

Janus Henderson Enterprise Portfolio

(closed to certain new investors) Ticker: JAAGX Institutional Shares

SUMMARY PROSPECTUS DATED APRIL 29, 2020

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 prospectus request@janushenderson.com.

Beginning on January 1, 2021, as permitted by regulations adopted by the Securities and Exchange Commission, the insurance company that offers your variable life insurance contract or variable annuity contract, may determine that it will no longer send you paper copies of the Portfolio's shareholder reports, unless you specifically request paper copies of the reports. Beginning on January 1, 2021, for shareholders who are not insurance contract holders, paper copies of the Portfolio's shareholder reports will no longer be sent by mail unless you specifically request paper copies of the reports. Instead, the reports will be made available on a website, and your insurance company or plan sponsor, broker-dealer, or financial intermediary will notify you by mail each time a report is posted and provide you with a website link to access the report. Instructions for requesting paper copies will be provided by your insurance company or plan sponsor, broker-dealer, or financial intermediary.

If you already elected to receive shareholder reports electronically, you will not be affected by this change and you need not take any action. You may elect to receive shareholder reports and other communications from the Portfolio electronically by contacting your insurance company or plan sponsor, broker-dealer, or other financial intermediary.

You may elect to receive all future reports in paper free of charge by contacting your insurance company or plan sponsor, broker-dealer or other financial intermediary. Your election to receive reports in paper will apply to all funds held in your account with your insurance company or plan sponsor, broker-dealer or other financial intermediary.

INVESTMENT OBJECTIVE

Janus Henderson Enterprise Portfolio ("Enterprise Portfolio") seeks long-term growth 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 | 0.64% |
|--------------------------------------|-------|
| Other Expenses | 0.08% |
| Total Annual Fund Operating Expenses | 0.72% |

EXAMPLE:

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 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 |
|----------------------|--------|---------|---------|----------|
| Institutional Shares | \$ 74 | \$ 230 | \$ 401 | \$ 894 |

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 14% of the average value of its portfolio.

PRINCIPAL INVESTMENT STRATEGIES

The Portfolio pursues its investment objective by investing primarily in common stocks selected for their growth potential, and normally invests at least 50% of its equity assets in medium-sized companies. Medium-sized companies are those whose market capitalization falls within the range of companies in the Russell Midcap® Growth Index. Market capitalization is a commonly used measure of the size and value of a company. The market capitalizations within the index will vary, but as of December 31, 2019, they ranged from approximately \$267 million to \$65.12 billion. The Portfolio may also invest in foreign securities, which may include investments in emerging markets. In addition, the Portfolio's investments may include securities of real estate-related companies, including real estate investment trusts.

The portfolio managers apply a "bottom up" approach in choosing investments. In other words, the portfolio managers look at companies one at a time to determine if a company is an attractive investment opportunity and if it is consistent with the Portfolio's investment policies. Attributes considered in the process of securities selection may include sustainable growth, return on invested capital, and competitive positioning.

The Portfolio may also invest its assets in derivatives, which are instruments that have a value derived from, or directly linked to, an underlying asset, such as equity securities, fixed-income securities, commodities, currencies, interest rates, or market indices. In particular, the Portfolio may use forward currency contracts to offset risks associated with an investment, currency exposure, or market conditions, or to hedge currency exposure relative to the Portfolio's benchmark index.

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

The biggest risk is that the Portfolio's returns will vary, and you could lose money. The Portfolio is designed for long-term investors seeking an equity portfolio, including common stocks. Common stocks tend to be more volatile than many other investment choices.

Market Risk. The value of the Portfolio's holdings may decrease if the value of an individual company or security, or multiple companies or securities, in the Portfolio decreases or if the portfolio managers' belief about a company's intrinsic worth is incorrect. Further, regardless of how well individual companies or securities perform, the value of the Portfolio's holdings could also decrease if there are deteriorating economic or market conditions. It is important to understand that the value of your investment may fall, sometimes sharply, in response to changes in the market, and you could lose money. Market risk may affect a single issuer, industry, economic sector, or the market as a whole. Market risk may be magnified if certain social, political, economic, and other conditions and events (such as natural disasters, epidemics and pandemics, terrorism, conflicts and social unrest) adversely interrupt the global economy and financial markets.

Mid-Sized Companies Risk. The Portfolio's investments in securities issued by mid-sized companies may involve greater risks than are customarily associated with larger, more established companies. Securities issued by mid-sized companies tend to be more volatile than securities issued by larger or more established companies and may underperform as compared to the securities of larger or more established companies.

Growth Securities Risk. The Portfolio invests in companies that the portfolio managers believe have growth potential. Securities of companies perceived to be "growth" companies may be more volatile than other stocks and may involve special risks. If the portfolio managers' perception of a company's growth potential is not realized, the securities purchased may not perform as expected, reducing the Portfolio's returns. In addition, because different types of stocks tend to shift in and out of favor depending on market and economic conditions, "growth" stocks may perform differently from the market as a whole and other types of securities.

Industry and Sector Risk. Although the Portfolio does not concentrate its investments in specific industries or industry sectors, it may have a significant portion of its assets invested in securities of companies conducting similar business or business within the same economic sector. Companies in the same industry or economic sector may be similarly affected by economic or market events, making the Portfolio more vulnerable to unfavorable developments than funds that invest more broadly. As the Portfolio's holdings become more concentrated, the Portfolio is less able to spread risk and potentially reduce the risk of loss and volatility. In addition, the Portfolio may be overweight or underweight in certain industries or sectors

relative to its benchmark index, which may cause the Portfolio's performance to be more or less sensitive to developments affecting those sectors.

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. 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, as noted in the Portfolio Summary. The Portfolio's investments in emerging market countries may involve risks greater than, or in addition to, the risks of investing in more developed countries.

Real Estate Securities Risk. The Portfolio's performance may be affected by the risks associated with investments in real estate-related companies. The value of real estate-related companies' securities is sensitive to changes in real estate values and rental income, property taxes, interest rates, tax and regulatory requirements, supply and demand, and the management skill and creditworthiness of the company. Investments in real estate investment trusts ("REITs") involve the same risks as other real estate investments. In addition, a REIT could fail to qualify for tax-free pass-through of its income under the Internal Revenue Code of 1986, as amended (the "Internal Revenue Code") or fail to maintain its exemption from registration under the Investment Company Act of 1940, as amended, which could produce adverse economic consequences for the REIT and its investors, including the Portfolio.

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, including forward currency contracts, 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.

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.

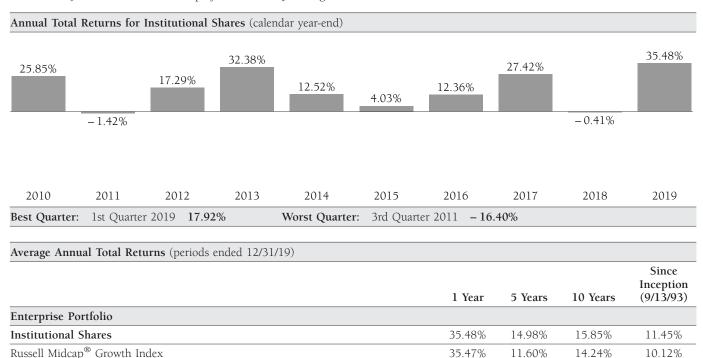
An investment in the Portfolio is not a bank deposit and is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency.

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 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

Institutional Shares of the Portfolio for the periods indicated to a broad-based securities market index. All figures assume reinvestment of dividends and distributions.

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.



The Portfolio's primary benchmark index is the Russell Midcap Growth Index. The index is described below.

• The Russell Midcap Growth Index measures the performance of those Russell Midcap companies with higher price-to-book ratios and higher forecasted growth values. The stocks are also members of the Russell 1000[®] Growth Index.

MANAGEMENT

Investment Adviser: Janus Capital Management LLC

(reflects no deduction for fees, expenses, or taxes)

Portfolio Managers: Brian Demain, CFA, is Executive Vice President and Co-Portfolio Manager of the Portfolio, which he has managed or co-managed since November 2007. **Cody Wheaton**, CFA, is Executive Vice President and Co-Portfolio Manager of the Portfolio, which he has co-managed since July 2016.

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.

