

SUMMARY PROSPECTUS

April 30, 2021

Share Class: Administrative Class

As permitted by regulations adopted by the Securities and Exchange Commission, you may not be receiving paper copies of the Portfolio's shareholder reports from the insurance company that offers your contract unless you specifically request paper copies from the insurance company or from your financial intermediary. Instead, the shareholder reports will be made available on a website, and the insurance company 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.

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 insurance company electronically by following the instructions provided by the insurance company.

You may elect to receive all future reports in paper free of charge from the insurance company. You should contact the insurance company if you wish to continue receiving paper copies of your shareholder reports. Your election to receive reports in paper will apply to all portfolio companies available under your contract at the insurance company.

Before you invest, you may want to review the Portfolio's prospectus, which, as supplemented, 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 <http://www.pimco.com/pvit>. You can also get this information at no cost by calling 1.800.927.4648 or by sending an email request to piprocess@dstsystems.com. The Portfolio's prospectus and Statement of Additional Information, both dated April 30, 2021, as supplemented, are incorporated by reference into this Summary Prospectus.

Investment Objective

The Portfolio seeks maximum total return, consistent with preservation of capital and prudent investment management.

Fees and Expenses of the Portfolio

This table describes the fees and expenses that you may pay if you buy, hold and sell Administrative Class shares of the Portfolio. You may pay other fees, such as commissions and other fees to financial intermediaries, which are not reflected in the table and example below. Overall fees and expenses of investing in the Portfolio are higher than shown because the table does not reflect variable contract fees and expenses.

Shareholder Fees (fees paid directly from your investment): N/A

Annual Portfolio Operating Expenses (expenses that you pay each year as a percentage of the value of your investment):

	Administrative Class
Management Fees	0.475%
Distribution and/or Service (12b-1) Fees	0.15%
Other Expenses ⁽¹⁾	0.22%
Total Annual Portfolio Operating Expenses	0.845%

¹ "Other Expenses" include interest expense of 0.22%. Interest expense is borne by the Portfolio separately from the management fees paid to Pacific Investment Management Company LLC ("PIMCO"). Excluding interest expense, Total Annual Portfolio Operating Expenses are 0.625% for Administrative Class shares.

Example. The Example is intended to help you compare the cost of investing in Administrative Class shares of the Portfolio with the costs of investing in other mutual funds. The Example assumes that you invest \$10,000 for the time periods indicated, and then redeem all your shares at the end of those periods. 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, the Example shows what your costs would be based on these assumptions. The Example does not reflect fees and expenses of any variable annuity contract or variable life insurance policy, and would be higher if it did.

	1 Year	3 Years	5 Years	10 Years
Administrative Class	\$86	\$270	\$469	\$1,043

Portfolio Turnover

The Portfolio pays transaction costs 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 the Annual Portfolio Operating Expenses or in the Example table, affect the Portfolio's performance. During the most recent fiscal year, the Portfolio's portfolio turnover rate was 251% of the average value of its portfolio.

Principal Investment Strategies

The Portfolio seeks to achieve its investment objective by investing under normal circumstances at least 80% of its assets in a diversified portfolio of fixed income securities that are issued or guaranteed by the U.S. Government, its agencies or government-sponsored enterprises ("U.S. Government Securities"), which may be represented by forwards or derivatives such as options, futures contracts or swap agreements. Assets not invested in U.S. Government Securities may be invested in other types of Fixed Income Instruments. "Fixed Income Instruments" include bonds, debt securities and other similar instruments issued by various U.S. and non-U.S. public- or private-sector entities. While PIMCO may invest in derivatives at any time it deems appropriate, it will generally do so when it believes that U.S. Government Securities are overvalued relative to derivative instruments. This Portfolio will normally have a minimum average portfolio duration of eight years. Duration is a measure used to determine the sensitivity of a security's price to changes in interest rates. The longer a security's duration, the more sensitive it will be to changes in interest rates. In addition, the dollar-weighted average portfolio maturity of the Portfolio, under normal circumstances, is expected to be more than ten years.

The Portfolio's investments in Fixed Income Instruments are limited to those of investment grade U.S. dollar-denominated securities of U.S. issuers that are rated at least A by Moody's Investors Service, Inc. ("Moody's"), or equivalently rated by Standard & Poor's Ratings Services ("S&P"), or Fitch, Inc. ("Fitch"), or, if unrated, determined by PIMCO to be of comparable quality. In addition, the Portfolio may only invest up to 10% of its total assets in securities rated A by Moody's, or equivalently rated by S&P or Fitch, or, if unrated, determined by PIMCO to be of

PIMCO Long-Term U.S. Government Portfolio

comparable quality and may only invest up to 25% of its total assets in securities rated Aa by Moody's, or equivalently rated by S&P or Fitch or, if unrated, determined by PIMCO to be of comparable quality.

The Portfolio may invest, without limitation, in derivative instruments, such as options, futures contracts or swap agreements, or in mortgage- or asset-backed securities, subject to applicable law and any other restrictions described in the Portfolio's prospectus or Statement of Additional Information. The Portfolio may purchase or sell securities on a when-issued, delayed delivery or forward commitment basis and may engage in short sales. The Portfolio may, without limitation, seek to obtain market exposure to the securities in which it primarily invests by entering into a series of purchase and sale contracts or by using other investment techniques (such as buy backs or dollar rolls). The "total return" sought by the Portfolio consists of income earned on the Portfolio's investments, plus capital appreciation, if any, which generally arises from decreases in interest rates or improving credit fundamentals for a particular sector or security. The Portfolio may also invest up to 10% of its total assets in preferred securities.

Principal Risks

It is possible to lose money on an investment in the Portfolio. The principal risks of investing in the Portfolio, which could adversely affect its net asset value, yield and total return, are listed below.

Interest Rate Risk: the risk that fixed income securities will decline in value because of an increase in interest rates; a portfolio with a longer average portfolio duration will be more sensitive to changes in interest rates than a portfolio with a shorter average portfolio duration

Call Risk: the risk that an issuer may exercise its right to redeem a fixed income security earlier than expected (a call). Issuers may call outstanding securities prior to their maturity for a number of reasons (e.g., declining interest rates, changes in credit spreads and improvements in the issuer's credit quality). If an issuer calls a security that the Portfolio has invested in, the Portfolio may not recoup the full amount of its initial investment and may be forced to reinvest in lower-yielding securities, securities with greater credit risks or securities with other, less favorable features

Credit Risk: the risk that the Portfolio could lose money if the issuer or guarantor of a fixed income security, or the counterparty to a derivative contract, is unable or unwilling, or is perceived (whether by market participants, rating agencies, pricing services or otherwise) as unable or unwilling, to meet its financial obligations

Market Risk: the risk that the value of securities owned by the Portfolio may go up or down, sometimes rapidly or unpredictably, due to factors affecting securities markets generally or particular industries

Issuer Risk: the risk that the value of a security may decline for a reason directly related to the issuer, such as management performance, financial leverage and reduced demand for the issuer's goods or services

Derivatives Risk: the risk of investing in derivative instruments (such as futures, swaps and structured securities), including leverage, liquidity, interest rate, market, credit and management risks, and valuation

complexity. Changes in the value of a derivative may not correlate perfectly with, and may be more sensitive to market events than, the underlying asset, rate or index, and the Portfolio could lose more than the initial amount invested. The Portfolio's use of derivatives may result in losses to the Portfolio, a reduction in the Portfolio's returns and/or increased volatility. Over-the-counter ("OTC") derivatives are also subject to the risk that a counterparty to the transaction will not fulfill its contractual obligations to the other party, as many of the protections afforded to centrally-cleared derivative transactions might not be available for OTC derivatives. The primary credit risk on derivatives that are exchange-traded or traded through a central clearing counterparty resides with the Portfolio's clearing broker or the clearinghouse. Changes in regulation relating to a mutual fund's use of derivatives and related instruments could potentially limit or impact the Portfolio's ability to invest in derivatives, limit the Portfolio's ability to employ certain strategies that use derivatives and/or adversely affect the value of derivatives and the Portfolio's performance

Equity Risk: the risk that the value of equity securities, such as common stocks and preferred securities, may decline due to general market conditions which are not specifically related to a particular company or to factors affecting a particular industry or industries. Equity securities generally have greater price volatility than fixed income securities

Mortgage-Related and Other Asset-Backed Securities Risk: the risks of investing in mortgage-related and other asset-backed securities, including interest rate risk, extension risk, prepayment risk and credit risk

Leveraging Risk: the risk that certain transactions of the Portfolio, such as reverse repurchase agreements, loans of portfolio securities, and the use of when-issued, delayed delivery or forward commitment transactions, or derivative instruments, may give rise to leverage, magnifying gains and losses and causing the Portfolio to be more volatile than if it had not been leveraged. This means that leverage entails a heightened risk of loss

Management Risk: the risk that the investment techniques and risk analyses applied by PIMCO will not produce the desired results and that actual or potential conflicts of interest, legislative, regulatory, or tax restrictions, policies or developments may affect the investment techniques available to PIMCO and the individual portfolio manager in connection with managing the Portfolio and may cause PIMCO to restrict or prohibit participation in certain investments. There is no guarantee that the investment objective of the Portfolio will be achieved

Short Exposure Risk: the risk of entering into short sales, including the potential loss of more money than the actual cost of the investment, and the risk that the third party to the short sale will not fulfill its contractual obligations, causing a loss to the Portfolio

Please see "Description of Principal Risks" in the Portfolio's prospectus for a more detailed description of the risks of investing in the Portfolio. An investment in the Portfolio is not a deposit of a bank and is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency.

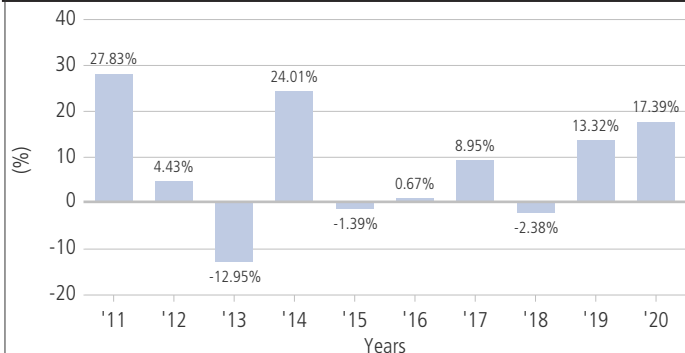
Performance Information

The performance information shows summary performance information for the Portfolio in a bar chart and an Average Annual Total Returns table. The information provides some indication of the risks of investing in the Portfolio by showing changes in its performance from year to year and by showing how the Portfolio's average annual returns compare with the returns of a broad-based securities market index. The Portfolio's performance information reflects applicable fee waivers and/or expense limitations in effect during the periods presented. Absent such fee waivers and/or expense limitations, if any, performance would have been lower. Performance shown does not reflect any charges or expenses imposed by an insurance company, and, if it did, performance shown would be lower. The bar chart and the table show performance of the Portfolio's Administrative Class shares. *The Portfolio's past performance is not necessarily an indication of how the Portfolio will perform in the future.*

The Bloomberg Barclays Long-Term Treasury Index consists of U.S. Treasury issues with maturities of 10 or more years.

Performance for the Portfolio is updated daily and monthly and may be obtained as follows: daily updates on the net asset value may be obtained by calling 1-888-87-PIMCO and monthly performance may be obtained at www.pimco.com/pvit.

Calendar Year Total Returns — Administrative Class



Best Quarter	September 30, 2011	22.46%
Worst Quarter	December 31, 2016	-12.17%

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

	1 Year	5 Years	10 Years
Administrative Class Return	17.39%	7.33%	7.31%
Bloomberg Barclays Long-Term Treasury Index (reflects no deductions for fees, expenses or taxes)	17.70%	7.85%	7.80%

Investment Adviser/Portfolio Manager



PIMCO serves as the investment adviser for the Portfolio. The Portfolio's portfolio is jointly and primarily managed by Mike Cudzil and Steve Rodosky. Messrs. Cudzil and Rodosky are Managing Directors of PIMCO. Mr. Cudzil has managed the Portfolio since February 2016. Mr. Rodosky has managed the Portfolio since July 2007.

Purchase and Sale of Portfolio Shares

Shares of the Portfolio currently are sold to segregated asset accounts ("Separate Accounts") of insurance companies that fund variable annuity contracts and variable life insurance policies ("Variable Contracts") and other funds that serve as underlying investment options for Variable Contracts (i.e., variable insurance funds). Investors do not deal directly with the Portfolio to purchase and redeem shares. Please refer to the prospectus for the Separate Account for information on the allocation of premiums and on transfers of accumulated value among sub-accounts of the Separate Account.

Tax Information

The shareholders of the Portfolio are the insurance companies offering the variable products or other variable insurance funds. Please refer to the prospectus for the Separate Account and the Variable Contract for information regarding the federal income tax treatment of distributions to the Separate Account.

Payments to Insurance Companies and Other Financial Intermediaries

The Portfolio and/or its related companies (including PIMCO) may pay the insurance company and other intermediaries for the sale of the Portfolio and/or other services. These payments may create a conflict of interest by influencing the insurance company or intermediary and your salesperson to recommend a Variable Contract and the Portfolio over another investment. Ask your insurance company or salesperson or visit your financial intermediary's Web site for more information.

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