

MainStay VP Natural Resources Portfolio

Message from the President and Annual Report

December 31, 2023

Special Notice:

Beginning in July 2024, new regulations issued by the Securities and Exchange Commission (SEC) will take effect requiring open-end mutual fund companies and ETFs to (1) overhaul the content of their shareholder reports and (2) mail paper copies of the new tailored shareholder reports to shareholders who have not opted to receive these documents electronically.

If you have not yet elected to receive your shareholder reports electronically, please contact your financial intermediary or visit our website.

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No Bank Guarantee

Not Insured by Any Government Agency



INVESTMENTS

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Message from the President

Against a backdrop of easing inflationary pressures and continued economic growth, stocks and bonds generally gained ground during the 12-month period ended December 31, 2023, despite high levels of volatility and sharp disparities between the performance of the different market sectors.

Although the war in Ukraine, the outbreak of hostilities in the Middle East and several other notable events affected financial assets, inflation, interest rate, and economic growth trends stood at the forefront of market developments during most of the period. As the reporting period began, high levels of inflation already showed signs of easing in the face of aggressive rate hikes by U.S. Federal Reserve (the “Fed”). From a peak of 9.1% in June 2022, the annualized U.S. inflation rate dropped to 6.4% in January, and 3.4% in December 2023. At the same time, the Fed increased the benchmark federal funds rate from 4.25%–4.50% at the beginning of reporting period, to 5.25%–5.50% as of the end of 2023. Despite the increasing cost of capital and tighter lending environment that resulted from rising rates, economic growth remained surprisingly robust, bolstered by high levels of consumer spending, low levels of unemployment and better-than-expected corporate earnings. With the pace of rate increases slowing from the prior year, investors began hoping for an early shift to a looser monetary policy, with stock prices and bond yields reacting as economic data and statements from the Fed either reinforced or undercut those hopes. Following months of hawkish rhetoric, the Fed finally reversed its stance in December 2023, signaling a positive economic outlook with little chance of a recession and a likelihood of rate cuts in 2024.

The S&P 500[®] Index, a widely regarded benchmark of U.S. market performance, produced strong gains during the reporting period—recovering all its losses from 2022 and approached new record territory. A preponderance of the Index’s gains were generated by a relatively small number of mega-cap stocks in the information technology, communication services and consumer discretionary sectors that stood to benefit from rapid developments in generative artificial intelligence (“AI”). Value-oriented, interest-rate sensitive and small-capitalization

shares lagged by significant margins, although market strength widened during the closing weeks of the reporting period. Most overseas equity markets trailed the U.S. market, as developed international economies experienced relatively low growth rates, and weak economic conditions in China undermined emerging markets.

Bonds produced generally positive returns, bolstered by attractive and relatively stable yields. The yield on the 10-year Treasury note hit a high of just under 5% in mid-October 2023, ranging between approximately 3.5% and 4.8% for most of the reporting period. The yield curve remained inverted throughout the year, with the 2-year Treasury yield modestly above the 10-year yield. Corporate bond prices trended moderately higher, generally outperforming government securities. After years of low yields and tight credit spreads, the corporate sector benefited from more attractive valuations and income opportunities. Among corporates, markets generally rewarded longer duration and lower credit quality, although an uptick in default rates posed added risks for high-yield corporate bonds. International bond markets produced mixed returns, with emerging-markets issues advancing over their developed-markets counterparts.

The market volatility of recent years reminds us of the constant need for experienced and steadfast portfolio management in the face of uncertainty. New York Life Investments remains dedicated to providing you, as a valued MainStay VP investor, with the guidance, resources and investment solutions you need to pursue your financial goals.

Thank you for trusting us to help meet your investment needs.

Sincerely,



Kirk C. Lehneis
President

The opinions expressed are as of the date of this report and are subject to change. There is no guarantee that any forecast made will come to pass. This material does not constitute investment advice and is not intended as an endorsement of any specific investment. Past performance is no guarantee of future results.

Table of Contents

Annual Report

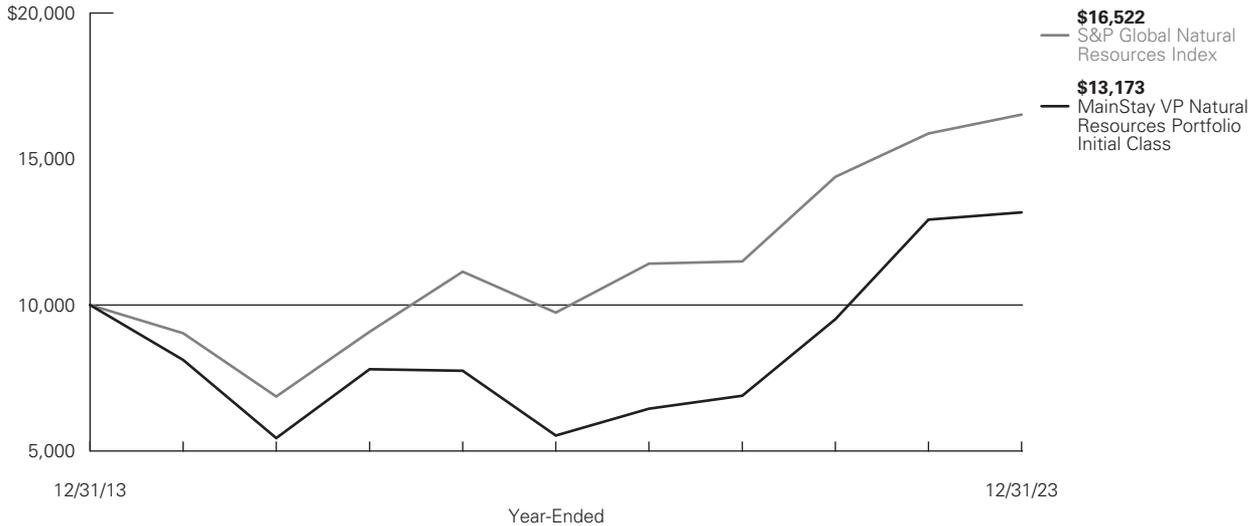
Investment and Performance Comparison	5
Portfolio Management Discussion and Analysis	8
Portfolio of Investments	10
Financial Statements	14
Notes to Financial Statements	18
Report of Independent Registered Public Accounting Firm	24
Board Consideration and Approval of Management Agreement and Subadvisory Agreement	25
Proxy Voting Policies and Procedures and Proxy Voting Record	29
Shareholder Reports and Quarterly Portfolio Disclosure	29
Board of Trustees and Officers	30

Investors should refer to the Portfolio's Summary Prospectus and/or Prospectus and consider the Portfolio's investment objectives, strategies, risks, charges and expenses carefully before investing. The Summary Prospectus and/or Prospectus contain this and other information about the Portfolio. You may obtain copies of the Portfolio's Summary Prospectus, Prospectus and Statement of Additional Information, which includes information about the MainStay VP Funds Trust's Trustees, free of charge, upon request, by calling toll-free 800-598-2019, by writing to New York Life Insurance and Annuity Corporation, 51 Madison Avenue, Room 251, New York, New York 10010 or by sending an email to MainStayShareholdersServices@nylim.com. These documents are also available at newyorklifeinvestments.com/investment-products/vp. Please read the Portfolio's Summary Prospectus and/or Prospectus carefully before investing. MainStay VP Funds Trust portfolios are separate account options which are purchased through a variable insurance or variable annuity contract.

Investment and Performance Comparison (Unaudited)

Performance data quoted represents past performance. Past performance is no guarantee of future results. Because of market volatility and other factors, current performance may be lower or higher than the figures shown. Investment return and principal value will fluctuate, and as a result, when shares are redeemed, they may be worth more or less than their original cost. The performance table and graph do not reflect any deduction of sales charges, mortality and expense charges, contract charges or administrative charges. Please refer to the Performance Summary appropriate for your policy. For performance information current to the most recent month-end, please call 800-598-2019 or visit www.newyorklife.com.

Performance figures may reflect certain fee waivers and/or expense limitations, without which total returns may have been different. For information on current fee waivers and/or expense limitations (if any), please refer to the Notes to Financial Statements.



Average Annual Total Returns for the Year-Ended December 31, 2023¹

Class	Inception Date ²	One Year	Five Years	Ten Years	Gross Expense Ratio ³
Initial Class Shares	2/17/2012	1.92%	18.96%	2.79%	0.83%

1. The Portfolio replaced its subadvisor and modified its principal investment strategies as of November 30, 2018. Therefore, the performance information shown in this report prior to November 30, 2018 reflects the Portfolio's prior subadvisor, investment objective and principal investment strategies.
2. Due to an organizational restructuring, the portfolio managers from Mellon Investments Corporation who managed the day-to-day operations of the Portfolio transitioned to Newton Investment Management North America, LLC as of September 1, 2021. The past performance in the graph and table prior to that date reflects the Portfolio's prior subadvisor.
3. The gross expense ratios presented reflect the Portfolio's "Total Annual Portfolio Operating Expenses" from the most recent Prospectus and may differ from other expense ratios disclosed in this report.

Benchmark Performance [*]	One Year	Five Years	Ten Years
S&P Global Natural Resources Index ¹	4.08%	11.15%	5.15%
Morningstar Natural Resources Category Average ²	7.61	12.51	4.77

* Returns for indices reflect no deductions for fees, expenses or taxes, except for foreign withholding taxes where applicable. Results assume reinvestment of all dividends and capital gains. An investment cannot be made directly in an index.

1. The Portfolio has selected the S&P Global Natural Resources Index as its primary benchmark. The S&P Global Natural Resources Index includes 90 of the largest publicly-traded companies in natural resources and commodities businesses that meet specific investability requirements, offering investors diversified and investable equity exposure across 3 primary commodity-related sectors: agribusiness, energy, and metals & mining.
2. The Morningstar Natural Resources Category Average is representative of funds that invest primarily on commodity-based industries such as energy, chemicals, minerals, and forest products in the United States or outside of the United States. Some funds invest across this spectrum to offer broad natural-resources exposure. Others concentrate heavily or even exclusively in specific industries. Funds that concentrate primarily in energy-related industries are part of the equity energy category. Results are based on average total returns of similar funds with all dividends and capital gain distributions reinvested.

Cost in Dollars of a \$1,000 Investment in MainStay VP Natural Resources Portfolio (Unaudited)

The example below is intended to describe the fees and expenses borne by shareholders during the six-month period from July 1, 2023 to December 31, 2023, and the impact of those costs on your investment.

Example

As a shareholder of the Portfolio you incur two types of costs: (1) transaction costs, including exchange fees and sales charges (loads) on purchases (as applicable), and (2) ongoing costs, including management fees and other Portfolio expenses (as applicable). This example is intended to help you understand your ongoing costs (in dollars) of investing in the Portfolio and to compare these costs with the ongoing costs of investing in other mutual funds. The example is based on an investment of \$1,000 made at the beginning of the six-month period and held for the entire period from July 1, 2023 to December 31, 2023. Shares are only sold in connection with variable life and annuity contracts and the example does not reflect any contract level or transactional fees or expenses. If these costs had been included, your costs would have been higher.

This example illustrates your Portfolio's ongoing costs in two ways:

Actual Expenses

The second and third data columns in the table below provide information about actual account values and actual expenses. You may use the information in these columns, together with the amount you invested, to estimate the expenses that you paid during the six months ended

December 31, 2023. Simply divide your account value by \$1,000 (for example, an \$8,600 account value divided by \$1,000 = 8.6), then multiply the result by the number under the heading entitled "Expenses Paid During Period" to estimate the expenses you paid on your account during this period.

Hypothetical Example for Comparison Purposes

The fourth and fifth data columns in the table below provide information about hypothetical account values and hypothetical expenses based on the Portfolio's actual expense ratio and an assumed rate of return of 5% per year before expenses, which is not the Portfolio's actual return. The hypothetical account values and expenses may not be used to estimate the actual ending account balances or expenses you paid for the six-month period shown. You may use this information to compare the ongoing costs of investing in the Portfolio with the ongoing costs of investing in other mutual funds. To do so, compare this 5% hypothetical example with the 5% hypothetical examples that appear in the shareholder reports of the other mutual funds.

Please note that the expenses shown in the table are meant to highlight your ongoing costs only and do not reflect any transactional costs, such as exchange fees or sales charges (loads). Therefore, the fourth and fifth data columns of the table are useful in comparing ongoing costs only and will not help you determine the relative total costs of owning different funds. In addition, if these transactional costs were included, your costs would have been higher.

Share Class	Beginning Account Value 7/1/23	Ending Account Value (Based on Actual Returns and Expenses) 12/31/23	Expenses Paid During Period ¹	Ending Account Value (Based on Hypothetical 5% Annualized Return and Actual Expenses) 12/31/23	Expenses Paid During Period ¹	Net Expense Ratio During Period ²
Initial Class Shares	\$1,000.00	\$1,049.20	\$4.34	\$1,020.97	\$4.28	0.84%

- Expenses are equal to the Portfolio's annualized expense ratio of each class multiplied by the average account value over the period, divided by 365 and multiplied by 184 (to reflect the six-month period). The table above represents the actual expenses incurred during the six-month period. In addition to the fees and expenses which the Portfolio bears directly, it also indirectly bears a pro rata share of the fees and expenses of the underlying funds in which it invests. Such indirect expenses are not included in the above-reported expense figures.
- Expenses are equal to the Portfolio's annualized expense ratio to reflect the six-month period.

Country Composition as of December 31, 2023 (Unaudited)

United States	77.9%	Chile	1.2%
Canada	12.2	Brazil	0.5
Netherlands	4.6	Zambia	0.5
Norway	2.7	Other Assets, Less Liabilities	<u>-3.4</u>
Germany	2.4		<u>100.0%</u>
Australia	1.4		

See Portfolio of Investments beginning on page 10 for specific holdings within these categories. The Portfolio's holdings are subject to change.

Top Ten Holdings and/or Issuers Held as of December 31, 2023 (excluding short-term investments) (Unaudited)

1. Freeport-McMoRan, Inc.	6. ConocoPhillips
2. Weatherford International plc	7. CRH plc
3. Occidental Petroleum Corp.	8. Schlumberger NV
4. Shell plc	9. Teck Resources Ltd., Class B
5. CF Industries Holdings, Inc.	10. Phillips 66

Portfolio Management Discussion and Analysis (Unaudited)

Answers to the questions reflect the views of portfolio manager Brock Campbell, CFA, and David S. Intoppa of Newton Investment Management North America, LLC, the Portfolio's Subadvisor.

How did MainStay VP Natural Resources Portfolio perform relative to its benchmark and peers during the 12 months ended December 31, 2023?

For the 12 months ended December 31, 2023, MainStay VP Natural Resources Portfolio returned 1.92% for Initial Class shares. Over the same period, Initial Class shares of the Portfolio underperformed the 4.08% return of the S&P Global Natural Resources Index (the "Index"), which is the Portfolio's benchmark, and the 7.61% return of the Morningstar Natural Resources Category Average.¹

What factors affected the Portfolio's relative performance during the reporting period?

Natural-resource equities are highly correlated to commodity prices, which are largely determined by supply and demand factors that can be affected by macroeconomic data, geopolitical events, and idiosyncratic, subsector and/or company news. Each of these factors affected the Portfolio's performance relative to the Index over the reporting period.

In addition, the Portfolio is designed to take concentrated positions in our highest conviction ideas across the natural-resource equity universe. We believe this provides a solid opportunity to deliver commodity alpha² to our investors, as opposed to broad commodity exposure or beta.³ As the Portfolio does not offer diversified commodity exposure, there may be times when the Portfolio outperforms or underperforms the Index.

Which sectors were the strongest contributors to the Portfolio's relative performance and which sectors were particularly weak?

Energy services, industrials and agriculture made the strongest contributions to the Portfolio's relative performance over the reporting period. (Contributions take weightings and total returns into account.) Conversely, steel, forest, and paper products and U.S. onshore upstream detracted the most from the Portfolio's relative performance.

During the reporting period, which individual stocks made the strongest positive contributions to the Portfolio's absolute performance and which stocks detracted the most?

The strongest positive contributions to the Portfolio's absolute performance came from uranium miner Cameco, energy drilling equipment company Weatherford International and offshore oil & gas drilling services provider Transocean. Cameco shares advanced throughout the year as investors began to focus on

increasing tightness in the uranium market. Weatherford International shares rose amid increased activity and much higher capacity utilization rates. Demand for services outstripped available supply, leading to a solid pricing environment, which benefited many of the high-quality operators in this sector. Transocean shares benefited as the oilfield services industry had a solid year, marked by increased activity and significantly higher capacity utilization rates. Once again, demand for services outstripped available supply, leading to a robust pricing environment, which benefited many of the sector's high-quality operators.

The most significant detractors from the Portfolio's absolute performance during the same period included positions in Canadian mineral producer First Quantum Minerals, German pharmaceutical company Bayer and aluminum producer Alcoa. First Quantum Minerals shares declined as the company's key Panamanian mine faced a referendum, raising concerns regarding future profits and cash flows. Bayer shares suffered in the face of several negative news stories regarding the company, including a downgrade of its debt by rating agency Fitch Ratings, Inc. litigation related to its agriculture business, and the termination of a clinical trial for an anticoagulant drug due to lack of efficacy. Alcoa shares lagged as investors grew increasingly concerned over the prospect of slowing global growth, the pace and sustainability of China's reopening, and concerns regarding aluminum oversupply.

Did the Portfolio make any significant purchases or sales during the reporting period?

Key additions to the Portfolio during the reporting period included new positions in international energy and petrochemical company Shell, globally diversified building materials company CRH and diversified energy company Phillips 66. Shell engages in the exploration, production, refining and marketing of oil and natural gas, and the manufacturing and marketing of chemicals. In addition to our positive outlook on energy, we believe Shell is in the early stages of cleaning up its balance sheet, paying down debt and returning more capital to shareholders. CRH manufactures and supplies a diverse range of building materials and products for use in the construction and maintenance of infrastructure, housing and commercial projects. We believe CRH could be among the leading beneficiaries of deglobalization, as countries and companies spend on infrastructure buildouts. In our view, the company should benefit from recent U.S. legislation, including the Inflation Reduction Act and the CHIPS Act. Phillips 66 appears well positioned to benefit from gains in the natural

1. See "Investment and Performance Comparison" for more information on benchmark and peer group returns.
2. Alpha measures the relationship between a mutual fund's return and its beta over a three-year period. Often, alpha is viewed as the excess return (positive or negative) or the value added by the portfolio manager.
3. Beta is a measure of volatility in relation to the market as a whole. A beta higher than 1 indicates that a security or portfolio will tend to exhibit higher volatility than the market. A beta lower than 1 indicates that a security or portfolio will tend to exhibit lower volatility than the market.

resources sector as a high-quality refiner that is now very focused on controlling expenses and improving returns.

During the same period, the Portfolio eliminated its entire positions in oil & gas exploration & production companies Hess and EOG Resources, and global mining company Anglo American, in favor of more compelling risk/reward opportunities.

How did the Portfolio's subsector and subindustry weightings change during the reporting period?

During the reporting period, the Portfolio increased its exposure to refining and chemicals from an equally weighted position to a markedly overweight position relative to the Index. Precious metals increased from zero exposure, but remained an underweight position relative to the Index. Industrials, energy services and agriculture saw the largest decreases in overall weights during the reporting period.

How was the Portfolio positioned at the end of the reporting period?

As of December 31, 2023, we continue to maintain strong conviction in the natural resources sector and foresee a tight supply/demand environment in the coming years. While inflation has declined somewhat, it continues to permeate the global economy, and we believe the supply response could take some time to alleviate inflationary pressures. The rise of environmental, social and governance (ESG) concerns are likely to continue to distort price signals to commodity producers, thereby exacerbating supply shortfalls. We believe that the potential impact of a recession on the Portfolio's commodity holdings has been exaggerated by the market, despite an uneven China reopening. Our analysis suggests that the impact of slowing demand on energy and metals, the Portfolio's major overweight positions, should be relatively moderate.

In this environment, the Portfolio's investment process and style remains unchanged. We continue to seek investments in areas where the commodity macroeconomic and company-specific factors are aligned. In our opinion, the natural resources sector remains one of the best sources of overall portfolio diversification, inflation protection and dividend yield generation.

The opinions expressed are those of the portfolio managers as of the date of this report and are subject to change. There is no guarantee that any forecasts will come to pass. This material does not constitute investment advice and is not intended as an endorsement of any specific investment.

Not all MainStay VP Portfolios and/or share classes are available under all policies.

Portfolio of Investments December 31, 2023^{†^}

	Shares	Value
Common Stocks 99.5%		
Australia 1.4%		
South32 Ltd. (Metals & Mining)	1,346,400	\$ 3,055,289
Woodside Energy Group Ltd. (Oil, Gas & Consumable Fuels)	83,859	<u>1,774,946</u>
		<u>4,830,235</u>
Brazil 0.5%		
Adecoagro SA (Food Products)	146,602	<u>1,627,282</u>
Canada 12.2%		
Cameco Corp. (Oil, Gas & Consumable Fuels)	248,517	10,711,083
Capstone Copper Corp. (Metals & Mining) (a)	818,386	3,983,691
Ivanhoe Mines Ltd., Class A (Metals & Mining) (a)	430,086	4,170,865
NexGen Energy Ltd. (Oil, Gas & Consumable Fuels) (a)	881,905	6,169,774
Nutrien Ltd. (Chemicals) (b)	58,060	3,270,520
Teck Resources Ltd., Class B (Metals & Mining)	302,291	<u>12,777,841</u>
		<u>41,083,774</u>
Chile 1.2%		
Antofagasta plc (Metals & Mining)	189,805	<u>4,063,297</u>
Germany 2.4%		
Bayer AG (Registered) (Pharmaceuticals)	221,757	<u>8,232,915</u>
Netherlands 4.6%		
Shell plc (Oil, Gas & Consumable Fuels)	468,291	<u>15,349,467</u>
Norway 2.7%		
Equinor ASA, Sponsored ADR (Oil, Gas & Consumable Fuels)	228,492	7,229,487
Norsk Hydro ASA (Metals & Mining)	276,419	<u>1,860,949</u>
		<u>9,090,436</u>
United States 74.0%		
Albemarle Corp. (Chemicals)	21,220	3,065,866
Alcoa Corp. (Metals & Mining)	231,562	7,873,108
Antero Resources Corp. (Oil, Gas & Consumable Fuels) (a)	452,486	10,262,382
Bunge Global SA (Food Products)	90,840	9,170,298
CF Industries Holdings, Inc. (Chemicals)	188,651	14,997,754
Chemours Co. (The) (Chemicals)	240,861	7,596,756

	Shares	Value
United States (continued)		
Chesapeake Energy Corp. (Oil, Gas & Consumable Fuels) (b)	74,246	\$ 5,712,487
ConocoPhillips (Oil, Gas & Consumable Fuels)	128,699	14,938,093
Corteva, Inc. (Chemicals)	71,777	3,439,554
CRH plc (Construction Materials)	197,703	13,673,139
Darling Ingredients, Inc. (Food Products) (a)	135,365	6,746,592
Diamondback Energy, Inc. (Oil, Gas & Consumable Fuels)	64,007	9,926,206
Energy Fuels, Inc. (Oil, Gas & Consumable Fuels) (a)(b)	348,141	2,503,134
EQT Corp. (Oil, Gas & Consumable Fuels)	286,859	11,089,969
Fluor Corp. (Construction & Engineering) (a)	115,915	4,540,391
Freeport-McMoRan, Inc. (Metals & Mining)	375,418	15,981,544
Marathon Oil Corp. (Oil, Gas & Consumable Fuels)	453,668	10,960,619
Marathon Petroleum Corp. (Oil, Gas & Consumable Fuels)	70,636	10,479,557
Mosaic Co. (The) (Chemicals)	101,424	3,623,880
Newmont Corp. (Metals & Mining)	204,106	8,447,947
NOV, Inc. (Energy Equipment & Services)	156,144	3,166,600
Occidental Petroleum Corp. (Oil, Gas & Consumable Fuels)	260,827	15,573,980
Phillips 66 (Oil, Gas & Consumable Fuels)	92,207	12,276,440
Schlumberger NV (Energy Equipment & Services)	261,100	13,587,644
Transocean Ltd. (Energy Equipment & Services) (a)	1,584,391	10,060,883
Valero Energy Corp. (Oil, Gas & Consumable Fuels)	12,632	1,642,160
Vulcan Materials Co. (Construction Materials)	8,239	1,870,335
Weatherford International plc (Energy Equipment & Services) (a)	163,128	<u>15,958,812</u>
		<u>249,166,130</u>
Zambia 0.5%		
First Quantum Minerals Ltd. (Metals & Mining)	194,549	<u>1,593,039</u>
Total Common Stocks (Cost \$306,842,141)		<u>335,036,575</u>

	Shares	Value
Short-Term Investments 3.9%		
Affiliated Investment Company 0.4%		
United States 0.4%		
MainStay U.S. Government Liquidity Fund, 5.235% (c)	1,387,605	\$ 1,387,605
Unaffiliated Investment Companies 3.5%		
United States 3.5%		
Dreyfus Treasury Obligations Cash Management Fund, 5.40% (c)(d)	5,865,355	5,865,355
Fidelity Government Portfolio, 5.356% (c)(d)	2,000,000	2,000,000
Invesco Government & Agency Portfolio, 5.361% (c)(d)	3,715,123	3,715,123
		<u>11,580,478</u>
Total Short-Term Investments (Cost \$12,968,083)		<u>12,968,083</u>
Total Investments (Cost \$319,810,224)	103.4%	348,004,658
Other Assets, Less Liabilities	<u>(3.4)</u>	<u>(11,325,433)</u>
Net Assets	<u>100.0%</u>	<u>\$ 336,679,225</u>

† Percentages indicated are based on Portfolio net assets.

^ Industry and country classifications may be different than those used for compliance monitoring purposes.

(a) Non-income producing security.

(b) All or a portion of this security was held on loan. As of December 31, 2023, the aggregate market value of securities on loan was \$11,232,661. The Portfolio received cash collateral with a value of \$11,580,478. (See Note 2(l))

(c) Current yield as of December 31, 2023.

(d) Represents a security purchased with cash collateral received for securities on loan.

Investments in Affiliates (in 000's)

Investments in issuers considered to be affiliate(s) of the Portfolio during the year ended December 31, 2023 for purposes of Section 2(a)(3) of the Investment Company Act of 1940, as amended, were as follows:

Affiliated Investment Companies	Value, Beginning of Year	Purchases at Cost	Proceeds from Sales	Net Realized Gain/(Loss) on Sales	Change in Unrealized Appreciation/ (Depreciation)	Value, End of Year	Dividend Income	Other Distributions	Shares End of Year
MainStay U.S. Government Liquidity Fund	\$ 1,917	\$ 100,172	\$ (100,701)	\$ —	\$ —	\$ 1,388	\$ 107	\$ —	1,388

The notes to the financial statements are an integral part of, and should be read in conjunction with, the financial statements.

Portfolio of Investments December 31, 2023[†] (continued)

Abbreviation(s):

ADR—American Depositary Receipt

The following is a summary of the fair valuations according to the inputs used as of December 31, 2023, for valuing the Portfolio's assets:

Description	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
Asset Valuation Inputs				
Investments in Securities (a)				
Common Stocks	\$ 335,036,575	\$ —	\$ —	\$ 335,036,575
Short-Term Investments				
Affiliated Investment Company	1,387,605	—	—	1,387,605
Unaffiliated Investment Companies	<u>11,580,478</u>	<u>—</u>	<u>—</u>	<u>11,580,478</u>
Total Short-Term Investments	<u>12,968,083</u>	<u>—</u>	<u>—</u>	<u>12,968,083</u>
Total Investments in Securities	<u>\$ 348,004,658</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 348,004,658</u>

(a) For a complete listing of investments and their industries, see the Portfolio of Investments.

The table below sets forth the diversification of the Portfolio's investments by industry.

Industry Diversification

	Value	Percent †^
Chemicals	\$ 35,994,330	10.7%
Construction & Engineering	4,540,391	1.4
Construction Materials	15,543,474	4.6
Energy Equipment & Services	42,773,939	12.7
Food Products	17,544,172	5.2
Metals & Mining	63,807,570	19.0
Oil, Gas & Consumable Fuels	146,599,784	43.5
Pharmaceuticals	<u>8,232,915</u>	<u>2.4</u>
	335,036,575	99.5
Short-Term Investments	12,968,083	3.9
Other Assets, Less Liabilities	<u>(11,325,433)</u>	<u>(3.4)</u>
Net Assets	<u>\$336,679,225</u>	<u>100.0%</u>

† Percentages indicated are based on Portfolio net assets.

^ Industry and country classifications may be different than those used for compliance monitoring purposes.

Statement of Assets and Liabilities as of December 31, 2023

Assets

Investment in unaffiliated securities, at value (identified cost \$318,422,619) including securities on loan of \$11,232,661	\$346,617,053
Investment in affiliated investment companies, at value (identified cost \$1,387,605)	1,387,605
Cash denominated in foreign currencies (identified cost \$355,448)	365,666
Receivables:	
Dividends	441,818
Portfolio shares sold	17,560
Securities lending	1,811
Other assets	<u>1,506</u>
Total assets	<u>348,833,019</u>

Initial Class

Net assets applicable to outstanding shares	<u>\$336,679,225</u>
Shares of beneficial interest outstanding	<u>28,123,768</u>
Net asset value per share outstanding	<u>\$ 11.97</u>

Liabilities

Cash collateral received for securities on loan	11,580,478
Payables:	
Portfolio shares redeemed	294,000
Manager (See Note 3)	221,288
Professional fees	44,419
Custodian	13,547
Shareholder communication	46
Accrued expenses	<u>16</u>
Total liabilities	<u>12,153,794</u>
Net assets	<u>\$336,679,225</u>

Composition of Net Assets

Shares of beneficial interest outstanding (par value of \$.001 per share) unlimited number of shares authorized	\$ 28,124
Additional paid-in-capital	<u>343,127,406</u>
	343,155,530
Total distributable earnings (loss)	<u>(6,476,305)</u>
Net assets	<u>\$336,679,225</u>

Statement of Operations

for the year ended December 31, 2023

Investment Income (Loss)

Income

Dividends-unaffiliated (net of foreign tax withholding of \$323,387)	\$ 8,755,987
Securities lending, net	111,179
Dividends-affiliated	<u>106,702</u>
Total income	<u>8,973,868</u>

Expenses

Manager (See Note 3)	2,886,962
Professional fees	95,231
Custodian	36,470
Shareholder communication	17,773
Trustees	9,550
Miscellaneous	<u>17,413</u>
Total expenses	<u>3,063,399</u>
Net investment income (loss)	<u>5,910,469</u>

Realized and Unrealized Gain (Loss)

Net realized gain (loss) on:	
Unaffiliated investment transactions	39,619,078
Foreign currency transactions	<u>95,490</u>
Net realized gain (loss)	<u>39,714,568</u>
Net change in unrealized appreciation (depreciation) on:	
Unaffiliated investments	(37,904,702)
Translation of other assets and liabilities in foreign currencies	<u>6,798</u>
Net change in unrealized appreciation (depreciation)	<u>(37,897,904)</u>
Net realized and unrealized gain (loss)	<u>1,816,664</u>
Net increase (decrease) in net assets resulting from operations	<u>\$ 7,727,133</u>

The notes to the financial statements are an integral part of, and should be read in conjunction with, the financial statements.

Statements of Changes in Net Assets

for the years ended December 31, 2023 and December 31, 2022

	2023	2022
Increase (Decrease) in Net Assets		
Operations:		
Net investment income (loss)	\$ 5,910,469	\$ 7,413,546
Net realized gain (loss)	39,714,568	107,424,418
Net change in unrealized appreciation (depreciation)	<u>(37,897,904)</u>	<u>(8,349,052)</u>
Net increase (decrease) in net assets resulting from operations	<u>7,727,133</u>	<u>106,488,912</u>
Distributions to shareholders:		
Initial Class	<u>(7,514,547)</u>	<u>(4,193,860)</u>
Capital share transactions:		
Net proceeds from sales of shares	40,152,127	117,317,650
Net asset value of shares issued to shareholders in reinvestment of distributions	7,514,547	4,193,860
Cost of shares redeemed	<u>(107,337,171)</u>	<u>(120,252,694)</u>
Increase (decrease) in net assets derived from capital share transactions	<u>(59,670,497)</u>	<u>1,258,816</u>
Net increase (decrease) in net assets	<u>(59,457,911)</u>	<u>103,553,868</u>
Net Assets		
Beginning of year	<u>396,137,136</u>	<u>292,583,268</u>
End of year	<u>\$ 336,679,225</u>	<u>\$ 396,137,136</u>

Financial Highlights selected per share data and ratios

Initial Class	Year Ended December 31,				
	2023	2022	2021	2020	2019
Net asset value at beginning of year	\$ 12.00	\$ 8.93	\$ 6.55	\$ 6.29	\$ 5.43
Net investment income (loss)	0.19	0.22	0.12(a)	0.09(a)	0.13(a)
Net realized and unrealized gain (loss)	0.04	2.97	2.36	0.32	0.78
Total from investment operations	0.23	3.19	2.48	0.41	0.91
Less distributions:					
From net investment income	(0.26)	(0.12)	(0.10)	(0.15)	(0.05)
Net asset value at end of year	\$ 11.97	\$ 12.00	\$ 8.93	\$ 6.55	\$ 6.29
Total investment return (b)	1.92%	35.84%	38.02%	6.89%	16.62%
Ratios (to average net assets)/Supplemental Data:					
Net investment income (loss)	1.62%	1.94%	1.56%	1.68%	2.17%
Net expenses (c)	0.84%	0.83%	0.85%	0.86%	0.96%
Portfolio turnover rate	85%	92%	72%	68%	87%
Net assets at end of year (in 000's)	\$ 336,679	\$ 396,137	\$ 292,583	\$ 238,908	\$ 249,276

(a) Per share data based on average shares outstanding during the year.

(b) Total return does not reflect any deduction of sales charges, mortality and expense charges, contract charges or administrative charges. For periods of less than one year, total return is not annualized.

(c) In addition to the fees and expenses which the Portfolio bears directly, it also indirectly bears a pro-rata share of the fees and expenses of the underlying funds in which it invests. Such indirect expenses are not included in the above expense ratios.

Notes to Financial Statements

Note 1—Organization and Business

MainStay VP Funds Trust (the "Fund") was organized as a Delaware statutory trust on February 1, 2011. The Fund is registered under the Investment Company Act of 1940, as amended (the "1940 Act"), as an open-end management investment company. The Fund is comprised of thirty-one separate series (collectively referred to as the "Portfolios"). These financial statements and notes relate to the MainStay VP Natural Resources Portfolio (the "Portfolio"), a "non-diversified" portfolio, as that term is defined in the 1940 Act, as interpreted or modified by regulatory authorities having jurisdiction, from time to time. However, due to its principal investment strategies and investment processes, the Portfolio has historically operated as a "diversified" portfolio. Therefore, the Portfolio will not operate as "non-diversified" portfolio without first obtaining shareholder approval.

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"), a wholly-owned subsidiary of New York Life Insurance Company ("New York Life") and may also be offered to fund variable annuity policies and variable universal life insurance policies issued by other insurance companies. NYLIAC allocates shares of the Portfolio to, among others, certain NYLIAC separate accounts. Shares of the Portfolio are also offered to the MainStay VP Conservative Allocation Portfolio, MainStay VP Moderate Allocation Portfolio, MainStay VP Growth Allocation Portfolio and MainStay VP Equity Allocation Portfolio, which operate as "funds-of-funds," and other variable insurance funds.

The following table lists the Portfolio's share class that has been registered and commenced operations:

Class	Commenced Operations
Initial Class	February 17, 2012

Shares of the Portfolio are offered and are redeemed at a price equal to their respective net asset value ("NAV") per share. No sales or redemption charge is applicable to the purchase or redemption of the Portfolio's shares.

The Portfolio's investment objective is to seek long-term capital appreciation.

Note 2—Significant Accounting Policies

The Portfolio is an investment company and accordingly follows the investment company accounting and reporting guidance of the Financial Accounting Standards Board ("FASB") Accounting Standards Codification *Topic 946 Financial Services—Investment Companies*. The Portfolio prepares its financial statements in accordance with generally accepted accounting principles ("GAAP") in the United States of America and follows the significant accounting policies described below.

(A) Securities Valuation. Investments are usually valued as of the close of regular trading on the New York Stock Exchange (the "Exchange") (usually 4:00 p.m. Eastern time) on each day the Portfolio is open for business ("valuation date").

Pursuant to Rule 2a-5 under the 1940 Act, the Board of Trustees of the Fund (the "Board") has designated New York Life Investment Management LLC ("New York Life Investments" or the "Manager") as its Valuation Designee (the "Valuation Designee"). The Valuation Designee is responsible for performing fair valuations relating to all investments in the Portfolio's portfolio for which market quotations are not readily available; periodically assessing and managing material valuation risks; establishing and applying fair value methodologies; testing fair valuation methodologies; evaluating and overseeing pricing services; ensuring appropriate segregation of valuation and portfolio management functions; providing quarterly, annual and prompt reporting to the Board, as appropriate; identifying potential conflicts of interest; and maintaining appropriate records. The Valuation Designee has established a valuation committee ("Valuation Committee") to assist in carrying out the Valuation Designee's responsibilities and establish prices of securities for which market quotations are not readily available. The Portfolio's and the Valuation Designee's policies and procedures ("Valuation Procedures") govern the Valuation Designee's selection and application of methodologies for determining and calculating the fair value of Portfolio investments. The Valuation Designee may value the Portfolio's portfolio securities for which market quotations are not readily available and other Portfolio assets utilizing inputs from pricing services and other third-party sources. The Valuation Committee meets (in person, via electronic mail or via teleconference) on an ad-hoc basis to determine fair valuations and on a quarterly basis to review fair value events with respect to certain securities for which market quotations are not readily available, including valuation risks and back-testing results, and to preview reports to the Board.

The Valuation Committee establishes prices of securities for which market quotations are not readily available based on such methodologies and measurements on a regular basis after considering information that is reasonably available and deemed relevant by the Valuation Committee. The Board shall oversee the Valuation Designee and review fair valuation materials on a prompt, quarterly and annual basis and approve proposed revisions to the Valuation Procedures.

Investments for which market quotations are not readily available are valued at fair value as determined in good faith pursuant to the Valuation Procedures. A market quotation is readily available only when that quotation is a quoted price (unadjusted) in active markets for identical investments that the Portfolio can access at the measurement date, provided that a quotation will not be readily available if it is not reliable. "Fair value" is defined as the price the Portfolio would reasonably expect to receive upon selling an asset or liability in an orderly transaction to an independent buyer in the principal or most advantageous market for the asset or liability. Fair value measurements are determined within a framework that establishes a three-tier hierarchy that maximizes the use

of observable market data and minimizes the use of unobservable inputs to establish a classification of fair value measurements for disclosure purposes. "Inputs" refer broadly to the assumptions that market participants would use in pricing the asset or liability, including assumptions about risk, such as the risk inherent in a particular valuation technique used to measure fair value using a pricing model and/or the risk inherent in the inputs for the valuation technique. Inputs may be observable or unobservable. Observable inputs reflect the assumptions market participants would use in pricing the asset or liability based on market data obtained from sources independent of the Portfolio. Unobservable inputs reflect the Portfolio's own assumptions about the assumptions market participants would use in pricing the asset or liability based on the information available. The inputs or methodology used for valuing assets or liabilities may not be an indication of the risks associated with investing in those assets or liabilities. The three-tier hierarchy of inputs is summarized below.

- Level 1—quoted prices (unadjusted) in active markets for an identical asset or liability
- Level 2—other significant observable inputs (including quoted prices for a similar asset or liability in active markets, interest rates and yield curves, prepayment speeds, credit risk, etc.)
- Level 3—significant unobservable inputs (including the Portfolio's own assumptions about the assumptions that market participants would use in measuring fair value of an asset or liability)

The level of an asset or liability within the fair value hierarchy is based on the lowest level of an input, both individually and in the aggregate, that is significant to the fair value measurement. The aggregate value by input level of the Portfolio's assets and liabilities as of December 31, 2023, is included at the end of the Portfolio of Investments.

The Portfolio may use third-party vendor evaluations, whose prices may be derived from one or more of the following standard inputs, among others:

• Broker/dealer quotes	• Benchmark securities
• Two-sided markets	• Reference data (corporate actions or material event notices)
• Bids/offers	• Monthly payment information
• Industry and economic events	• Reported trades

An asset or liability for which a market quotation is not readily available is valued by methods deemed reasonable in good faith by the Valuation Committee, following the Valuation Procedures to represent fair value. Under these procedures, the Valuation Designee generally uses a market-based approach which may use related or comparable assets or liabilities, recent transactions, market multiples, book values and other relevant information. The Valuation Designee may also use an income-based valuation approach in which the anticipated future cash flows of the asset or liability are discounted to calculate fair value. Discounts may also be applied due to the nature and/or duration of any restrictions on the disposition of the asset or liability. Fair value represents

a good faith approximation of the value of a security. Fair value determinations involve the consideration of a number of subjective factors, an analysis of applicable facts and circumstances and the exercise of judgment. As a result, it is possible that the fair value for a security determined in good faith in accordance with the Valuation Procedures may differ from valuations for the same security determined for other funds using their own valuation procedures. Although the Valuation Procedures are designed to value a security at the price the Portfolio may reasonably expect to receive upon the security's sale in an orderly transaction, there can be no assurance that any fair value determination thereunder would, in fact, approximate the amount that the Portfolio would actually realize upon the sale of the security or the price at which the security would trade if a reliable market price were readily available. During the year ended December 31, 2023, there were no material changes to the fair value methodologies.

Securities which may be valued in this manner include, but are not limited to: (i) a security for which trading has been halted or suspended or otherwise does not have a readily available market quotation on a given day; (ii) a debt security that has recently gone into default and for which there is not a current market quotation; (iii) a security of an issuer that has entered into a restructuring; (iv) a security that has been delisted from a national exchange; (v) a security subject to trading collars for which no or limited trading takes place; and (vi) a security whose principal market has been temporarily closed at a time when, under normal conditions, it would be open. Securities valued in this manner are generally categorized as Level 2 or 3 in the hierarchy.

Certain securities held by the Portfolio may principally trade in foreign markets. Events may occur between the time the foreign markets close and the time at which the Portfolio's NAVs are calculated. These events may include, but are not limited to, situations relating to a single issuer in a market sector, significant fluctuations in U.S. or foreign markets, natural disasters, armed conflicts, governmental actions or other developments not tied directly to the securities markets. Should the Valuation Designee conclude that such events may have affected the accuracy of the last price of such securities reported on the local foreign market, the Valuation Designee may, pursuant to the Valuation Procedures, adjust the value of the local price to reflect the estimated impact on the price of such securities as a result of such events. In this instance, securities are generally categorized as Level 3 in the hierarchy. Additionally, certain foreign equity securities are also fair valued whenever the movement of a particular index exceeds certain thresholds. In such cases, the securities are fair valued by applying factors provided by a third-party vendor in accordance with the Valuation Procedures and are generally categorized as Level 2 in the hierarchy.

If the principal market of certain foreign equity securities is closed in observance of a local foreign holiday, these securities are valued using the last closing price of regular trading on the relevant exchange and fair valued by applying factors provided by a third-party vendor in accordance with the Valuation Procedures. These securities are generally categorized as Level 2 in the hierarchy.

Notes to Financial Statements (continued)

Equity securities, rights and warrants, if applicable, are valued at the last quoted sales prices as of the close of regular trading on the relevant exchange on each valuation date. Securities that are not traded on the valuation date are valued at the mean of the last quoted bid and ask prices. Prices are normally taken from the principal market in which each security trades. These securities are generally categorized as Level 1 in the hierarchy.

Investments in mutual funds, including money market funds, are valued at their respective NAVs at the close of business each day on the valuation date. These securities are generally categorized as Level 1 in the hierarchy.

Temporary cash investments acquired in excess of 60 days to maturity at the time of purchase are valued using the latest bid prices or using valuations based on a matrix system (which considers such factors as security prices, yields, maturities and ratings), both as furnished by independent pricing services. Temporary cash investments that mature in 60 days or less at the time of purchase ("Short-Term Investments") are valued using the amortized cost method of valuation, unless the use of such method would be inappropriate. The amortized cost method involves valuing a security at its cost on the date of purchase and thereafter assuming a constant amortization to maturity of the difference between such cost and the value on maturity date. Amortized cost approximates the current fair value of a security. Securities valued using the amortized cost method are not valued using quoted prices in an active market and are generally categorized as Level 2 in the hierarchy.

The information above is not intended to reflect an exhaustive list of the methodologies that may be used to value portfolio investments. The Valuation Procedures permit the use of a variety of valuation methodologies in connection with valuing portfolio investments. The methodology used for a specific type of investment may vary based on the market data available or other considerations. The methodologies summarized above may not represent the specific means by which portfolio investments are valued on any particular business day.

(B) Income Taxes. The Portfolio's policy is to comply with the requirements of the Internal Revenue Code of 1986, as amended (the "Internal Revenue Code"), applicable to regulated investment companies and to distribute all of its taxable income to the shareholders of the Portfolio within the allowable time limits.

The Manager evaluates the Portfolio's tax positions to determine if the tax positions taken meet the minimum recognition threshold in connection with accounting for uncertainties in income tax positions taken or expected to be taken for the purposes of measuring and recognizing tax liabilities in the financial statements. Recognition of tax benefits of an uncertain tax position is permitted only to the extent the position is "more likely than not" to be sustained assuming examination by taxing authorities. The Manager analyzed the Portfolio's tax positions taken on federal, state and local income tax returns for all open tax years (for up to three tax years) and has concluded that no provisions for federal, state and local income tax are required in the Portfolio's financial statements.

The Portfolio's federal, state and local income tax and federal excise tax returns for tax years for which the applicable statutes of limitations have not expired are subject to examination by the Internal Revenue Service and state and local departments of revenue.

(C) Foreign Taxes. The Portfolio may be subject to foreign taxes on income and other transaction-based taxes imposed by certain countries in which it invests. A portion of the taxes on gains on investments or currency purchases/repatriation may be reclaimable. The Portfolio will accrue such taxes and reclaims as applicable, based upon its current interpretation of tax rules and regulations that exist in the markets in which it invests.

The Portfolio may be subject to taxation on realized capital gains, repatriation proceeds and other transaction-based taxes imposed by certain countries in which it invests. The Portfolio will accrue such taxes as applicable based upon its current interpretation of tax rules and regulations that exist in the market in which it invests. Capital gains taxes relating to positions still held are reflected as a liability in the Statement of Assets and Liabilities, as well as an adjustment to the Portfolio's net unrealized appreciation (depreciation). Taxes related to capital gains realized, if any, are reflected as part of net realized gain (loss) in the Statement of Operations. Changes in tax liabilities related to capital gains taxes on unrealized investment gains, if any, are reflected as part of the change in net unrealized appreciation (depreciation) on investments in the Statement of Operations. Transaction-based charges are generally assessed as a percentage of the transaction amount.

(D) Dividends and Distributions to Shareholders. Dividends and distributions are recorded on the ex-dividend date. The Portfolio intends to declare and pay dividends from net investment income and distributions from net realized capital and currency gains, if any, at least annually. All dividends and distributions are reinvested at NAV in the same class of shares of the Portfolio. Dividends and distributions to shareholders are determined in accordance with federal income tax regulations and may differ from determinations using GAAP.

(E) Security Transactions and Investment Income. The Portfolio records security transactions on the trade date. Realized gains and losses on security transactions are determined using the identified cost method. Dividend income is recognized on the ex-dividend date, net of any foreign tax withheld at the source, and interest income is accrued as earned using the effective interest rate method. Distributions received from real estate investment trusts may be classified as dividends, capital gains and/or return of capital. Discounts and premiums on securities purchased for the Portfolio are accreted and amortized, respectively, on the effective interest rate method.

(F) Expenses. Expenses of the Fund are allocated to the individual Portfolios in proportion to the net assets of the respective Portfolios when the expenses are incurred, except where direct allocations of expenses can be made. The expenses borne by the Portfolio, including those of related parties to the Portfolio, are shown in the Statement of Operations.

Additionally, the Portfolio may invest in mutual funds, which are subject to management fees and other fees that may cause the costs of investing in mutual funds to be greater than the costs of owning the underlying securities directly. These indirect expenses of mutual funds are not included in the amounts shown as expenses in the Statement of Operations or in the expense ratios included in the Financial Highlights.

(G) Use of Estimates. In preparing financial statements in conformity with GAAP, the Manager makes estimates and assumptions that affect the reported amounts and disclosures in the financial statements. Actual results could differ from those estimates and assumptions.

(H) Foreign Currency Transactions. The Portfolio's books and records are maintained in U.S. dollars. Prices of securities denominated in foreign currency amounts are translated into U.S. dollars at the mean between the buying and selling rates last quoted by any major U.S. bank at the following dates:

- (i) market value of investment securities, other assets and liabilities— at the valuation date; and
- (ii) purchases and sales of investment securities, income and expenses—at the date of such transactions.

The assets and liabilities that are denominated in foreign currency amounts are presented at the exchange rates and market values at the close of the period. The realized and unrealized changes in net assets arising from fluctuations in exchange rates and market prices of securities are not separately presented.

Net realized gain (loss) on foreign currency transactions represents net currency gains or losses realized as a result of differences between the amounts of securities sale proceeds or purchase cost, dividends, interest and withholding taxes as recorded on the Portfolio's books, and the U.S. dollar equivalent amount actually received or paid. Net currency gains or losses from valuing such foreign currency denominated assets and liabilities, other than investments at valuation date exchange rates, are reflected in unrealized foreign exchange gains or losses.

(I) Securities Lending. In order to realize additional income, the Portfolio may engage in securities lending, subject to the limitations set forth in the 1940 Act and relevant guidance by the staff of the Securities and Exchange Commission ("SEC"). If the Portfolio engages in securities lending, the Portfolio will lend through its custodian, JPMorgan Chase Bank, N.A., ("JPMorgan"), acting as securities lending agent on behalf of the Portfolio. Under the current arrangement, JPMorgan will manage the Portfolio's collateral in accordance with the securities lending agency agreement between the Portfolio and JPMorgan, and indemnify the Portfolio against counterparty risk. The loans will be collateralized by cash (which may be invested in a money market fund) and/or non-cash collateral (which may include U.S. Treasury securities and/or U.S. government agency securities issued or guaranteed by the United States government or its agencies or instrumentalities) at least equal at all times to the market value of the securities loaned. Non-cash collateral held at year end is segregated and cannot be transferred by the Portfolio. The

Portfolio bears the risk of delay in recovery of, or loss of rights in, the securities loaned. The Portfolio may also record a realized gain or loss on securities deemed sold due to a borrower's inability to return securities on loan. The Portfolio bears the risk of any loss on investment of cash collateral. The Portfolio will receive compensation for lending its securities in the form of fees or it will retain a portion of interest earned on the investment of any cash collateral. The Portfolio will also continue to receive interest and dividends on the securities loaned and any gain or loss in the market price of the securities loaned that may occur during the term of the loan will be for the account of the Portfolio. Income earned from securities lending activities, if any, is reflected in the Statement of Operations.

(J) Foreign Securities Risk. The Portfolio may invest in foreign securities, which carry certain risks that are in addition to the usual risks inherent in domestic 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 investments in foreign securities. These risks include those resulting from currency fluctuations, future adverse political or economic developments and possible imposition of currency exchange blockages or other foreign governmental laws or restrictions. Economic sanctions and other similar governmental actions or developments could, among other things, effectively restrict or eliminate the Portfolio's ability to purchase or sell certain foreign securities or groups of foreign securities, and thus may make the Portfolio's investments in such securities less liquid or more difficult to value. These risks are likely to be greater in emerging markets than in developed markets. The ability of issuers of debt securities held by the Portfolio to meet their obligations may be affected by, among other things, economic or political developments in a specific country, industry or region.

(K) Indemnifications. Under the Fund's organizational documents, its officers and trustees are indemnified against certain liabilities that may arise out of performance of their duties to the Fund. Additionally, in the normal course of business, the Portfolio enters into contracts with third-party service providers that contain a variety of representations and warranties and that may provide general indemnifications. The Portfolio's maximum exposure under these arrangements is unknown, as this would involve future claims that may be made against the Portfolio that have not yet occurred. The Manager believes that the risk of loss in connection with these potential indemnification obligations is remote. However, there can be no assurance that material liabilities related to such obligations will not arise in the future, which could adversely impact the Portfolio.

Note 3—Fees and Related Party Transactions

(A) Manager and Subadvisor. New York Life Investments, a registered investment adviser and an indirect, wholly-owned subsidiary of New York Life, serves as the Portfolio's Manager, pursuant to an Amended and Restated Management Agreement ("Management Agreement"). The

Notes to Financial Statements (continued)

Manager provides offices, conducts clerical, recordkeeping and bookkeeping services, and keeps most of the financial and accounting records required to be maintained by the Portfolio. Except for the portion of salaries and expenses that are the responsibility of the Portfolio, the Manager pays the salaries and expenses of all personnel affiliated with the Portfolio and certain operational expenses of the Portfolio. The Portfolio reimburses New York Life Investments in an amount equal to the portion of the compensation of the Chief Compliance Officer attributable to the Portfolio. Newton Investment Management North America, LLC ("Newton" or the "Subadvisor"), a registered investment adviser, serves as the Subadvisor to the Portfolio and is responsible for the day-to-day portfolio management of the Portfolio. Pursuant to the terms of a Subadvisory Agreement between New York Life Investments and Newton, New York Life Investments pays for the services of the Subadvisor.

Pursuant to the Management Agreement, the Fund pays the Manager, on behalf of the Portfolio, a monthly fee for the services performed and the facilities furnished at an annual rate of the Portfolio's average daily net assets as follows: 0.79% up to \$1 billion; and 0.78% in excess of \$1 billion. During the year ended December 31, 2023, the effective management fee rate was 0.79% of the Portfolio's average daily net assets.

During the year ended December 31, 2023, New York Life Investments earned fees from the Portfolio in the amount of \$2,886,962 and paid the Subadvisor fees in the amount of \$1,321,315.

JPMorgan provides sub-administration and sub-accounting services to the Portfolio pursuant to an agreement with New York Life Investments. These services include calculating the daily NAVs of the Portfolio, maintaining the general ledger and sub-ledger accounts for the calculation of the Portfolio's NAVs, and assisting New York Life Investments in conducting various aspects of the Portfolio's administrative operations. For providing these services to the Portfolio, JPMorgan is compensated by New York Life Investments.

Pursuant to an agreement between the Fund and New York Life Investments, New York Life Investments is responsible for providing or procuring certain regulatory reporting services for the Portfolio. The Portfolio will reimburse New York Life Investments for the actual costs incurred by New York Life Investments in connection with providing or procuring these services for the Portfolio.

Note 4-Federal Income Tax

As of December 31, 2023, the cost and unrealized appreciation (depreciation) of the Portfolio's investment portfolio, including applicable derivative contracts and other financial instruments, as determined on a federal income tax basis, were as follows:

	Federal Tax Cost	Gross Unrealized Appreciation	Gross Unrealized (Depreciation)	Net Unrealized Appreciation/ (Depreciation)
Investments in Securities	\$322,566,870	\$45,084,838	\$(19,647,050)	\$25,437,788

As of December 31, 2023, the components of accumulated gain (loss) on a tax basis were as follows:

Ordinary Income	Accumulated Capital and Other Gain (Loss)	Other Temporary Differences	Unrealized Appreciation (Depreciation)	Total Accumulated Gain (Loss)
\$8,439,500	\$(40,362,591)	\$—	\$25,446,786	\$(6,476,305)

The difference between book-basis and tax-basis unrealized appreciation (depreciation) is primarily due to wash sale and Passive Foreign Investment Company ("PFIC") adjustments.

As of December 31, 2023, for federal income tax purposes, capital loss carryforwards of \$40,362,591, as shown in the table below, were available to the extent provided by the regulations to offset future realized gains of the Portfolio. Accordingly, no capital gains distributions are expected to be paid to shareholders until net gains have been realized in excess of such amounts.

Capital Loss Available Through	Short-Term Capital Loss Amounts (000's)	Long-Term Capital Loss Amounts (000's)
Unlimited	\$21,667	\$18,695

The Portfolio utilized \$38,902,835 of capital loss carryforwards during the year ended December 31, 2023.

During the years ended December 31, 2023 and December 31, 2022, the tax character of distributions paid as reflected in the Statements of Changes in Net Assets was as follows:

	2023	2022
Distributions paid from:		
Ordinary Income	\$7,514,547	\$4,193,860

Note 5-Custodian

JPMorgan is the custodian of cash and securities held by the Portfolio. Custodial fees are charged to the Portfolio based on the Portfolio's net assets and/or the market value of securities held by the Portfolio and the number of certain transactions incurred by the Portfolio.

Note 6—Line of Credit

The Portfolio and certain other funds managed by New York Life Investments maintain a line of credit with a syndicate of banks in order to secure a source of funds for temporary purposes to meet unanticipated or excessive redemption requests.

Effective July 25, 2023, under the credit agreement (the "Credit Agreement"), the aggregate commitment amount is \$600,000,000 with an additional uncommitted amount of \$100,000,000. The commitment fee is an annual rate of 0.15% of the average commitment amount payable quarterly, regardless of usage, to JPMorgan, who serves as the agent to the syndicate. The commitment fee is allocated among the Portfolio and certain other funds managed by New York Life Investments based upon their respective net assets and other factors. Interest on any revolving credit loan is charged based upon the Federal Funds Rate, Daily Simple Secured Overnight Financing Rate ("SOFR") + 0.10%, or the Overnight Bank Funding Rate, whichever is higher. The Credit Agreement expires on July 23, 2024, although the Portfolio, certain other funds managed by New York Life Investments and the syndicate of banks may renew the Credit Agreement for an additional year on the same or different terms or enter into a credit agreement with a different syndicate of banks. Prior to July 25, 2023, the aggregate commitment amount and the commitment fee were the same as those under the current Credit Agreement. During the year ended December 31, 2023, there were no borrowings made or outstanding with respect to the Portfolio under the Credit Agreement.

Note 7—Interfund Lending Program

Pursuant to an exemptive order issued by the SEC, the Portfolio, along with certain other funds managed by New York Life Investments, may participate in an interfund lending program. The interfund lending program provides an alternative credit facility that permits the Portfolio and certain other funds managed by New York Life Investments to lend or borrow money for temporary purposes directly to or from one another, subject to the conditions of the exemptive order. During the year ended December 31, 2023, there were no interfund loans made or outstanding with respect to the Portfolio.

Note 8—Purchases and Sales of Securities (in 000's)

During the year ended December 31, 2023, purchases and sales of securities, other than short-term securities, were \$307,520 and \$368,317, respectively.

Note 9—Capital Share Transactions

Transactions in capital shares for the years ended December 31, 2023 and December 31, 2022, were as follows:

Initial Class	Shares	Amount
Year ended December 31, 2023:		
Shares sold	3,386,394	\$ 40,152,127
Shares issued to shareholders in reinvestment of distributions	620,463	7,514,547
Shares redeemed	(8,887,032)	(107,337,171)
Net increase (decrease)	(4,880,175)	\$ (59,670,497)
Year ended December 31, 2022:		
Shares sold	10,407,226	\$ 117,317,650
Shares issued to shareholders in reinvestment of distributions	365,214	4,193,860
Shares redeemed	(10,531,284)	(120,252,694)
Net increase (decrease)	241,156	\$ 1,258,816

Note 10—Other Matters

As of the date of this report, the Portfolio faces a heightened level of risk associated with current uncertainty, volatility and state of economies, financial markets, rising interest rates, and labor and health conditions around the world. Events such as war, acts of terrorism, recessions, rapid inflation, the imposition of international sanctions, earthquakes, hurricanes, epidemics and pandemics and other unforeseen natural or human disasters may have broad adverse social, political and economic effects on the global economy, which could negatively impact the value of the Portfolio's investments. Developments that disrupt global economies and financial markets may magnify factors that affect the Portfolio's performance.

Note 11—Subsequent Events

In connection with the preparation of the financial statements of the Portfolio as of and for the year ended December 31, 2023, events and transactions subsequent to December 31, 2023, through the date the financial statements were issued, have been evaluated by the Manager for possible adjustment and/or disclosure. No subsequent events requiring financial statement adjustment or disclosure have been identified.

Report of Independent Registered Public Accounting Firm

To the Board of Trustees of MainStay VP Funds Trust and Shareholders of MainStay VP Natural Resources Portfolio

Opinion on the Financial Statements

We have audited the accompanying statement of assets and liabilities, including the portfolio of investments, of MainStay VP Natural Resources Portfolio (one of the portfolios constituting MainStay VP Funds Trust, referred to hereafter as the “Portfolio”) as of December 31, 2023, the related statement of operations for the year ended December 31, 2023, the statements of changes in net assets for each of the two years in the period ended December 31, 2023, including the related notes, and the financial highlights for each of the five years in the period ended December 31, 2023 (collectively referred to as the “financial statements”). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Portfolio as of December 31, 2023, the results of its operations for the year then ended, the changes in its net assets for each of the two years in the period ended December 31, 2023 and the financial highlights for each of the five years in the period ended December 31, 2023 in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Portfolio’s management. Our responsibility is to express an opinion on the Portfolio’s financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Portfolio in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits of these financial statements in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. Our procedures included confirmation of securities owned as of December 31, 2023 by correspondence with the custodian and transfer agents. We believe that our audits provide a reasonable basis for our opinion.

/s/PricewaterhouseCoopers LLP
New York, New York
February 26, 2024

We have served as the auditor of one or more investment companies in the MainStay group of funds since 1984.

Board Consideration and Approval of Management Agreement and Subadvisory Agreement (Unaudited)

The continuation of the Management Agreement with respect to the MainStay VP Natural Resources Portfolio (“Portfolio”) and New York Life Investment Management LLC (“New York Life Investments”) and the Subadvisory Agreement between New York Life Investments and Newton Investment Management North America, LLC (“Newton”) with respect to the Portfolio (together, “Advisory Agreements”) is subject to annual review and approval by the Board of Trustees of MainStay VP Funds Trust (“Board” of the “Trust”) in accordance with Section 15 of the Investment Company Act of 1940, as amended (“1940 Act”). At its December 6–7, 2023 meeting, the Board, including the Trustees who are not an “interested person” (as such term is defined in the 1940 Act) of the Trust (“Independent Trustees”) voting separately, unanimously approved the continuation of each of the Advisory Agreements for a one-year period.

In reaching the decision to approve the continuation of each of the Advisory Agreements, the Board considered information and materials furnished by New York Life Investments and Newton in connection with an annual contract review process undertaken by the Board that took place at meetings of the Board and its Contracts Committee from September 2023 through December 2023, including information and materials furnished by New York Life Investments and Newton in response to requests prepared on behalf of the Board, and in consultation with the Independent Trustees, by independent legal counsel to the Independent Trustees, which encompassed a variety of topics, including those summarized below. Information and materials requested by and furnished to the Board for consideration in connection with the contract review process included, among other items, reports on the Portfolio and “peer funds” prepared by Institutional Shareholder Services Inc. (“ISS”), an independent third-party service provider engaged by the Board to report objectively on the Portfolio’s investment performance, management fee and total expenses. The Board also considered information on the fees charged to other investment advisory clients of New York Life Investments and/or Newton that follow investment strategies similar to those of the Portfolio, if any, and, when applicable, the rationale for differences in the Portfolio’s management and subadvisory fees and the fees charged to those other investment advisory clients. In addition, the Board considered information regarding the legal standards and fiduciary obligations applicable to its consideration of the continuation of each of the Advisory Agreements. The contract review process, including the structure and format for information and materials provided to the Board, has been developed in consultation with the Board. The Independent Trustees also met in executive sessions with their independent legal counsel and, for portions thereof, with senior management of New York Life Investments.

The Board’s deliberations with respect to the continuation of each of the Advisory Agreements reflect a year-long process, and the Board also took into account information furnished to the Board and its Committees throughout the year, as deemed relevant and appropriate by the Trustees, including, among other items, reports on investment performance of the Portfolio and investment-related matters for the Portfolio as well as presentations from New York Life Investments and, generally annually, Newton personnel. In addition, the Board took into account other

information provided by New York Life Investments throughout the year, including, among other items, periodic reports on legal and compliance matters, risk management, portfolio turnover, brokerage commissions and non-advisory services provided to the Portfolio by New York Life Investments, as deemed relevant and appropriate by the Trustees.

In addition to information provided to the Board throughout the year, the Board received information in connection with its June 2023 meeting provided specifically in response to requests prepared on behalf of the Board, and in consultation with the Independent Trustees, by independent legal counsel to the Independent Trustees regarding the Portfolio’s distribution arrangements. In addition, the Board received information regarding the Portfolio’s asset levels and share purchase and redemption activity, among other information.

In considering the continuation of each of the Advisory Agreements, the Trustees reviewed and evaluated the information and factors they believed to reasonably be necessary and appropriate in light of legal advice furnished to them by independent legal counsel to the Independent Trustees and through the exercise of their own business judgment. Although individual Trustees may have weighed certain factors or information differently and the Board did not consider any single factor or information controlling in reaching its decision, the factors that figured prominently in the Board’s consideration of the continuation of each of the Advisory Agreements are summarized in more detail below and include, among other factors: (i) the nature, extent and quality of the services provided to the Portfolio by New York Life Investments and Newton; (ii) the qualifications of the portfolio managers of the Portfolio and the historical investment performance of the Portfolio, New York Life Investments and Newton; (iii) the costs of the services provided, and profits realized, by New York Life Investments and Newton with respect to their relationships with the Portfolio; (iv) the extent to which economies of scale have been realized or may be realized if the Portfolio grows and the extent to which any economies of scale have been shared, have benefited or may benefit the Portfolio’s shareholders; and (v) the reasonableness of the Portfolio’s management and subadvisory fees and total ordinary operating expenses. Although the Board recognized that comparisons between the Portfolio’s fees and expenses and those of other funds are imprecise given different terms of agreements, variations in fund strategies and other factors, the Board considered the reasonableness of the Portfolio’s management fee and total ordinary operating expenses as compared to the peer funds identified by ISS. Throughout their considerations, the Trustees acknowledged the commitment of New York Life Investments and its affiliates to serve the MainStay Group of Funds, as well as their capacity, experience, resources, financial stability and reputations. The Trustees also acknowledged the entrepreneurial and other risks assumed by New York Life Investments in sponsoring and managing the Portfolio. With respect to the Subadvisory Agreement, the Board took into account New York Life Investments’ recommendation to approve the continuation of the Subadvisory Agreement.

The Trustees noted that, throughout the year, the Trustees are afforded an opportunity to ask questions of, and request additional information or materials from, New York Life Investments and Newton. The Board’s

Board Consideration and Approval of Management Agreement and Subadvisory Agreement (Unaudited) (continued)

decision with respect to each of the Advisory Agreements may have also been based, in part, on the Board's knowledge of New York Life Investments and Newton resulting from, among other things, the Board's consideration of each of the Advisory Agreements in prior years, the advisory agreements for other funds in the MainStay Group of Funds, the Board's review throughout the year of the performance and operations of other funds in the MainStay Group of Funds and each Trustee's business judgment and industry experience. In addition to considering the above-referenced factors, the Board observed that in the marketplace, notably under variable life insurance policies and variable annuity contracts for which the Portfolio serves as an investment option, there are a range of investment options available to investors and that the Portfolio's shareholders, having had the opportunity to consider other investment options, have invested in the Portfolio.

The factors that figured prominently in the Board's decision to approve the continuation of each of the Advisory Agreements during the Board's December 6–7, 2023 meeting are summarized in more detail below.

Nature, Extent and Quality of Services Provided by New York Life Investments and Newton

The Board examined the nature, extent and quality of the services that New York Life Investments provides to the Portfolio. The Board evaluated New York Life Investments' experience and capabilities in serving as manager of the Portfolio and considered that the Portfolio operates in a "manager-of-managers" structure. The Board also considered New York Life Investments' responsibilities and services provided pursuant to this structure, including overseeing the services provided by Newton, evaluating the performance of Newton, making recommendations to the Board as to whether the Subadvisory Agreement should be renewed, modified or terminated and periodically reporting to the Board regarding the results of New York Life Investments' evaluation and monitoring functions. The Board noted that New York Life Investments manages other mutual funds, serves a variety of other investment advisory clients, including other pooled investment vehicles, and has experience overseeing mutual fund service providers, including subadvisors. The Board considered the experience of senior personnel at New York Life Investments providing management and administrative and other non-advisory services to the Portfolio. The Board observed that New York Life Investments devotes significant resources and time to providing management and administrative and other non-advisory services to the Portfolio, including New York Life Investments' oversight and due diligence reviews of Newton and ongoing analysis of, and interactions with, Newton with respect to, among other things, the Portfolio's investment performance and risks as well as Newton's investment capabilities and subadvisory services with respect to the Portfolio.

The Board also considered the range of services that New York Life Investments provides to the Portfolio under the terms of the Management Agreement, including: (i) fund accounting and ongoing supervisory services provided by New York Life Investments' Fund Administration and Accounting Group; (ii) investment supervisory and analytical services provided by New York Life Investments' Investment Consulting Group; (iii)

compliance services provided by the Trust's Chief Compliance Officer as well as New York Life Investments' compliance department, including supervision and implementation of the Portfolio's compliance program; (iv) legal services provided by New York Life Investments' Office of the General Counsel; and (v) risk management monitoring and analysis by compliance and investment personnel. In addition, the Board considered New York Life Investments' willingness to invest in personnel and other resources, such as cyber security, information security and business continuity planning, that may benefit the Portfolio and noted that New York Life Investments is responsible for compensating the Trust's officers, except for a portion of the salary of the Trust's Chief Compliance Officer. The Board recognized that New York Life Investments provides certain other non-advisory services to the Portfolio and has over time provided an increasingly broad array of non-advisory services to the MainStay Group of Funds as a result of regulatory and other developments.

The Board also examined the range, and the nature, extent and quality, of the investment advisory services that Newton provides to the Portfolio and considered the terms of each of the Advisory Agreements. The Board evaluated Newton's experience and performance in serving as subadvisor to the Portfolio and advising other portfolios and Newton's track record and experience in providing investment advisory services as well as the experience of investment advisory, senior management and administrative personnel at Newton. The Board considered New York Life Investments' and Newton's overall resources, legal and compliance environment, capabilities, reputation, financial condition and history. In addition to information provided in connection with quarterly meetings with the Trust's Chief Compliance Officer, the Board considered information regarding the compliance policies and procedures of New York Life Investments and Newton and acknowledged their commitment to further developing and strengthening compliance programs that may relate to the Portfolio. The Board also considered Newton's ability to recruit and retain qualified investment professionals and willingness to invest in personnel and other resources that may benefit the Portfolio. In this regard, the Board considered the qualifications and experience of the Portfolio's portfolio managers, the number of accounts managed by the portfolio managers and the method for compensating the portfolio managers.

In addition, the Board considered information provided by New York Life Investments and Newton regarding their respective business continuity and disaster recovery plans.

Based on these considerations, among others, the Board concluded that the Portfolio would likely continue to benefit from the nature, extent and quality of these services.

Investment Performance

In evaluating the Portfolio's investment performance, the Board considered investment performance results over various periods in light of the Portfolio's investment objective, strategies and risks. The Board considered investment reports on, and analysis of, the Portfolio's performance provided to the Board throughout the year. These reports include, among other items, information on the Portfolio's gross and net

returns, the Portfolio's investment performance compared to a relevant investment category and the Portfolio's benchmark, the Portfolio's risk-adjusted investment performance and the Portfolio's investment performance as compared to peer funds, as appropriate, as well as portfolio attribution information and commentary on the effect of market conditions. The Board also considered information provided by ISS showing the investment performance of the Portfolio as compared to peer funds. In addition, the Board reviewed the methodology used by ISS to construct the group of peer funds for comparative purposes.

The Board also took into account its discussions with senior management at New York Life Investments concerning the Portfolio's investment performance over various periods as well as discussions between representatives of Newton and the members of the Board's Investment Committee, which generally occur on an annual basis.

Based on these considerations, among others, the Board concluded that its review of the Portfolio's investment performance and related information supported a determination to approve the continuation of each of the Advisory Agreements.

Costs of the Services Provided, and Profits and Other Benefits Realized, by New York Life Investments and Newton

The Board considered the costs of the services provided under each of the Advisory Agreements. The Board also considered the profitability of New York Life Investments and its affiliates and Newton due to their relationships with the Portfolio as well as by New York Life Investments and its affiliates due to their relationships with the MainStay Group of Funds. With respect to the profitability of Newton's relationship with the Portfolio, the Board considered information from New York Life Investments that Newton's subadvisory fee reflected an arm's-length negotiation and that this fee is paid by New York Life Investments, not the Portfolio, and the relevance of Newton's profitability was considered by the Trustees in that context. On this basis, the Board primarily considered the costs and profitability for New York Life Investments and its affiliates with respect to the Portfolio.

In addition, the Board acknowledged the difficulty in obtaining reliable comparative data about mutual fund managers' profitability because such information generally is not publicly available and may be impacted by numerous factors, including the structure of a fund manager's organization, the types of funds it manages, the methodology used to allocate certain fixed costs to specific funds and the manager's capital structure and costs of capital.

In evaluating the costs of the services provided by New York Life Investments and Newton, and profitability of New York Life Investments and its affiliates and Newton due to their relationships with the Portfolio, the Board considered, among other factors, New York Life Investments' and its affiliates' and Newton's continuing investments in, or willingness to invest in, personnel and other resources that may support and further enhance the management of the Portfolio, and that New York Life Investments is responsible for paying the subadvisory fee for the Portfolio. The Board also considered the financial resources of New York

Life Investments and Newton and acknowledged that New York Life Investments and Newton must be in a position to recruit and retain experienced professional personnel and to maintain a strong financial position for New York Life Investments and Newton to continue to provide high-quality services to the Portfolio. The Board recognized that the Portfolio benefits from the allocation of certain fixed costs among the funds in the MainStay Group of Funds, among other expected benefits resulting from its relationship with New York Life Investments.

The Board considered information regarding New York Life Investments' methodology for calculating profitability and allocating costs provided by New York Life Investments in connection with the fund profitability analysis presented to the Board. The Board concluded that New York Life Investments' methods for allocating costs and procedures for estimating overall profitability of the relationship with the funds in the MainStay Group of Funds were reasonable. The Board recognized the difficulty in calculating and evaluating a manager's profitability with respect to the Portfolio and considered that other profitability methodologies may also be reasonable.

The Board also considered certain fall-out benefits that may be realized by New York Life Investments and its affiliates and Newton and its affiliates due to their relationships with the Portfolio, including reputational and other indirect benefits. The Board recognized, for example, the benefits to Newton from legally permitted "soft-dollar" arrangements by which brokers provide research and other services to Newton in exchange for commissions paid by the Portfolio with respect to trades in the Portfolio's portfolio securities. In this regard, the Board also requested and considered information from New York Life Investments concerning other material business relationships between Newton and its affiliates and New York Life Investments and its affiliates that relates to certain current and future products and represents a potential conflict of interest associated with New York Life Investments' recommendation to approve the Subadvisory Agreement. In addition, the Board considered its review of the management agreement for a money market fund advised by New York Life Investments and an affiliated subadvisor that serves as an investment option for the Portfolio, including the potential rationale for and costs associated with investments in this money market fund by the Portfolio, if any, and considered information from New York Life Investments that the nature and type of specific investment advisory services provided to this money market fund are distinct from, or in addition to, the investment advisory services provided to the Portfolio. In addition, the Board considered the potential dividend received tax deduction for insurance company affiliates of New York Life Investments from the Portfolio's securities lending activity.

The Board noted that the Portfolio serves as an investment option primarily under variable contracts issued by affiliates of New York Life Investments that would receive fees under those contracts. The Board observed that, in addition to fees earned by New York Life Investments under the Management Agreement for managing the Portfolio, New York Life Investments' affiliates also earn revenues from serving the Portfolio in various other capacities. The Board considered information about these other revenues and their impact on the profitability of the relationship with

Board Consideration and Approval of Management Agreement and Subadvisory Agreement (Unaudited) (continued)

the Portfolio to New York Life Investments and its affiliates. The Board noted that, although it assessed the overall profitability of the relationship with the Portfolio to New York Life Investments and its affiliates as part of the contract review process, when considering the reasonableness of the fee paid to New York Life Investments under the Management Agreement, the Board considered the profitability of New York Life Investments' relationship with the Portfolio on a pre-tax basis and without regard to distribution expenses incurred by New York Life Investments from its own resources.

After evaluating the information deemed relevant by the Trustees, the Board concluded that any profits realized by New York Life Investments and its affiliates due to their relationships with the Portfolio were not excessive, other expected benefits that may accrue to New York Life Investments and its affiliates are reasonable and other expected benefits that may accrue to Newton and its affiliates are consistent with those expected for a subadvisor to a mutual fund. With respect to Newton, the Board considered that any profits realized by Newton due to its relationship with the Portfolio are the result of arm's-length negotiations between New York Life Investments and Newton, acknowledging that any such profits are based on the subadvisory fee paid to Newton by New York Life Investments, not the Portfolio.

Management and Subadvisory Fees and Total Ordinary Operating Expenses

The Board evaluated the reasonableness of the fee paid under each of the Advisory Agreements and the Portfolio's total ordinary operating expenses. With respect to the management fee and subadvisory fee, the Board primarily considered the reasonableness of the management fee paid by the Portfolio to New York Life Investments because the subadvisory fee paid to Newton is paid by New York Life Investments, not the Portfolio. The Board also considered the reasonableness of the subadvisory fee paid by New York Life Investments and the amount of the management fee retained by New York Life Investments.

In assessing the reasonableness of the Portfolio's fees and expenses, the Board primarily considered comparative data provided by ISS on the fees and expenses of similar mutual funds managed by other investment advisers. The Board reviewed the methodology used by ISS to construct the group of peer funds for comparative purposes. In addition, the Board considered information provided by New York Life Investments and Newton on fees charged to other investment advisory clients, including institutional separate accounts and/or other funds, that follow investment strategies similar to those of the Portfolio, if any. The Board considered the contractual management fee schedule for the Portfolio as compared to those for such other investment advisory clients, taking into account the rationale for differences in fee schedules. The Board also took into account information provided by New York Life Investments about the more extensive scope of services provided to registered investment companies, such as the Portfolio, as compared with other investment advisory clients. Additionally, the Board considered the impact of contractual breakpoints and voluntary waivers on the Portfolio's net

management fee and expenses. The Board also considered that in proposing fees for the Portfolio, New York Life Investments considers the competitive marketplace for mutual funds.

Based on the factors outlined above, among other considerations, the Board concluded that the Portfolio's management fee and total ordinary operating expenses are within a range that is competitive and support a conclusion that these fees and expenses are reasonable.

Economies of Scale

The Board considered information regarding economies of scale, including whether economies of scale may exist with respect to the Portfolio and whether the Portfolio's management fee and expense structure permits any economies of scale to be appropriately shared with the Portfolio's shareholders. The Board also considered a report from New York Life Investments, previously prepared at the request of the Board, that addressed economies of scale, including with respect to the mutual fund business generally, and the various ways in which the benefits of economies of scale may be shared with the funds in the MainStay Group of Funds. Although the Board recognized the difficulty of determining economies of scale with precision, the Board acknowledged that economies of scale may be shared with the Portfolio in a number of ways, including, for example, through the imposition of fee breakpoints, initially setting management fee rates at scale or making additional investments to enhance the services provided to the Portfolio. The Board reviewed information from New York Life Investments showing how the Portfolio's management fee schedule compared to fee schedules of other funds and accounts managed by New York Life Investments. The Board also reviewed information from ISS showing how the Portfolio's management fee schedule compared with fees paid for similar services by peer funds at varying asset levels.

Based on this information, the Board concluded that economies of scale are appropriately shared for the benefit of the Portfolio's shareholders through the Portfolio's management fee and expense structure and other methods to share benefits from economies of scale.

Conclusion

On the basis of the information and factors summarized above, among other information and factors deemed relevant by the Trustees, and the evaluation thereof, the Board, including the Independent Trustees voting separately, unanimously voted to approve the continuation of each of the Advisory Agreements.

Proxy Voting Policies and Procedures and Proxy Voting Record

The Portfolio is required to file with the SEC its proxy voting record for the 12-month period ending June 30 on Form N-PX. A description of the policies and procedures that are used to vote proxies relating to portfolio securities of the Portfolio is available free of charge upon request by calling 800-598-2019 or visiting the SEC's website at www.sec.gov. The most recent Form N-PX or proxy voting record is available free of charge upon request by calling 800-598-2019; visiting <https://www.newyorklifeinvestments.com/investment-products/vp>; or visiting the SEC's website at www.sec.gov.

Shareholder Reports and Quarterly Portfolio Disclosure

The Portfolio is required to file its complete schedule of portfolio holdings with the SEC 60 days after its first and third fiscal quarter on Form N-PORT. The Portfolio's holdings report is available free of charge upon request by calling 800-598-2019 or by visiting the SEC's website at www.sec.gov.

Board of Trustees and Officers (Unaudited)

The Trustees and officers of the Portfolio are listed below. The Board oversees the MainStay Group of Funds (which consists of MainStay Funds and MainStay Funds Trust), MainStay VP Funds Trust, MainStay MacKay DefinedTerm Municipal Opportunities Fund, MainStay CBRE Global Infrastructure Megatrends Term Fund, the Manager and the Subadvisors, and elects the officers of the Portfolios who are responsible for the day-to-day operations of the Portfolio. Information pertaining to the Trustees and officers is set forth below. Each Trustee serves until his or her successor is elected and qualified or until his or her resignation,

death or removal. Under the Board's retirement policy, unless an exception is made, a Trustee must tender his or her resignation by the end of the calendar year during which he or she reaches the age of 75. Officers are elected annually by the Board. The business address of each Trustee and officer listed below is 51 Madison Avenue, New York, New York 10010. A majority of the Trustees are not "interested persons" (as defined by the 1940 Act and rules adopted by the SEC thereunder) of the Portfolio ("Independent Trustees").

	Name and Year of Birth	Term of Office, Position(s) Held and Length of Service	Principal Occupation(s) During Past Five Years	Number of Portfolios in Fund Complex Overseen by Trustee	Other Directorships Held by Trustee
Interested Trustee	Naïm Abou-Jaoudé* 1966	MainStay VP Funds Trust: Trustee since 2023	Chief Executive Officer of New York Life Investment Management LLC (since 2023). Chief Executive Officer of Candriam (an affiliate of New York Life Investment Management LLC) (2007 to 2023).	81	<i>MainStay Funds</i> : Trustee since 2023 (11 Funds) <i>MainStay Funds Trust</i> : Trustee since 2023 (37 Funds); <i>MainStay MacKay DefinedTerm Municipal Opportunities Fund</i> : Trustee since 2023; <i>MainStay CBRE Global Infrastructure Megatrends Term Fund</i> : Trustee since 2023; and <i>New York Life Investment Management International</i> (Chair) since 2015

* This Trustee is considered to be an "interested person" of the MainStay Group of Funds, MainStay VP Funds Trust, MainStay CBRE Global Infrastructure Megatrends Term Fund and MainStay MacKay DefinedTerm Municipal Opportunities Fund, within the meaning of the 1940 Act because of his affiliation with New York Life Investment Management LLC and Candriam, as described in detail above in the column entitled "Principal Occupation(s) During Past Five Years."

Independent Trustees

Name and Year of Birth	Term of Office, Position(s) Held and Length of Service	Principal Occupation(s) During Past Five Years	Number of Portfolios in Fund Complex Overseen by Trustee	Other Directorships Held by Trustee
David H. Chow 1957	MainStay VP Funds Trust: Trustee since January 2016, Advisory Board Member (June 2015 to December 2015)	Founder and CEO, DanCourt Management, LLC since 1999	81	<i>MainStay Funds:</i> Trustee since January 2016, Advisory Board Member (June 2015 to December 2015) (11 Funds); <i>MainStay Funds Trust:</i> Trustee since January 2016, Advisory Board Member (June 2015 to December 2015) (37 Funds); <i>MainStay MacKay DefinedTerm Municipal Opportunities Fund:</i> Trustee since January 2016, Advisory Board Member (June 2015 to December 2015); <i>MainStay CBRE Global Infrastructure Megatrends Term Fund:</i> Trustee since 2021; <i>VanEck Vectors Group of Exchange-Traded Funds:</i> Trustee since 2006 and Independent Chairman of the Board of Trustees from 2008 to 2022 (57 portfolios); and <i>Berea College of Kentucky:</i> Trustee since 2009, Chair of the Investment Committee since 2018
Karen Hammond 1956	MainStay VP Funds Trust: Trustee since December 2021, Advisory Board Member (June 2021 to December 2021)	Retired, Managing Director, Devonshire Investors (2007 to 2013); Senior Vice President, Fidelity Management & Research Co. (2005 to 2007); Senior Vice President and Corporate Treasurer, FMR Corp. (2003 to 2005); Chief Operating Officer, Fidelity Investments Japan (2001 to 2003)	81	<i>MainStay Funds:</i> Trustee since December 2021, Advisory Board Member (June 2021 to December 2021) (11 Funds); <i>MainStay Funds Trust:</i> Trustee since December 2021, Advisory Board Member (June 2021 to December 2021) (37 Funds); <i>MainStay MacKay DefinedTerm Municipal Opportunities Fund:</i> Trustee since December 2021, Advisory Board Member (June 2021 to December 2021); <i>MainStay CBRE Global Infrastructure Megatrends Term Fund:</i> Trustee since December 2021, Advisory Board Member (June 2021 to December 2021); <i>Two Harbors Investment Corp.:</i> Director since 2018; <i>Rhode Island State Investment Commission:</i> Member since 2017; and <i>Blue Cross Blue Shield of Rhode Island:</i> Director since 2019
Susan B. Kerley 1951	MainStay VP Funds Trust: Chair since 2017 and Trustee since 2007**	President, Strategic Management Advisors LLC since 1990	81	<i>MainStay Funds:</i> Chair since January 2017 and Trustee since 2007 (11 Funds); <i>MainStay Funds Trust:</i> Chair since January 2017 and Trustee since 1990 (37 Funds)***; <i>MainStay MacKay DefinedTerm Municipal Opportunities Fund:</i> Chair since January 2017 and Trustee since 2011; <i>MainStay CBRE Global Infrastructure Megatrends Term Fund:</i> Trustee since June 2021; and <i>Legg Mason Partners Funds:</i> Trustee since 1991 (45 portfolios)

Board of Trustees and Officers (Unaudited) (continued)

	Name and Year of Birth	Term of Office, Position(s) Held and Length of Service	Principal Occupation(s) During Past Five Years	Number of Portfolios in Fund Complex Overseen by Trustee	Other Directorships Held by Trustee
Independent Trustees	Alan R. Latshaw 1951	MainStay VP Funds Trust: Trustee since 2007**	Retired; Partner, Ernst & Young LLP (2002 to 2003); Partner, Arthur Andersen LLP (1989 to 2002); Consultant to the MainStay Funds Audit and Compliance Committee (2004 to 2006)	81	<i>MainStay Funds</i> : Trustee since 2006 (11 Funds); <i>MainStay Funds Trust</i> : Trustee since 2007 (37 Funds)***; <i>MainStay MacKay DefinedTerm Municipal Opportunities Fund</i> : Trustee since 2011; and <i>MainStay CBRE Global Infrastructure Megatrends Term Fund</i> : Trustee since June 2021
	Jacques P. Perold 1958	MainStay VP Funds Trust: Trustee since January 2016, Advisory Board Member (June 2015 to December 2015)	Founder and Chief Executive Officer, CapShift Advisors LLC (since 2018); President, Fidelity Management & Research Company (2009 to 2014); President and Chief Investment Officer, Geode Capital Management, LLC (2001 to 2009)	81	<i>MainStay Funds</i> : Trustee since January 2016, Advisory Board Member (June 2015 to December 2015) (11 Funds); <i>MainStay Funds Trust</i> : Trustee since January 2016, Advisory Board Member (June 2015 to December 2015) (37 Funds); <i>MainStay MacKay DefinedTerm Municipal Opportunities Fund</i> : Trustee since January 2016, Advisory Board Member (June 2015 to December 2015); <i>MainStay CBRE Global Infrastructure Megatrends Term Fund</i> : Trustee since June 2021; <i>Allstate Corporation</i> : Director since 2015; <i>Partners in Health</i> : Trustee since 2019; and <i>MSCI Inc.</i> : Director since 2017
	Richard S. Trutanic 1952	MainStay VP Funds Trust: Trustee since 2007**	Chairman and Chief Executive Officer, Somerset & Company (financial advisory firm) since 2004; Managing Director, The Carlyle Group (private investment firm) (2002 to 2004); Senior Managing Director, Partner and Board Member, Groupe Arnault S.A. (private investment firm) (1999 to 2002)	81	<i>MainStay Funds</i> : Trustee since 1994 (11 Funds); <i>MainStay Funds Trust</i> : Trustee since 2007 (37 Funds)***; <i>MainStay MacKay DefinedTerm Municipal Opportunities Fund</i> : Trustee since 2011; and <i>MainStay CBRE Global Infrastructure Megatrends Term Fund</i> : Trustee since June 2021

** Includes prior service as a Director of MainStay VP Series Fund, Inc., the predecessor to MainStay VP Funds Trust.

*** Includes prior service as a Director/Trustee of certain predecessor entities to MainStay Funds Trust.

Officers of the Trust (Who are not Trustees)*

Name and Year of Birth	Position(s) Held and Length of Service	Principal Occupation(s) During Past Five Years
Kirk C. Lehneis 1974	President, MainStay VP Funds Trust (since 2017)	Chief Operating Officer and Senior Managing Director (since 2016), New York Life Investment Management LLC and New York Life Investment Management Holdings LLC; Member of the Board of Managers (since 2017) and Senior Managing Director (since 2018), NYLIFE Distributors LLC; Chairman of the Board and Senior Managing Director, NYLIM Service Company LLC (since 2017); Trustee, President and Principal Executive Officer of IndexIQ Trust, IndexIQ ETF Trust and IndexIQ Active ETF Trust (since 2018); President, MainStay CBRE Global Infrastructure Megatrends Term Fund (since 2021), MainStay MacKay DefinedTerm Municipal Opportunities Fund, MainStay Funds and MainStay Funds Trust (since 2017); Senior Managing Director, Global Product Development (from 2015 to 2016); Managing Director, Product Development (from 2010 to 2015), New York Life Investment Management LLC
Jack R. Benintende 1964	Treasurer and Principal Financial and Accounting Officer, MainStay VP Funds Trust (since 2007)**	Managing Director, New York Life Investment Management LLC (since 2007); Treasurer and Principal Financial and Accounting Officer, MainStay CBRE Global Infrastructure Megatrends Term Fund (since 2021), MainStay MacKay DefinedTerm Municipal Opportunities Fund (since 2011), MainStay Funds Trust (since 2009) and MainStay Funds (since 2007); and Assistant Treasurer, New York Life Investment Management Holdings LLC (2008 to 2012)
J. Kevin Gao 1967	Secretary and Chief Legal Officer, MainStay VP Funds Trust (since 2010)**	Managing Director and Associate General Counsel, New York Life Investment Management LLC (since 2010); Secretary and Chief Legal Officer, MainStay CBRE Global Infrastructure Megatrends Term Fund (since 2021), MainStay MacKay DefinedTerm Municipal Opportunities Fund (since 2011), MainStay Funds and MainStay Funds Trust (since 2010)
Kevin M. Gleason 1967	Vice President and Chief Compliance Officer, MainStay VP Funds Trust (since June 2022)	Vice President and Chief Compliance Officer, IndexIQ Trust, IndexIQ ETF Trust and IndexIQ Active ETF Trust (since June 2022); Vice President and Chief Compliance Officer, MainStay CBRE Global Infrastructure Megatrends Term Fund, MainStay MacKay DefinedTerm Municipal Opportunities Fund (since June 2022); MainStay Funds Trust and MainStay Funds (since June 2022); Senior Vice President, Voya Investment Management and Chief Compliance Officer, Voya Family of Funds (2012 to 2022)
Scott T. Harrington 1959	Vice President—Administration, MainStay VP Funds Trust (since 2005)**	Managing Director, New York Life Investment Management LLC (including predecessor advisory organizations) (since 2000); Member of the Board of Directors, New York Life Trust Company (since 2009); Vice President—Administration, MainStay CBRE Global Infrastructure Megatrends Term Fund (since 2021), MainStay MacKay DefinedTerm Municipal Opportunities Fund (since 2011), MainStay Funds Trust and MainStay Funds (since 2009)

* The officers listed above are considered to be “interested persons” of the MainStay Group of Funds, MainStay VP Funds Trust, MainStay CBRE Global Infrastructure Megatrends Term Fund and MainStay MacKay DefinedTerm Municipal Opportunities Fund within the meaning of the 1940 Act because of their affiliation with the MainStay Group of Funds, New York Life Insurance Company and/or its affiliates, including New York Life Investment Management LLC, New York Life Insurance Company, NYLIM Service Company LLC, NYLIFE Securities LLC and/or NYLIFE Distributors LLC, as described in detail in the column captioned “Principal Occupation(s) During Past Five Years.” Officers are elected annually by the Board.

** Includes prior service as an Officer of MainStay VP Series Fund, Inc., the predecessor to MainStay VP Funds Trust.

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MainStay VP Portfolios

MainStay VP offers a wide range of Portfolios. The full array of MainStay VP offerings is listed here, with information about the manager, subadvisors, legal counsel, and independent registered public accounting firm.

Equity

MainStay VP American Century Sustainable Equity Portfolio
MainStay VP Candriam Emerging Markets Equity Portfolio
MainStay VP Epoch U.S. Equity Yield Portfolio
MainStay VP Fidelity Institutional AM[®] Utilities Portfolio[†]
MainStay VP Natural Resources Portfolio
MainStay VP PineStone International Equity Portfolio¹
MainStay VP S&P 500 Index Portfolio
MainStay VP Small Cap Growth Portfolio
MainStay VP Wellington Growth Portfolio
MainStay VP Wellington Mid Cap Portfolio
MainStay VP Wellington Small Cap Portfolio
MainStay VP Wellington U.S. Equity Portfolio
MainStay VP Winslow Large Cap Growth Portfolio

Mixed Asset

MainStay VP Balanced Portfolio
MainStay VP Income Builder Portfolio
MainStay VP Janus Henderson Balanced Portfolio
MainStay VP MacKay Convertible Portfolio

Income

MainStay VP Bond Portfolio
MainStay VP Floating Rate Portfolio
MainStay VP Indexed Bond Portfolio
MainStay VP MacKay Government Portfolio²
MainStay VP MacKay High Yield Corporate Bond Portfolio
MainStay VP MacKay Strategic Bond Portfolio
MainStay VP PIMCO Real Return Portfolio

Money Market

MainStay VP U.S. Government Money Market Portfolio

Alternative

MainStay VP CBRE Global Infrastructure Portfolio
MainStay VP IQ Hedge Multi-Strategy Portfolio

Asset Allocation

MainStay VP Conservative Allocation Portfolio
MainStay VP Equity Allocation Portfolio
MainStay VP Growth Allocation Portfolio
MainStay VP Moderate Allocation Portfolio

Manager

New York Life Investment Management LLC
New York, New York

Subadvisors

American Century Investment Management, Inc.
Kansas City, Missouri

Brown Advisory LLC
Baltimore, Maryland

Candriam*
Strassen, Luxembourg

CBRE Investment Management Listed Real Assets LLC
Radnor, Pennsylvania

Epoch Investment Partners, Inc.
New York, New York

FIAM LLC
Smithfield, Rhode Island

IndexIQ Advisors LLC*
New York, New York

Janus Henderson Investors US LLC
Denver, Colorado

MacKay Shields LLC*
New York, New York

Newton Investment Management North America, LLC
Boston, Massachusetts

NYL Investors LLC*
New York, New York

Pacific Investment Management Company LLC
Newport Beach, California

PineStone Asset Management Inc.
Montreal, Québec

Segall Bryant & Hamill, LLC
Chicago, Illinois

Wellington Management Company LLP
Boston, Massachusetts

Winslow Capital Management, LLC
Minneapolis, Minnesota

Legal Counsel

Dechert LLP
Washington, District of Columbia

Independent Registered Public Accounting Firm

PricewaterhouseCoopers LLP
New York, New York

Distributor

NYLIFE Distributors LLC*
Jersey City, New Jersey

Custodian

JPMorgan Chase Bank, N.A.
New York, New York

Some Portfolios may not be available in all products.

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* An affiliate of New York Life Investment Management LLC.

1. Prior to August 28, 2023, the Portfolio's name was MainStay VP MacKay International Equity Portfolio.
2. Effective on or about May 1, 2024, the MainStay VP MacKay Government Portfolio will be renamed the MainStay VP U.S. Infrastructure Bond Portfolio.

2023 Annual Report

This report is for the general information of New York Life Variable Annuities and NYLIAC Variable Universal Life Insurance Products policyowners. It must be preceded or accompanied by the appropriate product(s) and funds prospectuses if it is given to anyone who is not an owner of a New York Life variable annuity policy or a NYLIAC Variable Universal Life Insurance Product. This report does not offer for sale or solicit orders to purchase securities.

The performance data quoted in this report represents past performance. Past performance is no guarantee of future results. Due to market volatility and other factors, current performance may be lower or higher than the figures shown. The most recent month-end performance summary for your variable annuity or variable life policy is available by calling 800-598-2019 and is updated periodically on newyorklife.com.

The New York Life Variable Annuities and NYLIAC Variable Universal Life Insurance Products are issued by New York Life Insurance and Annuity Corporation (a Delaware Corporation) and distributed by NYLIFE Distributors LLC (Member FINRA/SIPC).

New York Life Insurance Company

New York Life Insurance and Annuity Corporation (NYLIAC) (A Delaware Corporation)

51 Madison Avenue, Room 551
New York, NY 10010

newyorklife.com

newyorklifeinvestments.com

NYLIFE Distributors LLC, 30 Hudson Street, Jersey City, NJ 07302

New York Life Investment Management LLC is the investment manager to the MainStay VP Funds Trust

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You may obtain copies of the Prospectus and the Statement of Additional Information free of charge, upon request, by calling toll-free 800-598-2019 or writing to New York Life Insurance and Annuity Corporation, 51 Madison Avenue, New York, NY 10010.

Not FDIC Insured

No Bank Guarantee

May Lose Value