MainStay VP MacKay High Yield Corporate Bond Portfolio

Investment Objective
The Portfolio seeks maximum current income through investment in a diversified portfolio of high-yield debt securities. Capital appreciation is a secondary objective.

Fees and Expenses of the Portfolio
The table below describes the fees and expenses that you may pay if you buy and hold shares of the Portfolio. The table does not include any separate account or policy fees or charges imposed under the variable annuity policies and variable universal life insurance policies for which the Portfolio is an investment option. If they were included, your costs would be higher. Investors should consult the applicable variable annuity policy or variable universal life insurance policy prospectus for more information.

<table>
<thead>
<tr>
<th>Annual Portfolio Operating Expenses</th>
<th>Initial Class</th>
<th>Service Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management Fees (as an annual percentage of the Portfolio’s average daily net assets)</td>
<td>0.56%</td>
<td>0.56%</td>
</tr>
<tr>
<td>Distribution and Service (12b-1) Fees</td>
<td>None</td>
<td>0.25%</td>
</tr>
<tr>
<td>Other Expenses</td>
<td>0.03%</td>
<td>0.03%</td>
</tr>
<tr>
<td><strong>Total Annual Portfolio Operating Expenses</strong></td>
<td><strong>0.59%</strong></td>
<td><strong>0.84%</strong></td>
</tr>
</tbody>
</table>

1. The management fee is as follows: 0.57% on assets up to $1 billion; 0.55% on assets from $1 billion to $5 billion; and 0.525% on assets over $5 billion.

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 does not include any separate account or policy fees or charges imposed under the variable annuity policies and variable universal life insurance policies for which the Portfolio is an investment option. If they were included, your costs would be higher. The Example assumes that you invest $10,000 in the Portfolio for the time periods indicated whether or not you redeem all of 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. The Example reflects the contractual fee waiver and/or expense reimbursement arrangement, if applicable, for the current duration of the arrangement only. Although your actual costs may be higher or lower, based on these assumptions your costs would be:

<table>
<thead>
<tr>
<th></th>
<th>1 Year</th>
<th>3 Years</th>
<th>5 Years</th>
<th>10 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Class</td>
<td>$ 60</td>
<td>$ 189</td>
<td>$ 329</td>
<td>$ 738</td>
</tr>
<tr>
<td>Service Class</td>
<td>$ 86</td>
<td>$ 268</td>
<td>$ 466</td>
<td>$ 1,037</td>
</tr>
</tbody>
</table>

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 Portfolio operating expenses or in the Example, affect the Portfolio’s performance. During the most recent fiscal year, the Portfolio’s portfolio turnover rate was 28% of the average value of its portfolio.

Principal Investment Strategies
The Portfolio, under normal circumstances, invests at least 80% of its assets (net assets plus any borrowings for investment purposes) in high-yield corporate debt securities, including all types of high-yield domestic and foreign corporate debt securities that are rated below investment grade by a nationally recognized statistical rating organization (“NRSRO”) or that are unrated but are considered to be of comparable quality by MacKay Shields LLC, the Portfolio’s Subadvisor.
Securities that are rated below investment grade by NRSROs (such as securities rated lower than BBB- and Baa3) are commonly referred to as “high-yield securities” or “junk bonds.” If NRSROs assign different ratings to the same security, the Portfolio will use the higher rating for purposes of determining the security’s credit quality.

The Portfolio’s high-yield investments may also include convertible corporate securities, loans and loan participation interests. The Portfolio may invest up to 20% of its net assets in common stocks and other equity-related securities.

The Portfolio may hold cash or invest in short-term instruments during times when the Subadvisor is unable to identify attractive high-yield securities.

The Portfolio may invest in derivatives, such as futures, options and swap agreements to seek enhanced returns or to reduce the risk of loss by hedging certain of its holdings.

In times of unusual or adverse market, economic or political conditions, the Portfolio may invest without limit in investment grade securities and may invest in U.S. government securities or other high quality money market instruments. Periods of unusual or adverse market, economic or political conditions may exist in some cases, for up to a year or longer. To the extent the Portfolio is invested in cash, investment grade debt or other high quality instruments, the yield on these investments tends to be lower than the yield on other investments normally purchased by the Portfolio. Although investing heavily in these investments may help to preserve the Portfolio’s assets, it may not be consistent with the Portfolio’s primary investment objective and may limit the Portfolio’s ability to achieve a high level of income.

Investment Process: The Subadvisor seeks to identify investment opportunities by analyzing individual companies and evaluating each company’s competitive position, financial condition, and business prospects. The Portfolio invests in companies in which the Subadvisor has judged that there is sufficient asset coverage—that is, the Subadvisor’s subjective appraisal of a company’s value compared to the value of its debt, with the intent of maximizing risk-adjusted income and returns.

The Subadvisor may sell a security if it believes the security will no longer contribute to meeting the investment objectives of the Portfolio. In considering whether to sell a security, the Subadvisor may evaluate, among other things, the price of the security and meaningful changes in the issuer’s financial condition and competitiveness.

Principal Risks

You can lose money by investing in the Portfolio. 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 governmental agency. The investments selected by the Subadvisor may underperform the market in which the Portfolio invests or other investments. The Portfolio may receive large purchase or redemption orders which may have adverse effects on performance if the Portfolio were required to sell securities, invest cash or hold a relatively large amount of cash at times when it would not otherwise do so.

The principal risks of investing in the Portfolio are summarized below.

Market Risk: The value of the Portfolio’s investments may fluctuate because of changes in the markets in which the Portfolio invests, which could cause the Portfolio to underperform other funds with similar investment objectives and strategies. Such changes may be rapid and unpredictable. From time to time, markets may experience periods of stress for potentially prolonged periods that may result in: (i) increased market volatility; (ii) reduced market liquidity; and (iii) increased redemptions of Portfolio shares. Such conditions may add significantly to the risk of volatility in the net asset value of the Portfolio’s shares.

Portfolio Management Risk: The investment strategies, practices and risk analyses used by the Subadvisor may not produce the desired results. In addition, the Portfolio may not achieve its investment objective, including during periods in which the Subadvisor takes temporary positions in response to unusual or adverse market, economic or political conditions, or other unusual or abnormal circumstances.

Yield Risk: There can be no guarantee that the Portfolio will achieve or maintain any particular level of yield.

Debt Securities Risk: The risks of investing in debt or fixed-income securities include (without limitation): (i) credit risk, e.g., the issuer or guarantor of a debt security may be unable or unwilling (or be perceived as unable or unwilling) to make timely principal and/or interest payments or otherwise honor its obligations, or changes in an issuer’s credit rating or the market’s perception of an issuer’s creditworthiness may affect the value of the Portfolio’s investments; (ii) maturity risk, e.g., a debt security with a longer maturity may fluctuate in value more than one with a shorter maturity; (iii) market risk, e.g., low demand for debt securities may negatively impact their price; (iv) interest rate risk, e.g., when interest rates go up, the value of a debt security generally goes down, and when interest rates go down, the value of a debt security generally goes up (long-term debt securities are generally more susceptible to interest rate risk than short-term debt securities); and (v) call or prepayment risk, e.g., during a period of falling interest rates, the issuer may redeem a security by repaying it early, which may reduce the Portfolio’s income if the proceeds are reinvested at lower interest rates.

Interest rate risk is the risk that the value of the Portfolio’s investments in fixed income or debt securities will change because of changes in interest rates. There is a risk that interest rates across the financial system may change, possibly significantly and/or rapidly. Changes in interest rates or a lack of market participants may lead to decreased liquidity and increased volatility in the fixed-income or debt markets, making it more difficult for the Portfolio to sell its fixed-income or debt holdings. Decreased liquidity in the fixed-income or debt markets also may make it more difficult to value some or all of the Portfolio’s fixed-income or debt holdings. For most fixed-income investments, when market interest rates fall, prices of fixed-rate debt securities rise. However, when market interest rates fall, prices of certain variable and fixed-rate debt securities may be adversely affected (i.e., falling interest rates bring the possibility of prepayment risk, as an instrument may be redeemed before maturity).

Not all U.S. government debt securities are guaranteed by the U.S. government—some are backed only by the issuing agency, which must rely on its own resources to repay the debt. The Portfolio’s yield will fluctuate with changes in short-term interest rates.

High-Yield Securities Risk: Investments in high-yield securities or non-investment grade securities (commonly referred to as “junk bonds”) are considered speculative because investments in such securities present a greater risk of loss than investments in higher quality securities. Such securities may, under certain circumstances, be less liquid than higher rated securities. These securities pay investors a premium (a high interest rate or yield) because of the
potential illiquidity and increased risk of loss. These securities can also be subject to greater price volatility. In times of unusual or adverse market, economic or political conditions, these securities may experience higher than normal default rates.

**Liquidity and Valuation Risk:** The Portfolio’s investments may become illiquid at the time of purchase or liquid at the time of purchase and subsequently become illiquid due to, among other things, events relating to the issuer of the securities, market events, operational issues, economic conditions, investor perceptions or lack of market participants. The lack of an active trading market may make it difficult to sell or obtain an accurate price for a security. If market conditions or issuer specific developments make it difficult to value securities, the Portfolio may value these securities using more subjective methods, such as fair value pricing. In such cases, the value determined for a security could be different than the value realized upon such security’s sale. As a result, an investor could pay more than the market value when buying shares or receive less than the market value when selling shares. This could affect the proceeds of any redemption or the number of shares an investor receives upon purchase.

The Portfolio is subject to the risk that it could not meet redemption requests within the allowable time period without significant dilution of remaining investors’ interests in the Portfolio. To meet redemption requests or to raise cash to pursue other investment opportunities, the Portfolio may be forced to sell securities at an unfavorable time and/or under unfavorable conditions, which may adversely affect the Portfolio.

**Loan Participation Interest Risk:** There may not be a readily available market for loan participation interests, which in some cases could result in the Portfolio disposing of such interests at a substantial discount from face value or holding such interests until maturity. In addition, the Portfolio may be exposed to the credit risk of the underlying corporate borrower as well as the lending institution or other participant from whom the Portfolio purchased the loan participation interests. The Portfolio may not always have direct recourse against a borrower if the borrower fails to pay scheduled principal and/or interest and may be subject to greater delays, expenses and risks than if the Portfolio had purchased a direct obligation of the borrower. Substantial increases in interest rates may cause an increase in loan obligation defaults.

**Floating Rate Loans Risk:** The floating rate loans in which the Portfolio invests are usually rated below investment grade, or if unrated, determined by the Subadvisor to be of comparable quality (commonly referred to as “junk bonds”) and are generally considered speculative because they present a greater risk of loss, including default, than higher quality debt instruments. Moreover, such investments may, under certain circumstances, be particularly susceptible to liquidity and valuation risks. Although certain floating rate loans are collateralized, there is no guarantee that the value of the collateral will be sufficient or available to satisfy the borrower’s obligation. In times of unusual or adverse market, economic or political conditions, floating rate loans may experience higher than normal default rates. In the event of a recession or serious credit event, among other eventualities, the value of the Portfolio’s investments in floating rate loans are more likely to decline. The secondary market for floating rate loans is limited and, thus, the Portfolio’s ability to sell or realize the full value of its investment in these loans to reinvest sale proceeds or to meet redemption obligations may be impaired. In addition, floating rate loans generally are subject to extended settlement periods that may be longer than seven days. As a result, the Portfolio may be adversely affected by selling other investments at an unfavorable time and/or under unfavorable conditions or engaging in borrowing transactions, such as borrowing against its credit facility, to raise cash to meet redemption obligations or pursue other investment opportunities.

In certain circumstances, floating rate loans may not be deemed to be securities. As a result, the Portfolio may not have the protection of the anti-fraud provisions of the federal securities laws. In such cases, the Portfolio generally must rely on the contractual provisions in the loan agreement and common-law fraud protections under applicable state law.

**Convertible Securities Risk:** Convertible securities are typically subordinate to an issuer’s other debt obligations. In part, the total return for a convertible security depends upon the performance of the underlying stock into which it can be converted. Also, issuers of convertible securities are often not as strong financially as those issuing securities with higher credit ratings, are more likely to encounter financial difficulties and typically are more vulnerable to changes in the economy, such as a recession or a sustained period of rising interest rates, which could affect their ability to make interest and principal payments. If an issuer stops making interest and/or principal payments, the Portfolio could lose its entire investment.

**Foreign Securities Risk:** Investments in foreign (non-U.S.) securities may be riskier than investments in U.S. securities. Foreign regulatory regimes and securities markets can have less stringent investor protections and disclosure standards and less liquid trading markets than U.S. regulatory regimes and securities markets, and can experience political, social and economic developments that may affect the value of the Portfolio’s investments in foreign securities. Foreign securities may also subject the Portfolio’s investments to changes in currency rates. Changes in the value of foreign currencies may make the return on an investment increase or decrease, unrelated to the quality or performance of the investment itself. These risks may be greater with respect to securities of companies that conduct their business activities in emerging markets or whose securities are traded principally in emerging markets.

**Derivatives Risk:** Derivatives are investments whose value depends on (or is derived from) the value of an underlying instrument, such as a security, asset, reference rate or index. Derivative strategies may expose the Portfolio to greater risk than if it had invested directly in the underlying instrument and often involve leverage, which may exaggerate a loss, potentially causing the Portfolio to lose more money than it originally invested and would have lost had it invested directly in the underlying instrument. For example, if the Portfolio is the seller of credit protection in a credit default swap, the Portfolio effectively adds leverage to its portfolio and is subject to the credit exposure on the full notional value of the swap. Derivatives may be difficult to sell, unwind or value. Derivatives may also be subject to counterparty risk, which is the risk that the counterparty (the party on the other side of the transaction) on a derivative transaction will be unable or unwilling to honor its contractual obligations to the Portfolio. Futures may be more volatile than direct investments in the instrument underlying the contract, and may not correlate perfectly to the underlying instrument. Futures and other derivatives also may involve a small initial investment relative to the risk assumed, which could result in losses greater than if they had not been used. Swaps may be subject to counterparty credit, correlation, valuation, liquidity and leveraging risks. Swap transactions tend to shift a Portfolio’s investment exposure from one type of investment to another and may entail the risk that a party will default on its payment obligations to the Portfolio. Additionally, applicable regulators have adopted rules imposing certain margin requirements, including minimums on uncleared swaps, which may result in the Portfolio and its counterparties posting higher margin amounts for uncleared swaps. Certain standardized swaps are subject to mandatory central clearing and exchange trading. Central clearing, which interposes a central clearancehouse to each participant’s swap, and exchange trading are intended to reduce counterparty credit risk and increase liquidity but neither makes swap transactions risk-free. Derivatives may also increase the expenses of the Portfolio.
**Equity Securities Risk:** Investments in common stocks and other equity securities are particularly subject to the risk of changing economic, stock market, industry and company conditions and the risks inherent in the portfolio manager’s ability to anticipate such changes that can adversely affect the value of the Portfolio’s holdings.

**Money Market/Short-Term Securities Risk:** To the extent the Portfolio holds cash or invests in money market or short-term securities, the Portfolio may be less likely to achieve its investment objective. In addition, it is possible that the Portfolio’s investments in these instruments could lose money.

### Past Performance

The following bar chart and table indicate some of the risks of investing in the Portfolio. The bar chart shows how the Portfolio’s calendar year performance has varied over time. The average annual total returns table shows how the Portfolio’s average annual total returns compare to those of a broad-based securities market index. Separate variable annuity and variable universal life insurance account and policy fees and charges are not reflected in the bar chart and table. If they were, returns would be less than those shown. The Portfolio has selected the ICE BofA Merrill Lynch U.S. High Yield Constrained index as its primary benchmark. The ICE BofA Merrill Lynch U.S. High Yield Constrained Index is a market value-weighted index of all domestic and Yankee high-yield bonds, including deferred interest bonds and payment-in-kind securities. Issuers included in the ICE BofA Merrill Lynch U.S. High Yield Constrained Index have maturities of one year or more and have a credit rating lower than BBB-/Baa3, but are not in default. No single issuer may constitute greater than 2% of the ICE BofA Merrill Lynch U.S. High Yield Constrained Index.

Performance data for the classes varies based on differences in their fee and expense structures. Past performance is not necessarily an indication of how the Portfolio will perform in the future.

### Annual Returns, Initial Class Shares
(by calendar year 2010-2019)

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</tr>
</thead>
<tbody>
<tr>
<td>Best Quarter</td>
<td>1Q/19</td>
<td>6.25%</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
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<tr>
<td>Worst Quarter</td>
<td>4Q/18</td>
<td>-3.53%</td>
<td></td>
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</tbody>
</table>

#### Average Annual Total Returns
(for the periods ended December 31, 2019)

<table>
<thead>
<tr>
<th></th>
<th>Inception</th>
<th>1 Year</th>
<th>5 Years</th>
<th>10 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Class</td>
<td>5/1/1995</td>
<td>13.22%</td>
<td>6.40%</td>
<td>7.23%</td>
</tr>
<tr>
<td>Service Class</td>
<td>6/4/2003</td>
<td>12.94%</td>
<td>6.14%</td>
<td>6.96%</td>
</tr>
<tr>
<td>ICE BofA Merrill Lynch U.S. High Yield Constrained Index (reflects no deductions for fees, expenses, or taxes)</td>
<td></td>
<td>14.41%</td>
<td>6.14%</td>
<td>7.48%</td>
</tr>
</tbody>
</table>

### Management

New York Life Investment Management LLC serves as the Portfolio’s Manager. MacKay Shields LLC serves as the Subadvisor. The individual listed below is primarily responsible for the day-to-day portfolio management of the Portfolio.

<table>
<thead>
<tr>
<th>Subadvisor</th>
<th>Portfolio Manager</th>
<th>Portfolio Service Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>MacKay Shields LLC</td>
<td>Andrew Susser, Executive Managing Director</td>
<td>Since 2013</td>
</tr>
</tbody>
</table>

### How to Purchase and Sell Shares

Shares of the Portfolio are currently offered to certain separate accounts to fund variable annuity policies and variable universal life insurance policies issued by New York Life Insurance and Annuity Corporation ("NYLIAC") and may also be offered to fund variable annuity policies and variable universal life insurance policies issued by other insurance companies. Shares of the Portfolio are also offered as underlying investments of the MainStay VP Asset Allocation Portfolios ("Asset Allocation Portfolios") and other variable insurance funds.

Individual investors do not transact directly with the Portfolio to purchase and redeem shares. Rather, investors select underlying investment options offered by the applicable policy. Please refer to the prospectus for the variable annuity policy or variable universal life insurance policy that offers the Portfolio as an underlying investment option for information on the allocation of premium payments and on transfers among the investment divisions of the separate account.
Tax Information

Because the Portfolio’s shareholders are the separate accounts of NYLIAC or other insurance companies through which you purchased your variable annuity policy or variable universal life insurance policy and the Asset Allocation Portfolios and other variable insurance funds, no discussion is included here as to the federal income tax consequences at the shareholder level. For information concerning the federal income tax consequences to variable annuity and variable universal life insurance policy owners, consult the prospectus relating to the appropriate policy.

Compensation to Broker/Dealers and Other Financial Intermediaries

The Portfolio and/or its related companies may pay NYLIAC or other participating insurance companies, broker/dealers, or other financial intermediaries for the sale of Portfolio shares and related services. These payments may create a conflict of interest by influencing the broker/dealer or other financial intermediary or your sales person to recommend the Portfolio over another investment and/or a policy that offers this Portfolio over another investment. Ask your individual salesperson or visit your broker/dealer’s or other financial intermediary firm’s website for more information. For additional information about these payments, please see the section entitled “The Fund and its Management” in the Prospectus.

*New York Life Investments* is both a service mark, and the common trade name, of certain investment advisors affiliated with New York Life Insurance Company.

To Statutory Prospectus  To Statement of Additional Information