

May 1, 2023

American Century Investments

Prospectus

VP Mid Cap Value Fund

Class I (AVIPX)

Class II (AVMTX)

The Securities and Exchange Commission has not approved or disapproved these securities or passed upon the adequacy of this prospectus. Any representation to the contrary is a criminal offense.



Table of Contents

| | |
|---|-----------|
| Fund Summary | 2 |
| Investment Objective | 2 |
| Fees and Expenses | 2 |
| Principal Investment Strategies | 2 |
| Principal Risks | 3 |
| Fund Performance | 3 |
| Portfolio Management | 4 |
| Purchase and Sale of Fund Shares | 4 |
| Tax Information | 4 |
| Payments to Broker-Dealers and Other Financial Intermediaries | 5 |
| Objectives, Strategies and Risks | 6 |
| Management | 8 |
| Additional Policies Affecting Your Investment | 10 |
| Share Price, Distributions and Taxes | 12 |
| Multiple Class Information | 14 |
| Financial Highlights | 15 |

Fund Summary

Investment Objective

The fund seeks long-term capital growth. Income is a secondary objective.

Fees and Expenses

The following table describes the fees and expenses you may pay if you buy and hold shares of the fund. The table does not include the fees and expenses associated with your variable annuity or variable life insurance contract. Had they been included, fees and expenses presented below would have been higher. For information regarding the fees and expenses associated with your variable annuity or variable life insurance contract, please refer to your insurance product prospectus.

| Annual Fund Operating Expenses (expenses that you pay each year as a percentage of the value of your investment) | | |
|---|----------------|-----------------|
| | <i>Class I</i> | <i>Class II</i> |
| Management Fee | 0.85% | 0.75% |
| Distribution and Service (12b-1) Fees | None | 0.25% |
| Other Expenses | 0.01% | 0.01% |
| Total Annual Fund Operating Expenses | 0.86% | 1.01% |

Example

The example below is intended to help you compare the costs of investing in the fund with the costs of investing in other mutual funds. The example does not include fees and expenses associated with your variable annuity or variable life insurance contract. Had they been included, fees and expenses would have been higher. The example assumes that you invest \$10,000 in the fund for the time periods indicated and then redeem all of your shares at the end of those periods, and that you earn a 5% return each year. The example also assumes that the fund's operating expenses remain the same, except that it reflects the rate and duration of any fee waivers noted in the table above. Although your actual costs may be higher or lower, based on these assumptions your costs would be:

| | <i>1 year</i> | <i>3 years</i> | <i>5 years</i> | <i>10 years</i> |
|----------|---------------|----------------|----------------|-----------------|
| Class I | \$88 | \$275 | \$477 | \$1,061 |
| Class II | \$103 | \$322 | \$559 | \$1,236 |

Portfolio Turnover

The fund 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 fund's performance. During the most recent fiscal year, the fund's portfolio turnover rate was 74% of the average value of its portfolio.

Principal Investment Strategies

Under normal market conditions, the portfolio managers will invest at least 80% of the fund's net assets in medium size companies. The portfolio managers consider medium size companies to include those whose market capitalization at the time of purchase is within the capitalization range of the Russell 3000[®] Index, excluding the largest 100 such companies. The portfolio managers intend to manage the fund so that its weighted capitalization falls within the capitalization range of the members of the Russell Midcap[®] Index.

Though market capitalization may change from time to time, as of February 28, 2023, the capitalization range of the Russell 3000[®] Index, excluding the largest 100 companies, and the Russell Midcap[®] Index, were approximately \$5.4 million to \$77.8 billion and \$394.4 million to \$56.5 billion, respectively.

In selecting stocks for the fund, the portfolio managers look for companies whose stock price may not reflect the company's value. The managers attempt to purchase the stocks of these undervalued companies and hold each stock until the price has increased to, or is higher than, a level the managers believe more accurately reflects the fair value of the company. The portfolio managers use a variety of analytical research tools and techniques to help them make decisions about buying or holding securities of companies that meet their investment criteria and selling the securities of companies that do not. In addition to fundamental financial metrics, the portfolio managers may also consider environmental, social, and/or governance (ESG) data. However, the portfolio managers may not consider ESG data with respect to every investment decision and, even when such data is considered, they may conclude that other attributes of an investment outweigh ESG considerations when making decisions for the fund.

The fund may invest a portion of its assets in foreign securities when these securities meet the portfolio managers' standards of selection.

The portfolio managers may sell stocks from the fund's portfolio if they believe a stock no longer meets their valuation criteria, a stock's risk parameters outweigh its return opportunity, more attractive alternatives are identified or specific events alter a stock's prospects.

Principal Risks

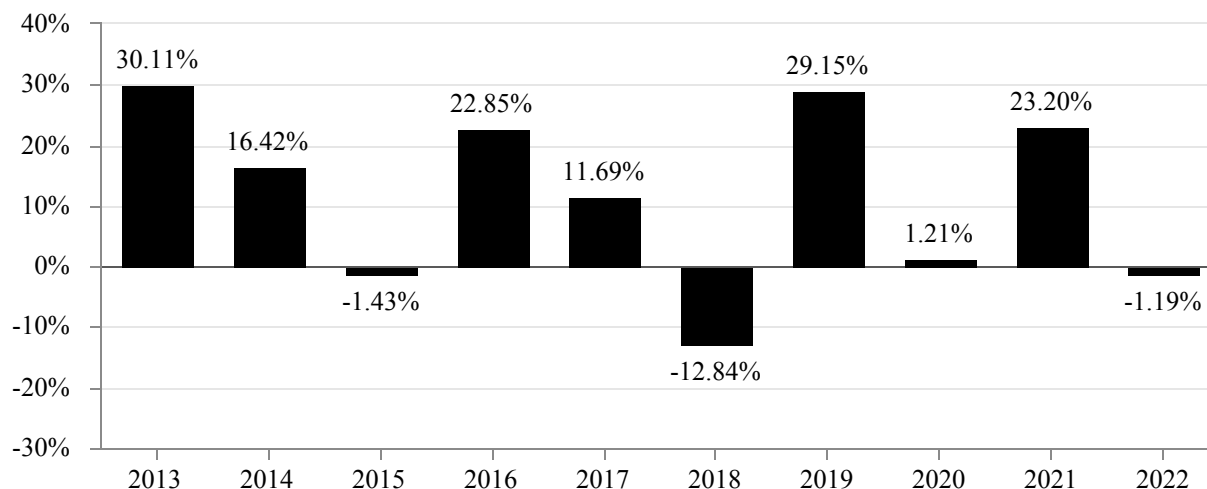
Loss of money is a risk of investing in the fund; at any given time your shares may be worth less than the price you paid for them. An investment in the fund is not a bank deposit, and it is not insured or guaranteed by the Federal Deposit Insurance Corporation (FDIC) or any other government agency.

- **Mid Cap Stocks Risk** – The medium-sized companies in which the fund invests may be more volatile and present greater risks than larger companies.
- **Style Risk** – If the market does not consider the individual stocks purchased by the fund to be undervalued, the value of the fund's shares may decline, even if stock prices generally are rising.
- **Foreign Securities Risk** – The fund may invest in foreign securities, which can be riskier than investing in U.S. securities. Securities of foreign issuers may be less liquid, more volatile and harder to value than U.S. securities.
- **IPO Risk** – The fund's performance may be affected by investments in initial public offerings.
- **Market Risk** – The value of the fund's shares will go up and down based on the performance of the companies whose securities it owns and other factors generally affecting the securities market. Market risks, including political, regulatory, economic and social developments, can affect the value of the fund's investments. Natural disasters, public health emergencies, war, terrorism and other unforeseeable events may lead to increased market volatility and may have adverse long-term effects on world economies and markets generally.
- **ESG Integration Risk** – When the portfolio managers consider ESG data in addition to fundamental financial metrics to help them make an investment decision for the fund, the fund may perform differently than funds for which ESG data is not considered. Additionally, despite their consideration of ESG data, the portfolio managers may nonetheless invest in companies with weak, or exclude companies with strong, ESG characteristics if they conclude that other attributes of an investment outweigh ESG considerations. ESG data used by the portfolio managers often lacks standardization, consistency, and transparency, and for certain companies such data may not be available, complete, or accurate.
- **Price Volatility Risk** – The value of the fund's shares may fluctuate significantly in the short term.
- **Redemption Risk** – The fund may need to sell securities at times it would not otherwise do so in order to meet shareholder redemption requests. Selling securities to meet such redemptions may cause the fund to experience a loss or increase the fund's transaction costs. To the extent that an insurance company has a large position in the fund, the fund may experience relatively large redemptions if such insurance company reallocates its assets.

Fund Performance

The following bar chart and table provide some indication of the risks of investing in the fund. The bar chart shows changes in the fund's performance from year to year for Class I shares. The table shows how the fund's average annual returns for the periods shown compared with those of a broad measure of market performance. Fees associated with your variable annuity or variable life insurance contract are not reflected in the chart or table below. Had they been included, returns presented below would have been lower. The fund's past performance is not necessarily an indication of how the fund will perform in the future.

Calendar Year Total Returns



Highest Performance Quarter (4Q 2020): 16.77%

Lowest Performance Quarter (1Q 2020): -27.73%

Average Annual Total Returns

For the calendar year ended December 31, 2022

| | 1 year | 5 years | 10 years |
|--|---------|---------|----------|
| Class I | -1.19% | 6.76% | 11.01% |
| Class II | -1.38% | 6.61% | 10.84% |
| Russell Midcap [®] Value Index (reflects no deduction for fees, expenses or taxes) | -12.03% | 5.72% | 10.10% |

Portfolio Management

Investment Advisor

American Century Investment Management, Inc.

Portfolio Managers

Kevin Toney, CFA, Chief Investment Officer - Global Value Equity, Senior Vice President and Senior Portfolio Manager, has been a member of the team that manages the fund since 2004.

Michael Liss, CFA, CPA, Vice President and Senior Portfolio Manager, has been a member of the team that manages the fund since 2004.

Brian Woglom, CFA, Vice President and Senior Portfolio Manager, has been a member of the team that manages the fund since 2005.

Nathan Rawlins, CFA, Portfolio Manager and Senior Investment Analyst, has been a member of the team that manages the fund since 2015.

Purchase and Sale of Fund Shares

The fund only offers shares through insurance company separate accounts. For instructions on how to purchase and redeem shares through your separate account, read the prospectus provided by your insurance company. Orders for fund shares will be priced at the net asset value next determined after the order is received in the form required by the agreement between the fund, its investment advisor and/or its distributor and the insurance company from which you have purchased your separate account. There are no sales commissions or redemption charges. However, certain sales or deferred sales charges and other charges may apply to the variable annuity or life insurance contracts. Those charges are disclosed in the separate account prospectus.

Tax Information

Consult the prospectus of your insurance company separate account for a discussion of the tax status of your variable contract.

Payments to Broker-Dealers and Other Financial Intermediaries

The fund is offered as an underlying investment option for variable annuity or life insurance contracts. The fund and its related companies pay the sponsoring insurance company and its related companies for distribution and other services. These payments may influence the insurance company to include the fund over another investment as an option in its products. Ask your salesperson or visit your insurance company's website for more information.

Objectives, Strategies and Risks

What are the fund's investment objectives?

The fund seeks long-term capital growth. Income is a secondary objective.

What are the fund's principal investment strategies?

Under normal market conditions, the portfolio managers will invest at least 80% of the fund's net assets in *equity securities* of medium size companies. The fund may change this 80% policy only upon 60 days' prior written notice to shareholders. The portfolio managers consider medium size companies to include those whose market capitalization at the time of purchase is within the capitalization range of the Russell 3000[®] Index, excluding the largest 100 such companies. The portfolio managers intend to manage the fund so that its weighted capitalization falls within the capitalization range of the members of the Russell Midcap[®] Index. Though market capitalization may change from time to time, as of February 28, 2023, the capitalization range of the Russell 3000[®] Index, excluding the largest 100 companies, and the Russell Midcap[®] Index, were approximately \$5.4 million to \$77.8 billion and \$394.4 million to \$56.5 billion, respectively.

Equity securities include common stock, preferred stock, and equity-equivalent securities, such as securities convertible into common stock, stock futures contracts or stock index futures contracts.

The portfolio managers look for stocks of companies that they believe are undervalued at the time of purchase. The managers use a value investment strategy that looks for companies that are temporarily out of favor in the market. The managers attempt to purchase the stocks of these undervalued companies and hold each stock until it has returned to favor in the market and the price has increased to, or is higher than a level the managers believe more accurately reflects the fair value of the company.

Companies may be undervalued due to market declines, poor economic conditions, actual or anticipated bad news regarding the issuer or its industry, or because they have been overlooked by the market. To identify these companies, the portfolio managers look for companies with earnings, cash flows and/or assets that may not accurately reflect the companies' value as determined by the portfolio managers. The managers also may consider whether the companies' securities have a favorable income-paying history and whether income payments are expected to continue or increase. The portfolio managers use a variety of analytical research tools and techniques to help them make decisions about buying or holding securities of companies that meet their investment criteria and selling the securities of companies that do not. In addition to fundamental financial metrics, the portfolio managers may also consider environmental, social, and/or governance (ESG) data. However, the portfolio managers may not consider ESG data with respect to every investment decision and, even when such data is considered, they may conclude that other attributes of an investment outweigh ESG considerations when making decisions for the fund.

The portfolio managers may sell stocks from the fund's portfolio if they believe:

- a stock no longer meets their valuation criteria;
- a stock's risk parameters outweigh its return opportunity;
- more attractive alternatives are identified; or
- specific events alter a stock's prospects.

When the managers believe it is prudent, the fund may invest a portion of its assets in foreign securities, debt securities of companies, debt obligations of governments and their agencies, and other similar securities.

In the event of adverse market, economic, political, or other conditions, the fund may take temporary defensive positions that are inconsistent with the fund's principal investment strategies. To the extent the fund assumes a defensive position, it may not achieve its investment objective.

A description of the policies and procedures with respect to the disclosure of the fund's portfolio securities is available in the statement of additional information.

What are the principal risks of investing in the fund?

Loss of money is a risk of investing in the fund; at any given time your shares may be worth less than the price you paid for them. An investment in the fund is not a bank deposit, and it is not insured or guaranteed by the Federal Deposit Insurance Corporation (FDIC) or any other government agency.

Mid cap stocks may involve greater risks because the value of securities of medium size, less well-known companies can be more volatile than that of relatively larger companies and can react differently to company, political, market and economic developments than the market as a whole and other types of stocks.

If the market does not consider the individual stocks purchased by the fund to be undervalued, the value of the fund's shares may not rise as high as other funds and may in fact decline, even if stock prices generally are increasing.

Market performance tends to be cyclical, and, in the various cycles, certain investment styles may fall in and out of favor. If the market is not favoring a fund's style, the fund's gains may not be as big as, or its losses may be bigger than, those of other equity funds using different investment styles.

Although the portfolio managers intend to invest the fund's assets primarily in U.S. securities, the fund may invest in securities of foreign companies. Foreign investment involves additional risks, including fluctuations in currency exchange rates, less stable political and economic structures, reduced availability of public information, and lack of uniform financial reporting and regulatory practices similar to those that apply in the United States. These factors make investing in foreign securities generally riskier than investing in U.S. securities. To the extent the fund invests in foreign securities, the overall risk of the fund could be affected.

The fund's performance also may be affected by investments in initial public offerings (IPOs). The impact of IPOs on a fund's performance depends on the strength of the IPO market and the size of the fund. IPOs may have less impact on the fund's performance as its assets grow.

The value of the fund's shares depends on the value of the stocks and other securities it owns. The value of the individual securities the fund owns will go up and down depending on the performance of the companies that issued them, general market and economic conditions and investor confidence. Market risks, including political, regulatory, economic and social developments, can affect the value of the fund's investments. Natural disasters, public health emergencies, war, terrorism and other unforeseeable events may lead to increased market volatility and may have adverse long-term effects on world economies and markets generally.

The value of the fund's shares may fluctuate significantly in the short term.

The fund may need to sell securities at times it would not otherwise do so in order to meet shareholder redemption requests. The fund could experience a loss when selling securities, particularly if the redemption requests are unusually large or frequent, occur in times of overall market turmoil or declining pricing for the securities sold or when the securities the fund wishes to sell are illiquid. Selling securities to meet such redemption requests also may increase transaction costs. To the extent that an insurance company has a large position in the fund, the fund may experience relatively large redemptions if such insurance company reallocates its assets. Although the advisor seeks to minimize the impact of such transactions where possible, the fund's performance may be adversely affected.

When the portfolio managers consider ESG data in addition to fundamental financial metrics to help them make an investment decision for the fund, the fund may perform differently than funds for which ESG data is not considered. Additionally, despite their consideration of ESG data, the portfolio managers may nonetheless invest in companies with weak, or exclude companies with strong, ESG characteristics if they conclude that other attributes of an investment outweigh ESG considerations. ESG data used by the portfolio managers often lacks standardization, consistency, and transparency, and for certain companies such data may not be available, complete, or accurate.

Management

Who manages the fund?

The Board of Directors, investment advisor and fund management team play key roles in the management of the fund.

The Board of Directors

The Board of Directors is responsible for overseeing the advisor's management and operations of the fund pursuant to the management agreement. In performing their duties, Board members receive detailed information about the fund and its advisor regularly throughout the year, and meet at least quarterly with management of the advisor to review reports about fund operations. The directors' role is to provide oversight and not to provide day-to-day management. More than three-fourths of the directors are independent of the fund's advisor. They are not employees, directors or officers of, and have no financial interest in, the advisor or any of its affiliated companies (other than as shareholders of American Century Investments funds), and they do not have any other affiliations, positions or relationships that would cause them to be considered "interested persons" under the Investment Company Act of 1940.

The Investment Advisor

The fund's investment advisor is American Century Investment Management, Inc. (the advisor). The advisor has been managing mutual funds since 1958 and is headquartered at 4500 Main Street, Kansas City, Missouri 64111.

The advisor is responsible for managing the investment portfolios of the fund and directing the purchase and sale of its investment securities. The advisor also arranges for transfer agency, custody and all other services necessary for the fund to operate.

For the services it provides to the fund, the advisor receives a unified management fee based on a percentage of the daily net assets of each class of shares of the fund. The management fee is calculated daily and paid monthly in arrears. Out of the fund's fee, the advisor pays all expenses of managing and operating that fund except brokerage expenses, taxes, interest, fees and expenses of the independent directors (including legal counsel fees), extraordinary expenses, and expenses incurred in connection with the provision of shareholder services and distribution services under a plan adopted pursuant to Rule 12b-1 under the Investment Company Act of 1940. The difference in unified management fees among the classes is a result of their separate arrangements for non-Rule 12b-1 shareholder services. It is not the result of any difference in advisory or custodial fees or other expenses related to the management of the fund's assets, which do not vary by class. The advisor may pay unaffiliated third parties who provide recordkeeping and administrative services that would otherwise be performed by an affiliate of the advisor.

*Management Fee Paid by the Fund to the Advisor
as a Percentage of Average Net Assets for the
Fiscal Year Ended December 31, 2022*

| | <i>Class I</i> | <i>Class II</i> |
|------------------|----------------|-----------------|
| VP Mid Cap Value | 0.79% | 0.69% |

A discussion regarding the basis for the Board's approval of the investment advisory agreement is available in the fund's semiannual report to shareholders dated June 30, 2022.

The Fund Management Team

The advisor uses teams of portfolio managers and analysts to manage funds. The teams meet regularly to review portfolio holdings and discuss purchase and sale activity. Team members buy and sell securities for a fund as they see fit, guided by the fund's investment objective and strategy. Ultimate responsibility for portfolio construction and strategy implementation, taking into account the team's analysis and insights, rests with the operational lead portfolio manager.

The portfolio managers on the investment team who are jointly and primarily responsible for the day-to-day management of the fund are identified below.

Kevin Toney (operational lead portfolio manager)

Mr. Toney, Chief Investment Officer - Global Value Equity, Senior Vice President and Senior Portfolio Manager, has been a member of the team that manages the fund since 2004. He joined American Century Investments in 1999 and became a portfolio manager in 2006. He has a bachelor's degree in commerce from the University of Virginia and an MBA from The Wharton School at the University of Pennsylvania. He is a CFA charterholder.

Michael Liss

Mr. Liss, Vice President and Senior Portfolio Manager, has been a member of the team that manages the fund since 2004. He joined American Century Investments in 1998 and became a portfolio manager in 2004. He has a bachelor's degree in accounting and finance from Albright College and an MBA in finance from Indiana University. He is a CFA charterholder and a CPA.

Brian Woglom

Mr. Woglom, Vice President and Senior Portfolio Manager, has been a member of the team that manages the fund since joining American Century Investments in 2005. He became a senior investment analyst in 2008 and a portfolio manager in 2012. He has a bachelor's degree from Amherst College and an MBA from the Ross School of Business, University of Michigan. He is a CFA charterholder.

Nathan Rawlins

Mr. Rawlins, Portfolio Manager and Senior Investment Analyst, has been a member of the team that manages the fund since joining American Century in 2015 as an investment analyst. He became a senior investment analyst in 2020 and a portfolio manager in 2022. He has a bachelor's degree from the University of Kansas and an MBA from the Kelley School of Business, Indiana University. He is a CFA charterholder.

The statement of additional information provides additional information about the accounts managed by the portfolio managers, the structure of their compensation and their ownership of fund securities.

Fund Performance

The fund has the same management team and investment policies as another fund in the American Century Investments family of funds, the Mid Cap Value Fund. The fees and expenses of the funds are similar, and they are managed with substantially the same investment objective and strategies. Notwithstanding these general similarities, VP Mid Cap Value Fund and the Mid Cap Value Fund are separate mutual funds that have different investment performance. Differences in cash flows into the two funds, the size of their portfolios and specific investments held by the two funds, as well as the additional expenses of the insurance product, cause performance to differ.

Please consult the separate account prospectus for a description of the insurance product through which the fund is offered and its associated fees.

Fundamental Investment Policies

Shareholders must approve any change to the fundamental investment policies contained in the statement of additional information, as well as any change to the investment objective of the fund. The Board of Directors and/or the advisor may change any other policies or investment strategies described in this prospectus or otherwise used in the operation of the fund at any time, subject to applicable notice provisions.

Fees and Expenses

The fees and expenses set forth herein are those of the fund only; for the fees and expenses associated with your variable annuity or variable life insurance contract, please consult your insurance product prospectus.

Because this fund is offered as an investment option under certain types of insurance contracts, the insurance company offering the fund performs recordkeeping and administrative services for fund shareholders that would otherwise be performed by American Century Investments' transfer agent. In some circumstances, the advisor will pay the insurance company a fee for performing those services. Also, the advisor or the fund's distributor may make payments to insurance companies for various additional services, other expenses and/or the insurance companies' distribution of the fund out of their profits or other available sources. Such payments may be made for one or more of the following: (1) distribution, which may include expenses incurred by insurance companies for their sales activities with respect to the fund, such as preparing, printing and distributing sales literature and advertising materials and compensating registered representatives or other employees of such insurance companies for their sales activities, as well as the opportunity for the fund to be made available by such insurance companies; (2) shareholder services, such as providing individual and custom investment advisory services to clients of the insurance companies; and (3) marketing and promotional services, including business planning assistance, educating personnel about the fund, and sponsorship of sales meetings, which may include covering costs of providing speakers, meals and other entertainment. The distributor may sponsor seminars and conferences designed to educate insurance companies about the fund and may cover the expenses associated with attendance at such meetings, including travel costs. These payments and activities are intended to provide an incentive to insurance companies to sell the fund by educating them about the fund and helping defray the costs associated with offering the fund. Ask your salesperson or visit your insurance company's website for more information. The amount of any payments described by this paragraph is determined by the advisor or the distributor, and all such amounts are paid out of the available assets of the advisor and distributor, and not by you or the fund. As a result, the total expense ratio of the fund will not be affected by any such payments.

Additional Policies Affecting Your Investment

Purchase and Redemption of Shares

The fund only offers shares through insurance company separate accounts. For instructions on how to purchase and redeem shares through your separate account, read the prospectus provided by your insurance company. Orders for fund shares will be priced at the net asset value next determined after the order is received in the form required by the agreement between the fund, its investment advisor and/or its distributor and the insurance company from which you have purchased your separate account. There are no sales commissions or redemption charges. However, certain sales or deferred sales charges and other charges may apply to the variable annuity or life insurance contracts. Those charges are disclosed in the separate account prospectus.

Under normal market conditions, the fund generally meets redemption requests through its holding of cash or cash equivalents or by selling portfolio securities. We reserve the right to pay part or all of the proceeds for certain large redemptions in readily marketable securities instead of cash. A description of the requirements for large redemptions is included in the statement of additional information. Additionally, the fund may consider interfund lending to meet redemption requests. The fund is more likely to use these other methods to meet large redemption requests or during times of market crisis.

Frequent Trading Practices

Frequent trading and other abusive trading practices may disrupt portfolio management strategies and harm fund performance. If the cumulative amount of frequent trading activity is significant relative to a fund's net assets, the fund may incur trading costs that are higher than necessary as securities are first purchased then quickly sold to meet the redemption request. In such case, the fund's performance could be negatively impacted by the increased trading costs created by frequent trading if the additional trading costs are significant.

Because of the potentially harmful effects of abusive trading practices, the fund's Board of Directors has approved American Century Investments' abusive trading policies and procedures, which are designed to reduce the frequency and effect of these activities in our funds. These policies and procedures include monitoring trading activity, imposing trading restrictions on certain accounts, and using fair value pricing when current market prices are not readily available. Although these efforts are designed to discourage abusive trading practices, they cannot eliminate the possibility that such activity will occur. American Century Investments seeks to exercise its judgment in implementing these tools to the best of its ability in a manner that it believes is consistent with shareholder interests.

We may deem the sale of all or a substantial portion of a shareholder's purchase of fund shares to be frequent trading if the sale is made:

- within seven days of the purchase; or
- within 30 days of the purchase, if it happens more than once per year.

The frequent trading limitations do not apply to the following types of transactions:

- purchases of shares through reinvested distributions (dividends and capital gains);
- redemption of shares to pay fund or account fees;
- transactions through automatic purchase or redemption plans.

In addition, American Century Investments reserves the right to accept purchases and exchanges in excess of the trading restrictions discussed above if it believes that such transactions would not be inconsistent with the best interests of fund shareholders or this policy.

American Century Investments' policies do not permit us to enter into arrangements with fund shareholders that permit such shareholders to engage in frequent purchases and redemptions of fund shares. Shares of the fund are not sold directly to the public, but rather to insurance company separate accounts for the purpose of offering the fund as an investment option under variable annuity or variable life insurance products. Purchases and redemptions of fund shares held in omnibus arrangements with insurance companies are aggregated and presented to the fund on a net basis, inherently making it more difficult for the fund to identify abusive trading practices or the shareholder who is effecting the transaction. American Century Investments monitors aggregate trades placed in insurance company separate accounts, and works with each insurance company to identify investors engaging in abusive trading practices and impose restrictions to discourage such practices. Pursuant to Rule 22c-2 under the Investment Company Act of 1940, American Century Investments and each insurance company that uses an American Century Variable Portfolios, Inc. or American Century Variable Portfolios II, Inc. fund as an underlying investment vehicle has entered into an information sharing agreement that obligates the insurance company to: (i) provide certain information regarding shareholder transactions to American Century Investments upon its request; and (ii) impose restrictions on shareholder transactions when instructed by American Century Investments. Because American Century Investments relies on each insurance company to provide information and impose restrictions, our ability to monitor and discourage abusive trading may be dependent on the insurance company's timely performance of such duties and restrictions may not be applied uniformly in all cases.

Small Distributions and Uncashed Distribution Checks

Generally, dividends and distributions cannot be paid by check for an amount less than \$50. Any such amount will be automatically reinvested in additional shares. The fund reserves the right to reinvest any dividend or distribution amount you elect to receive by check if your check is returned as undeliverable or if you do not cash your check within six months. Interest will not accrue on the amount of your uncashed check. We will reinvest your check into your account at the NAV on the day of reinvestment. When reinvested, those amounts are subject to the risk of loss like any other fund investment. We also reserve the right to change your election to receive dividends and distributions in cash after a check is returned undeliverable or uncashed for the six month period, and we may automatically reinvest all future dividends and distributions at the NAV on the date of the payment.

Canceling a Transaction

American Century Investments will use its best efforts to honor your request to revoke a transaction instruction if your revocation request is received prior to the close of trading on the New York Stock Exchange (NYSE) (generally 4 p.m. Eastern time) on the trade date of the transaction. Once processing has begun, or the NYSE has closed on the trade date, the transaction can no longer be canceled. Each fund reserves the right to suspend the offering of shares for a period of time and to reject any specific investment (including a purchase by exchange). Additionally, we may refuse a purchase if, in our judgment, it is of a size that would disrupt the management of a fund.

Right to Change Policies

We reserve the right to change any stated investment requirement, including those that relate to purchases, exchanges and redemptions. In accordance with applicable law, we also may alter, add or discontinue any service or privilege. Changes may affect all investors or only those in certain classes or groups. In addition, from time to time we may waive a policy on a case-by-case basis, as the advisor deems appropriate.

Share Price, Distributions and Taxes

Share Price

American Century Investments will price the fund shares you purchase, exchange or redeem based on the *net asset value* (NAV) next determined after your order is received in good order by the fund's transfer agent, or other financial intermediary with the authority to accept orders on the fund's behalf. We determine the NAV of each fund as of the close of regular trading (usually 4 p.m. Eastern time) on the New York Stock Exchange (NYSE) on each day the NYSE is open. On days when the NYSE is closed (including certain U.S. national holidays), we do not calculate the NAV.

The net asset value, or NAV, of each class of the fund is the current value of the class's assets minus any liabilities, divided by the number of shares of the class outstanding.

The value of the securities and other assets and liabilities held by the fund are determined by the advisor, as the valuation designee, pursuant to its valuation policies and procedures. The fund's Board of Directors oversees the valuation designee and at least annually reviews its valuation policies and procedures. Valuations are determined in accordance with applicable federal securities laws and accounting principles generally accepted in the United States.

Portfolio securities for which market quotations are readily available are valued at their market price. Equity securities (including exchange-traded funds) and other equity instruments for which market quotations are readily available are valued at the last reported official closing price or sale price as of the time the NAV is determined. If the fund invests in futures contracts, futures contracts are generally valued at the settlement price as provided by the exchange or clearing corporation. Portfolio securities primarily traded on foreign securities exchanges that are generally open later than the NYSE are valued at the last sale price reported at the time the NAV is determined.

If the valuation designee determines that the market price for a portfolio security is not readily available or is believed by the valuation designee to be unreliable, such security is valued at fair value as determined in good faith by the valuation designee, in accordance with its policies and procedures. Circumstances that may cause the fund to determine that market quotations are not available or reliable include, but are not limited to:

- when there is a significant event subsequent to the market quotation;
- trading in a security has been halted during the trading day; or
- trading in a security is insufficient or did not take place due to a closure or holiday.

If such circumstances occur, the valuation designee will fair value the security if the fair valuation would materially impact the fund's NAV. While fair value determinations involve judgments that are inherently subjective, these determinations are made in good faith in accordance with the valuation designee's valuation policies and procedures.

The effect of using fair value determinations is that the fund's NAV will be based, to some degree, on security valuations that the valuation designee reasonably believes are fair rather than being solely determined by the market.

Model-derived fair value factors may be applied to adjust the market quotation of certain foreign equity securities whose last closing price was before the time the NAV is determined. These factors are based on observable market data and are generally provided by an independent pricing service. Such factors are designed to estimate the price of the foreign equity security that would have prevailed at the time the NAV is determined.

Equity securities with no current day last sale or official close price may be priced at the mean of the bid and ask market quotations obtained from a listing exchange or an independent broker who is an established market maker in the security. The valuation designee may use third party pricing services to assist in the determination of fair value.

With respect to any portion of the fund's assets that are invested in other mutual funds, the fund's NAV will be calculated based upon the NAVs of such mutual funds. These mutual funds are required by law to explain the circumstances under which they will use fair value pricing and the effects of using fair value pricing in their prospectuses.

The value of any security or other asset denominated in a currency other than U.S. dollars is converted to U.S. dollars at the prevailing foreign exchange rate at the time the fund's NAV is determined. Trading of securities in foreign markets may not take place every day the NYSE is open. Also, trading in some foreign markets and on some electronic trading networks may take place on weekends or holidays when the fund's NAV is not calculated. So, the value of the fund's portfolio may be affected on days when you will not be able to purchase, exchange or redeem fund shares.

Distributions

Federal tax laws require the fund to make distributions to its shareholders in order to qualify as a regulated investment company. Qualification as a regulated investment company means the fund should not be subject to state or federal income tax on amounts distributed. The distributions generally consist of dividends and interest received by the fund, as well as *capital gains* realized by the fund on the sale of its investment securities. The fund generally expects to pay distributions of substantially all of its income, if any, quarterly. Distributions from realized capital gains, if any, are paid once a year in March. The fund may make more frequent distributions, if necessary, to comply with Internal Revenue Code provisions.

Capital gains are increases in the values of capital assets, such as stocks or bonds, from the time the assets are purchased.

You will participate in fund distributions, when they are declared, starting on the next business day after your purchase is effective. For example, if you purchase shares on a day that a distribution is declared, you will not receive that distribution. If you redeem shares, you will receive any distribution declared on the day you redeem. If you redeem all shares, we will include any distributions received with your redemption proceeds.

Provided that all shareholders agree, the fund may utilize the consent dividend provision of Internal Revenue Code Section 565 which treats the income earned by the fund as distributed to the shareholders as of the end of the taxable year.

Taxes

Consult the prospectus of your insurance company separate account for a discussion of the tax status of your variable contract.

Multiple Class Information

The fund offers multiple classes of shares. All classes are offered exclusively to insurance companies to fund their obligations under the variable annuity and variable life contracts purchased by their clients.

Class I and Class II shares have different fees and expenses. Different fees and expenses will affect performance.

Except as described below, all classes of shares of the fund have identical voting, dividend, liquidation and other rights, preferences, terms and conditions. The only differences between the classes are (a) each class may be subject to different expenses specific to that class; (b) each class has a different identifying designation or name; (c) each class has exclusive voting rights with respect to matters solely affecting that class; and (d) each class may have different exchange privileges.

Rule 12b-1 Fees

Investment Company Act Rule 12b-1 permits mutual funds that adopt a written plan to pay certain expenses associated with the distribution of their shares out of fund assets. The fund's Class II shares have a 12b-1 plan. Under the plan, the fund's Class II pays the distributor an annual fee of 0.25% of Class II average net assets for distribution services, including past distribution services. The distributor pays all or a portion of such fees to the insurance companies that make Class II shares available. Because these fees are used to pay for services that are not related to prospective sales of the fund, the class will continue to make payments under its plan even if it is closed to new investors. Because these fees are paid out of the fund's assets on an ongoing basis, over time these fees will increase the cost of your investment and may cost you more than paying other types of sales charges. For additional information about the plan and its terms, see *Multiple Class Structure* in the statement of additional information.

Financial Highlights

Understanding the Financial Highlights

The following financial information does not include fees and expenses associated with your variable annuity or variable life insurance contract. Had they been included, the performance shown would have been lower.

The table on the next page itemizes what contributed to the changes in share price during the most recently ended fiscal year. It also shows the changes in share price for this period in comparison to changes over the last five fiscal years.

On a per-share basis, the table includes as appropriate

- share price at the beginning of the period
- investment income and capital gains or losses
- distributions of income and capital gains paid to investors
- share price at the end of the period

The table also includes some key statistics for the period as appropriate

- **Total Return** – the overall percentage of return of the fund, assuming the reinvestment of all distributions
- **Expense Ratio** – the operating expenses of the fund as a percentage of average net assets
- **Net Income Ratio** – the net investment income of the fund as a percentage of average net assets
- **Portfolio Turnover** – the percentage of the fund's investment portfolio that is replaced during the period

The Financial Highlights that follow have been audited by Deloitte & Touche LLP. Their Report of Independent Registered Public Accounting Firm and the financial statements and financial highlights are included in the fund's annual report, which is available upon request.

VP Mid Cap Value Fund

For a Share Outstanding Throughout the Years Ended December 31 (except as noted)

| Per-Share Data | | | | | | | | Ratios and Supplemental Data | | | | | | | |
|--------------------------------------|---|---|----------------------------------|-----------------------|--------------------|---------------------|--------------------------------|---------------------------------|--------------------|--|------------------------------|--|-------------------------|--|-----------|
| Income From Investment Operations: | | | | Distributions From: | | | | Ratio to Average Net Assets of: | | | | | | | |
| Net Asset Value, Beginning of Period | Net Investment Income (Loss) ⁽¹⁾ | Net Realized and Unrealized Gain (Loss) | Total From Investment Operations | Net Investment Income | Net Realized Gains | Total Distributions | Net Asset Value, End of Period | Total Return ⁽²⁾ | Operating Expenses | Operating Expenses (before expense waiver) | Net Investment Income (Loss) | Net Investment Income (Loss) (before expense waiver) | Portfolio Turnover Rate | Net Assets, End of Period (in thousands) | |
| Class I | | | | | | | | | | | | | | | |
| 2022 | \$25.03 | 0.42 | (0.57) | (0.15) | (0.50) | (3.23) | (3.73) | \$21.15 | (1.19)% | 0.80% | 0.86% | 1.92% | 1.86% | 74% | \$172,440 |
| 2021 | \$20.55 | 0.34 | 4.41 | 4.75 | (0.27) | — | (0.27) | \$25.03 | 23.20% | 0.80% | 0.94% | 1.47% | 1.33% | 53% | \$182,236 |
| 2020 | \$20.68 | 0.30 | (0.10) | 0.20 | (0.33) | — | (0.33) | \$20.55 | 1.21% | 0.85% | 1.00% | 1.69% | 1.54% | 72% | \$158,968 |
| 2019 | \$18.31 | 0.35 | 4.62 | 4.97 | (0.41) | (2.19) | (2.60) | \$20.68 | 29.15% | 0.85% | 1.00% | 1.66% | 1.51% | 41% | \$173,105 |
| 2018 | \$22.75 | 0.29 | (3.04) | (2.75) | (0.31) | (1.38) | (1.69) | \$18.31 | (12.84)% | 0.84% | 1.00% | 1.31% | 1.15% | 72% | \$424,234 |
| Class II | | | | | | | | | | | | | | | |
| 2022 | \$25.05 | 0.39 | (0.57) | (0.18) | (0.47) | (3.23) | (3.70) | \$21.17 | (1.38)% | 0.95% | 1.01% | 1.77% | 1.71% | 74% | \$507,485 |
| 2021 | \$20.57 | 0.31 | 4.41 | 4.72 | (0.24) | — | (0.24) | \$25.05 | 23.02% | 0.95% | 1.09% | 1.32% | 1.18% | 53% | \$541,594 |
| 2020 | \$20.70 | 0.28 | (0.10) | 0.18 | (0.31) | — | (0.31) | \$20.57 | 1.11% | 1.00% | 1.15% | 1.54% | 1.39% | 72% | \$465,890 |
| 2019 | \$18.32 | 0.30 | 4.65 | 4.95 | (0.38) | (2.19) | (2.57) | \$20.70 | 28.99% | 1.00% | 1.15% | 1.51% | 1.36% | 41% | \$497,924 |
| 2018 | \$22.76 | 0.24 | (3.03) | (2.79) | (0.27) | (1.38) | (1.65) | \$18.32 | (12.96)% | 0.99% | 1.15% | 1.16% | 1.00% | 72% | \$424,219 |

Notes to Financial Highlights

- (1) Computed using average shares outstanding throughout the period.
- (2) Total returns are calculated based on the net asset value of the last business day. Total returns for periods less than one year are not annualized. The total returns presented do not include the fees and charges assessed with investments in variable insurance products, those charges are disclosed in the separate account prospectus. The inclusion of such fees and charges would lower total return.

Notes

Notes

Where to Find More Information

Annual and Semiannual Reports

Additional information about the fund's investments is available in the fund's annual and semiannual reports to shareholders. In the fund's annual report, you will find a discussion of the market conditions and investment strategies that significantly affected the fund's performance during its last fiscal year. This prospectus incorporates by reference the Report of Independent Registered Public Accounting Firm and the financial statements included in the fund's annual report to shareholders, dated December 31, 2022.

Statement of Additional Information (SAI)

The SAI contains a more detailed legal description of the fund's operations, investment restrictions, policies and practices. The SAI is incorporated by reference into this prospectus. This means that it is legally part of this prospectus, even if you don't request a copy.

You may obtain a free copy of the SAI, annual reports and semiannual reports by contacting American Century Investments at the address or telephone numbers listed below, or online at americancentury.com/vpdocs. You may also ask questions about the fund or your accounts by contacting the insurance company through which you purchased the fund.

The Securities and Exchange Commission (SEC)

Reports and other information about the fund are available on the EDGAR database on the SEC's website at sec.gov, and copies of this information may be obtained, after paying a duplicating fee, by electronic request at the following email address: publicinfo@sec.gov.

This prospectus shall not constitute an offer to sell securities of the fund in any state, territory, or other jurisdiction where the fund's shares have not been registered or qualified for sale, unless such registration or qualification is not required, or under any circumstances in which such offer or solicitation would be unlawful.

American Century Investments

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