



American Century Investments[®] VP Mid Cap Value Fund

Class I: AVIPX
Class II: AVMTX

Before you invest, you may want to review the fund's prospectus, which contains more information about the fund and its risks. You can find the fund's prospectus and other information about the fund online at the web addresses listed below. You can also get this information at no cost by calling or sending an email request. The fund's prospectus and other information are also available from insurance companies through which shares of the fund may be purchased or sold.

Retail Investors

americencentury.com/funds/vp_fund_reports.jsp
1-800-378-9878 or 816-531-5575
prospectus@americacentury.com

Financial Professionals

americacentury.com/ipro/funds/fund_reports_vp.jsp
1-800-345-6488
advisor_prospectus@americacentury.com

This summary prospectus incorporates by reference the fund's prospectus and statement of additional information (SAI), each dated May 1, 2017 (as supplemented at the time you receive this summary prospectus), as well as the Report of Independent Registered Public Accounting Firm and the financial statements included in the fund's annual report to shareholders, dated December 31, 2016. The fund's SAI and annual report may be obtained, free of charge, in the same manner as the prospectus.

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 | 1.00% | 0.90% |
| Distribution and Service (12b-1) Fees | None | 0.25% |
| Other Expenses | 0.00% | 0.00% |
| Acquired Fund Fees and Expenses | 0.01% | 0.01% |
| Total Annual Fund Operating Expenses | 1.01% | 1.16% |
| Fee Waiver ¹ | 0.14% | 0.14% |
| Total Annual Fund Operating Expenses After Waiver | 0.87% | 1.02% |

¹ The advisor has agreed to waive 0.14 percentage points of the fund's management fee. The advisor expects this waiver to continue until April 30, 2018 and cannot terminate it prior to such date without the approval of the Board of Directors.

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 | \$89 | \$308 | \$545 | \$1,224 |
| Class II | \$104 | \$355 | \$626 | \$1,396 |

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 49% 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, 2017, the capitalization range of the Russell 3000[®] Index, excluding the largest 100 companies, and the Russell Midcap[®] Index, were approximately \$7.9 million to \$62.6 billion and \$91.9 million to \$59.4 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 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

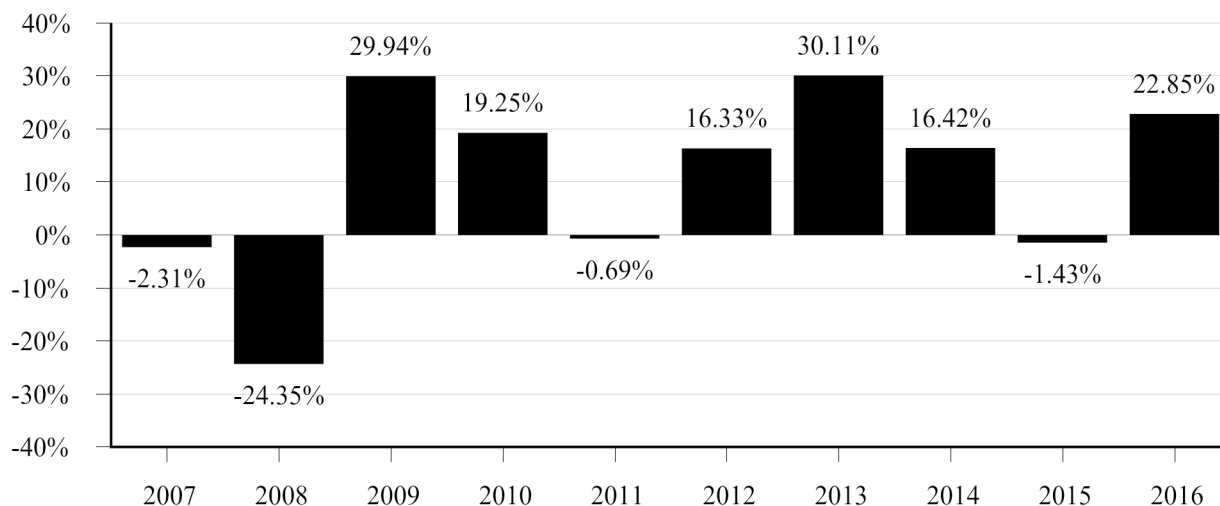
- **Mid Cap Stocks** – The medium-sized companies in which the fund invests may be more volatile and present greater risks than larger companies.
- **Style Risk** – If the market does not consider the individual stocks purchased by the fund to be undervalued, the value of the fund’s shares may decline, even if stock prices generally are rising.
- **Foreign Securities** – 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.
- **Price Volatility** – 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.
- **Principal Loss** – At any given time your shares may be worth less than the price you paid for them. In other words, it is possible to lose money by investing in the fund.

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.

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 (3Q 2009): 17.43%

Lowest Performance Quarter (4Q 2008): -18.91%

Average Annual Total Returns

For the calendar year ended December 31, 2016

| | 1 year | 5 years | 10 years |
|--|--------|---------|----------|
| Class I | 22.85% | 16.35% | 9.26% |
| Class II | 22.72% | 16.19% | 9.10% |
| Russell Midcap® Value Index (reflects no deduction for fees, expenses or taxes) | 20.00% | 15.69% | 7.58% |

Portfolio Management

Investment Advisor

American Century Investment Management, Inc.

Portfolio Managers

Phillip N. Davidson, CFA, Chief Investment Officer - 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.

Kevin Toney, CFA, Senior 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 Portfolio Manager, has been a member of the team that manages the fund since 2005.

Purchase and Sale of Fund Shares

The fund is closed to new investors as of November 1, 2013. 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.