Janus Hendersor

Janus Henderson Mid Cap Value Portfolio

Ticker: JAMVX Institutional 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 Mid Cap Value Portfolio ("Mid Cap Value Portfolio") seeks capital appreciation.

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)

| 1 | , , , | , | | 1 | 0 | , | | | | | | | |
|------------|------------------------|---------|---------|---|---|-------|--|--|---|---|---|----|-----|
| Managemei | nt Fees ⁽¹⁾ | | | | | | | | | | | 0. | 62% |
| Other Expe | enses | | | | | | | | | | | 0. | 19% |
| Total Annu | al Fund Ope | erating | Expense | S | | | | | | | | 0. | 81% |
| | | | | | | - | | | - | - | - | | |

(1) This fee may adjust up or down monthly based on the Portfolio's performance relative to its benchmark index over the performance measurement period. For more information regarding performance-based advisory fees, refer to "Management Expenses" in the Portfolio's Prospectus.

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 | \$ 83 | \$ 259 | \$ 450 | \$ 1,002 |

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 44% of the average value of its portfolio.

PRINCIPAL INVESTMENT STRATEGIES

The Portfolio pursues its investment objective by investing primarily in the common stocks of mid-sized companies whose stock prices are believed to be undervalued by the portfolio managers. The Portfolio invests, under normal circumstances, at least 80% of its net assets (plus any borrowings for investment purposes) in equity securities of companies whose market capitalization falls, at the time of purchase, within the 12-month average of the capitalization range of the Russell Midcap[®] Value Index. The market capitalizations within the index will vary, but as of December 31, 2020, they ranged from approximately \$123 million to \$47.25 billion. The Portfolio may also invest in foreign securities, which may include investments in emerging markets. The Portfolio may invest, under normal circumstances, up to 20% of its net assets in securities of companies having market capitalizations outside of the aforementioned market capitalization ranges. In addition, when the portfolio managers believe that market conditions are unfavorable for investing, or when they are otherwise unable to locate attractive investment opportunities, the Portfolio may invest up to 20% of its net assets in cash or similar investments.

The Portfolio focuses on companies that have fallen out of favor with the market or that appear to be temporarily misunderstood by the investment community. As defensive value managers, the portfolio managers generally look for companies with:

- strong management teams;
- strong and stable balance sheets and solid recurring free cash flows;
- attractive relative and absolute valuation ratios or that have underperformed recently;
- favorable reward to risk characteristics;
- durable competitive advantages that are trading at attractive valuations; and
- strong long-term prospects.

The portfolio managers' philosophy is to weigh a security's downside risk before considering its upside potential, which may help provide an element of capital preservation.

The Portfolio may invest in equity and debt securities of real estate-related companies. Such companies may include those in the real estate industry or real estate-related industries. These securities may include common stocks, preferred stocks, and other securities, including, but not limited to, mortgage-backed securities, real estate-backed securities, securities of real estate investment trusts ("REITs") and similar REIT-like entities. A REIT is a trust that invests in real estate-related projects, such as properties, mortgage loans, and construction loans. REITs are generally categorized as equity REITs, mortgage REITs, or hybrid REITs. A REIT may be listed on an exchange or traded over-the-counter.

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.

Value Investing Risk. The Portfolio may invest in value stocks. Because different types of stocks tend to shift in and out of favor depending on market and economic conditions, "value" stocks may perform differently than other types of stocks and from the market as a whole, and can continue to be undervalued by the market for long periods of time. It is also possible that a value stock will never appreciate to the extent expected by the portfolio managers.

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 terrorism, conflicts, social unrest, natural disasters, epidemics and pandemics, including COVID-19) adversely interrupt the global economy and financial markets.

Small- and Mid-Sized Companies Risk. The Portfolio's investments in securities issued by small- and mid-sized companies, which can include smaller companies offering emerging products or services, may involve greater risks than are customarily associated with larger, more established companies. Securities issued by small- and mid-sized companies tend to be more volatile and somewhat more speculative than securities issued by larger or more established companies and may underperform as compared to the securities of larger or more established companies.

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.

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. 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.

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 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.

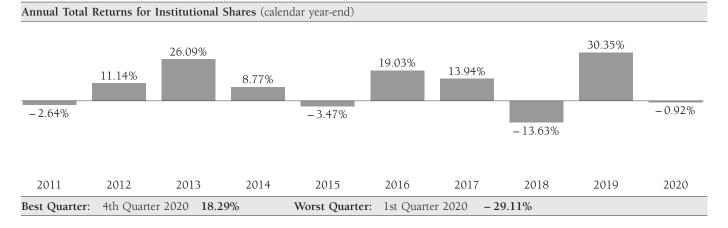
Cash Holdings Risk. The Portfolio's investments in cash, cash equivalents, or similar investments may increase due to a lack of favorable investment opportunities or other extraordinary factors. As a result, the Portfolio may not participate in market advances or declines to the same extent that it would if the Portfolio had been fully invested in the market. Furthermore, cash, cash equivalents, or similar investments may generate minimal or no income and could negatively impact the Portfolio's performance and ability to achieve its investment objective. The Portfolio may invest in securities such as repurchase agreements and other short-term debt obligations to generate return on its cash position.

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. 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.



| Average Annual Total Returns (periods ended 12/31/20) | | | | | | | | | |
|-------------------------------------------------------------------------------------------------|---------|---------|----------|--------------------------------|--|--|--|--|--|
| | 1 Year | 5 Years | 10 Years | Since Inception (5/1/03) | | | | | |
| Mid Cap Value Portfolio | | | | | | | | | |
| Institutional Shares | - 0.92% | 8.63% | 8.04% | 9.91% | | | | | |
| Russell Midcap [®] Value Index (reflects no deduction for fees, expenses, or taxes) | 4.96% | 9.73% | 10.49% | 10.86% | | | | | |

The Portfolio's primary benchmark index is the Russell Midcap Value Index. The Russell Midcap Value Index is used to calculate the Portfolio's performance fee adjustment. The index is described below.

• The Russell Midcap Value Index measures the performance of those Russell Midcap companies with lower price-to-book ratios and lower forecasted growth values.

MANAGEMENT

Investment Adviser: Janus Capital Management LLC

Portfolio Managers: Kevin Preloger is Co-Portfolio Manager of the Portfolio, which he has co-managed since April 2013. **Justin Tugman**, CFA, is Co-Portfolio Manager of the Portfolio, which he has co-managed since March 2015.

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.