolio's exposure to a particular market, to manage or adjust the risk profile of the Portfolio relative to its benchmark index, and to earn income, enhance returns, or preserve capital. The Portfolio's exposure to derivatives will vary. For purposes of meeting its 80% investment policy, the Portfolio may include derivatives that have characteristics similar to the securities in which the Portfolio may directly invest.

The portfolio managers' investment process is research-driven, incorporating "top-down" and "bottom-up" factors to identify and manage exposure to risks across sectors, industries, and individual investments. The portfolio managers evaluate expected risk-adjusted returns on a portfolio and position level by analyzing fundamentals, valuations, and market technical indicators.

The Portfolio may lend portfolio securities on a short-term or long-term basis, in an amount equal to up to one-third of its total assets as determined at the time of the loan origination.

PRINCIPAL INVESTMENT RISKS

Although the Portfolio may be less volatile than funds that invest most of their assets in common stocks, the Portfolio's returns and yields will vary, and you could lose money.

Fixed-Income Securities Risk. The Portfolio invests in a variety of fixed-income securities. Typically, the values of fixed-income securities change inversely with prevailing interest rates. Therefore, a fundamental risk of fixed-income securities is interest rate risk, which is the risk that the value of such securities will generally decline as prevailing interest rates rise, which may cause the Portfolio's net asset value to likewise decrease. For example, while securities with longer maturities and durations tend to produce higher yields, they also tend to be more sensitive to changes in prevailing interest rates and are therefore more volatile than shorter-term securities and are subject to greater market fluctuations as a result of changes in interest rates. Investments in fixed-income securities with very low or negative interest rates may diminish the Portfolio's yield and performance. The Portfolio may be subject to heightened interest rate risk in times of monetary policy change and uncertainty, such as when the Federal Reserve Board ends a quantitative easing program and/or raises interest rates. The end of quantitative easing and/or rising interest rates may expose fixed-income markets to increased volatility and may reduce the liquidity of certain Portfolio investments. These developments could cause the Portfolio's net asset value to fluctuate or make it more difficult for the Portfolio to accurately value its securities. If rising interest rates cause the Portfolio to lose enough value, the Portfolio could also face increased shareholder redemptions, which may lead to increased portfolio turnover and transaction costs. An increase in shareholder redemptions could also force the Portfolio to liquidate investments at disadvantageous times or prices, therefore adversely affecting the Portfolio as well as the value of your investment. The amount of assets deemed illiquid remaining within the Portfolio may also increase, making it more difficult to meet shareholder redemptions and further adversely affecting the value of the Portfolio. How specific fixed-income securities may react to changes in interest rates will depend on the specific characteristics of each security. Fixed-income securities are also subject to credit risk, prepayment risk, valuation risk, extension risk, and liquidity risk. Credit risk is the risk that the credit strength of an issuer of a fixed-income security will weaken and/or that the issuer will be unable to make timely principal and interest payments and that the security may go into default. Prepayment risk is the risk that during periods of falling

interest rates, certain fixed-income securities with higher interest rates, such as mortgage- and asset-backed securities, may be prepaid by their issuers which may result in the Portfolio reinvesting its assets at lower interest rates. Valuation risk is the risk that one or more of the fixed-income securities in which the Portfolio invests are priced differently than the value realized upon such security's sale. In times of market instability, valuation may be more difficult. Extension risk is the risk that borrowers may pay off their debt obligations more slowly in times of rising interest rates, which will lengthen the duration of the portfolio. Liquidity risk is the risk that fixed-income securities may be difficult or impossible to sell at the time that the portfolio managers would like or at the price the portfolio managers believe the security is currently worth.

High-Yield/High-Risk Bond Risk. High-yield/high-risk bonds are considered speculative and may be more sensitive than other types of bonds to economic changes, political changes, or adverse developments specific to the company that issued the bond, which may adversely affect their value.

Sovereign Debt Risk. The Portfolio may invest in U.S. and non-U.S. government debt securities ("sovereign debt"). Some investments in sovereign debt, such as U.S. sovereign debt, are considered low risk. However, investments in sovereign debt, especially the debt of less developed countries, can involve a high degree of risk, including the risk that the governmental entity that controls the repayment of sovereign debt may not be willing or able to repay the principal and/or to pay the interest on its sovereign debt in a timely manner. A sovereign debtor's willingness or ability to satisfy its debt obligation may be affected by various factors including, but not limited to, its cash flow situation, the extent of its foreign currency reserves, the availability of foreign exchange when a payment is due, and the relative size of its debt position in relation to its economy as a whole. In the event of default, there may be limited or no legal remedies for collecting sovereign debt and there may be no bankruptcy proceedings through which the Portfolio may collect all or part of the sovereign debt that a governmental entity has not repaid. In addition, to the extent the Portfolio invests in non-U.S. sovereign debt, it may be subject to currency risk.

Mortgage- and Asset-Backed Securities Risk. Mortgage- and asset-backed securities represent interests in "pools" of commercial or residential mortgages or other assets, including consumer loans or receivables. Mortgage- and asset-backed securities tend to be more sensitive to changes in interest rates than other types of debt securities. Investments in mortgage- and asset-backed securities are subject to both extension risk, where borrowers pay off their debt obligations more slowly in times of rising interest rates, and prepayment risk, where borrowers pay off their debt obligations sooner than expected in times of declining interest rates. These risks may reduce the Portfolio's returns. In addition, investments in mortgage- and asset-backed securities, including those comprised of subprime mortgages, may be subject to a higher degree of credit risk, valuation risk, and liquidity risk than various other types of fixed-income securities.

Floating Rate Obligations Risk. The Portfolio may invest in floating rate obligations with interest rates that reset regularly, maintaining a fixed spread over a stated reference rate. The interest rates on floating rate obligations typically reset quarterly, although rates on some obligations may adjust at other intervals. Unexpected changes in the interest rates on floating rate obligations could result in lower income to the Portfolio. In addition, the secondary market on which floating rate obligations are traded may be less liquid than the market for investment grade securities or other types of income-producing securities, which may have an adverse impact on their market price. There is also a potential that there is no active market to trade floating rate obligations and that there may be restrictions on their transfer. As a result, the Portfolio may be unable to sell floating rate obligations at the desired time or may be able to sell only at a price less than fair market value.

Liquidity Risk. The Portfolio may invest in securities or instruments that do not trade actively or in large volumes, and may make investments that are less liquid than other investments. Also, the Portfolio may make investments that may become less liquid in response to market developments or adverse investor perceptions. Investments that are illiquid or that trade in lower volumes may be more difficult to value. When there is no willing buyer and investments cannot be readily sold at the desired time or price, the Portfolio may have to accept a lower price or may not be able to sell the security or instrument at all. Investments in foreign securities, particularly those of issuers located in emerging market countries, tend to have greater exposure to liquidity risk than domestic securities. In unusual market conditions, even normally liquid securities may be affected by a degree of liquidity risk (i.e., if the number and capacity of traditional market participants is reduced). An inability to sell one or more portfolio positions can adversely affect the Portfolio's value or prevent the Portfolio from being able to take advantage of other investment opportunities.

Foreign Exposure Risk. The Portfolio may have exposure to foreign markets as a result of its investments in foreign securities, including investments in emerging markets, which can be more volatile than the U.S. markets. As a result, its returns and net asset value may be affected to a large degree by fluctuations in currency exchange rates or political or

economic conditions in a particular country. In some foreign markets, there may not be protection against failure by other parties to complete transactions. It may not be possible for the Portfolio to repatriate capital, dividends, interest, and other income from a particular country or governmental entity. In addition, a market swing in one or more countries or regions where the Portfolio has invested a significant amount of its assets may have a greater effect on the Portfolio's performance than it would in a more geographically diversified portfolio. To the extent the Portfolio invests in foreign debt securities, such investments are sensitive to changes in interest rates. Additionally, investments in securities of foreign governments involve the risk that a foreign government may not be willing or able to pay interest or repay principal when due. Some of the risks of investing directly in foreign securities may be reduced when the Portfolio invests indirectly in such securities through various other investment vehicles including derivatives, but such investments also involve other risks. The Portfolio's investments in emerging market countries, if any, may involve risks greater than, or in addition to, the risks of investing in more developed countries.

Loan Risk. The Portfolio may invest in a variety of loans. Bank loans are obligations of companies or other entities entered into in connection with recapitalizations, acquisitions, and refinancings. The Portfolio's investments in bank loans are generally acquired as a participation interest in, or assignment of, loans originated by a lender or other financial institution. These investments may include institutionally-traded floating and fixed-rate debt securities. The bank loans underlying these securities often involve borrowers with low credit ratings whose financial conditions are troubled or uncertain, including companies that are highly leveraged or in bankruptcy proceedings. Participation interests and assignments involve credit, interest rate, and liquidity risk.

Portfolio Turnover Risk. Increased portfolio turnover may result in higher costs, which may have a negative effect on the Portfolio's performance.

TBA Commitments Risk. The Portfolio may enter into "to be announced" or "TBA" commitments. Although the particular TBA securities must meet industry-accepted "good delivery" standards, there can be no assurance that a security purchased on a forward commitment basis will ultimately be issued or delivered by the counterparty. If the counterparty to a transaction fails to deliver the securities, the Portfolio could suffer a loss. Because TBA commitments do not require the purchase and sale of identical securities, the characteristics of the security delivered to the Portfolio may be less favorable than the security delivered to the dealer. Accordingly, there is a risk that the security that the Portfolio buys will lose value between the purchase and settlement dates.

Derivatives Risk. Derivatives can be highly volatile and involve risks in addition to the risks of the underlying referenced securities or asset. Gains or losses from a derivative investment can be substantially greater than the derivative's original cost, and can therefore involve leverage. Leverage may cause the Portfolio to be more volatile than if it had not used leverage. Derivatives can be less liquid than other types of investments and entail the risk that the counterparty will default on its payment obligations. The Portfolio may use derivatives for hedging purposes. Hedging with derivatives may increase expenses, and there is no guarantee that a hedging strategy will work. While hedging can reduce or eliminate losses, it can also reduce or eliminate gains or cause losses if the market moves in a manner different from that anticipated by the portfolio managers or if the cost of the derivative outweighs the benefit of the hedge.

Restricted Securities Risk. Securities that have limitations on their resale are referred to as "restricted securities". Investments in restricted securities, including securities issued under Regulation S and Rule 144A, could have the effect of decreasing the Portfolio's liquidity profile or preventing the Portfolio from disposing of them promptly at advantageous prices. Restricted securities may be less liquid than other investments because such securities may not always be readily sold in broad public markets and may have no active trading market. As a result, they may be difficult to value because market quotations may not be readily available.

LIBOR Replacement Risk. The Portfolio may invest in certain debt securities, derivatives, or other financial instruments that utilize the London Inter-Bank Offered Rate ("LIBOR") as a reference rate for various rate calculations. The U.K. Financial Conduct Authority has announced that it intends to stop compelling or inducing banks to submit LIBOR rates after 2021. The elimination of LIBOR or other reference rates and transition process could adversely impact (i) volatility and liquidity in markets that are tied to these reference rates, (ii) the market for, or value of, specific securities or payments linked to those reference rates, (iii) the availability or terms of borrowing or refinancing, or (iv) the effectiveness of hedging strategies. For these and other reasons, the elimination of LIBOR or changes to other interest rates may adversely affect the Portfolio's performance and/or net asset value. Alternatives to LIBOR are established or in development in most major currencies including the Secured Overnight Financing Rate ("SOFR") that is intended to replace the U.S. dollar LIBOR.

The effect of the discontinuation of LIBOR or other reference rates on the Portfolio will vary depending on, among other things (i) existing fallback or termination provisions in individual contracts and (ii) whether, how, and when industry participants develop and adopt new reference rates and fallbacks for both legacy and new products and instruments. Accordingly, it is difficult to predict the full impact of the transition away from LIBOR or other reference rates on the Portfolio until new reference rates and fallbacks for both legacy and new products, instruments, and contracts are commercially accepted.

Securities Lending Risk. The Portfolio may seek to earn additional income through lending its securities to certain qualified broker-dealers and institutions. There is the risk that when portfolio securities are lent, the securities may not be returned on a timely basis, and the Portfolio may experience delays and costs in recovering the security or gaining access to the collateral provided to the Portfolio to collateralize the loan. If the Portfolio is unable to recover a security on loan, the Portfolio may use the collateral to purchase replacement securities in the market. There is a risk that the value of the collateral could decrease below the cost of the replacement security by the time the replacement investment is made, resulting in a loss to the Portfolio.

Management Risk. The Portfolio is an actively managed investment portfolio and is therefore subject to the risk that the investment strategies employed for the Portfolio may fail to produce the intended results. The Portfolio may underperform its benchmark index or other mutual funds with similar investment objectives.

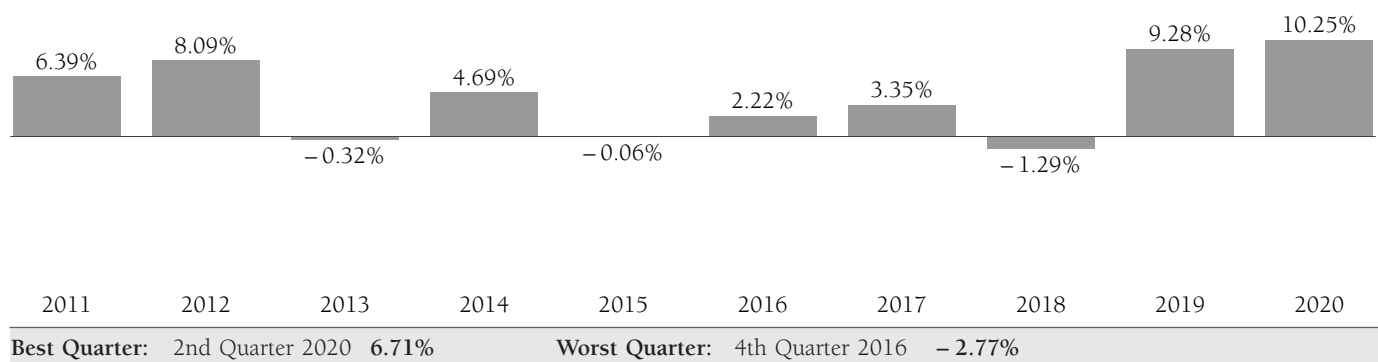
An investment in the Portfolio is not a bank deposit and is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency.

PERFORMANCE INFORMATION

The following information provides some indication of the risks of investing in the Portfolio by showing how the Portfolio's performance has varied over time. The Portfolio's Service Shares commenced operations on December 31, 1999. The returns shown for the Service Shares for periods prior to December 31, 1999 reflect the historical performance of a different class of shares (the Institutional Shares), restated based on the Service Shares' estimated fees and expenses (ignoring any fee and expense limitations). The bar chart depicts the change in performance from year to year during the periods indicated, but does not include charges or expenses attributable to any insurance product, which would lower the performance illustrated. The Portfolio does not impose any sales or other charges that would affect total return computations. Total return figures include the effect of the Portfolio's expenses. The table compares the average annual returns for the Service Shares of the Portfolio for the periods indicated to a broad-based securities market index. All figures assume reinvestment of dividends and distributions. For certain periods, the Portfolio's performance reflects the effect of expense waivers. Without the effect of these expense waivers, the performance shown would have been lower.

The Portfolio's past performance does not necessarily indicate how it will perform in the future. Updated performance information is available at janushenderson.com/VITperformance or by calling 1-877-335-2687.

Annual Total Returns for Service Shares (calendar year-end)



Average Annual Total Returns (periods ended 12/31/20)

	1 Year	5 Years	10 Years	Since Inception (9/13/93)
Flexible Bond Portfolio				
Service Shares	10.25%	4.67%	4.19%	6.09%
Bloomberg Barclays U.S. Aggregate Bond Index (reflects no deduction for fees, expenses, or taxes)	7.51%	4.44%	3.84%	5.23%

The Portfolio's primary benchmark index is the Bloomberg Barclays U.S. Aggregate Bond Index. The index is described below.

- The Bloomberg Barclays U.S. Aggregate Bond Index is made up of U.S. dollar-denominated, fixed-rate taxable bonds, including securities that are of investment grade quality or better.

MANAGEMENT

Investment Adviser: Janus Capital Management LLC

Portfolio Managers: **Michael Keough** is Executive Vice President and Co-Portfolio Manager of the Portfolio, which he has co-managed since December 2015. **Greg Wilensky**, CFA, is Executive Vice President and Co-Portfolio Manager of the Portfolio, which he has co-managed since February 2020.

PURCHASE AND SALE OF PORTFOLIO SHARES

Purchases of Shares may be made only by the separate accounts of insurance companies for the purpose of funding variable insurance contracts or by certain qualified retirement plans. Redemptions, like purchases, may be effected only through the separate accounts of participating insurance companies or through qualified retirement plans. Requests are duly processed at the NAV next calculated after your order is received in good order by the Portfolio or its agents. Refer to the appropriate separate account prospectus or plan documents for details.

TAX INFORMATION

Because Shares of the Portfolio may be purchased only through variable insurance contracts and certain qualified retirement plans, it is anticipated that any income dividends or net capital gains distributions made by the Portfolio will be exempt from current federal income taxation if left to accumulate within the variable insurance contract or qualified retirement plan. The federal income tax status of your investment depends on the features of your qualified retirement plan or variable insurance contract.

PAYMENTS TO INSURERS, BROKER-DEALERS, AND OTHER FINANCIAL INTERMEDIARIES

Portfolio shares are generally available only through an insurer's variable contracts, or through certain employer or other retirement plans (Retirement Products). Retirement Products are generally purchased through a broker-dealer or other financial intermediary. The Portfolio or its distributor (and/or their related companies) may make payments to the insurer and/or its related companies for distribution and/or other services; some of the payments may go to broker-dealers and other financial intermediaries. These payments may create a conflict of interest for an intermediary, or be a factor in the insurer's decision to include the Portfolio as an underlying investment option in a variable contract. Ask your financial advisor, visit your intermediary's website, or consult your insurance contract prospectus for more information.

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