MainStay VP Small Cap Growth Portfolio

(Formerly MainStay VP Eagle Small Cap Growth Portfolio)

Message from the President and Annual Report

December 31, 2020

NEW YORK LIFE INVESTMENTS

This page intentionally left blank

Message from the President

The economy entered 2020 riding an expansion of historic longevity, supporting an equally lengthy bull market for stocks. With unemployment near all-time lows and corporations making abundant use of leverage, conditions were arguably ripe for a disruption. As it happened, it was a novel virus and subsequent pandemic that triggered a global recession. Business closures and stay-at-home orders designed to contain the spread of COVID-19 had a catastrophic impact on household and corporate cashflows. Policymakers and regulators moved aggressively through the spring to buttress corporate balance sheets and cushion household income, significantly blunting the damage caused by pandemic-related restrictions. Nevertheless, both earnings and GDP (gross economic output) declined markedly during the first half of the year, with GDP declining by 5% in the first quarter and 31.4% in the second quarter.

But whereas many segments of the real economy continued to suffer during the second half of the year, capital markets proved extraordinarily resilient. Decisive action by the U.S. Federal Reserve in March—implementing a near-zero interest rate policy, backstopping the corporate bond market, and rolling out a slew of lending facilities—proved pivotal. Further augmented a short while later by the CARES Act (Coronavirus Aid, Relief, and Economic Security Act), these actions served to quickly restore liquidity to the bond market and trigger a sharp recovery in pricing. After selling off dramatically in February and March, the S&P 500 Index reached a new all-time high just a few months later. While many pandemic-affected service, travel and entertainment industries remained stricken, U.S. GDP recovered as well, rising by a record 33.4% in the third quarter of the year. The rally continued through the fall with an abrupt acceleration coming in November with the end of election-related uncertainty and the release of clinical trial results for COVID vaccinations showing them to be highly effective.

While some of the most pressing issues that confronted us last year appear somewhat less daunting as we look ahead to 2021, multiple other challenges continue to confront us as investors, as citizens and as members of our communities. The economic recovery remains uneven, unemployment remains high and the political landscape remains fractured along deepening fault lines. Meanwhile, the pandemic continues to cost lives as vaccines slowly roll out across the country, with little clarity regarding when the country and the world might fully reopen for business or what our new political, economic and social normal is likely to be.

Despite these difficulties, at New York Life Investments we remain dedicated to providing you, as an investor in MainStay VP Funds, with products, information and services to help you to navigate today's rapidly changing investment environment. We continuously refine our portfolios and provide insights into ever-evolving markets and investment strategies to give you the tools you need to build a resilient portfolio in the face of uncertain times.

Sincerely,

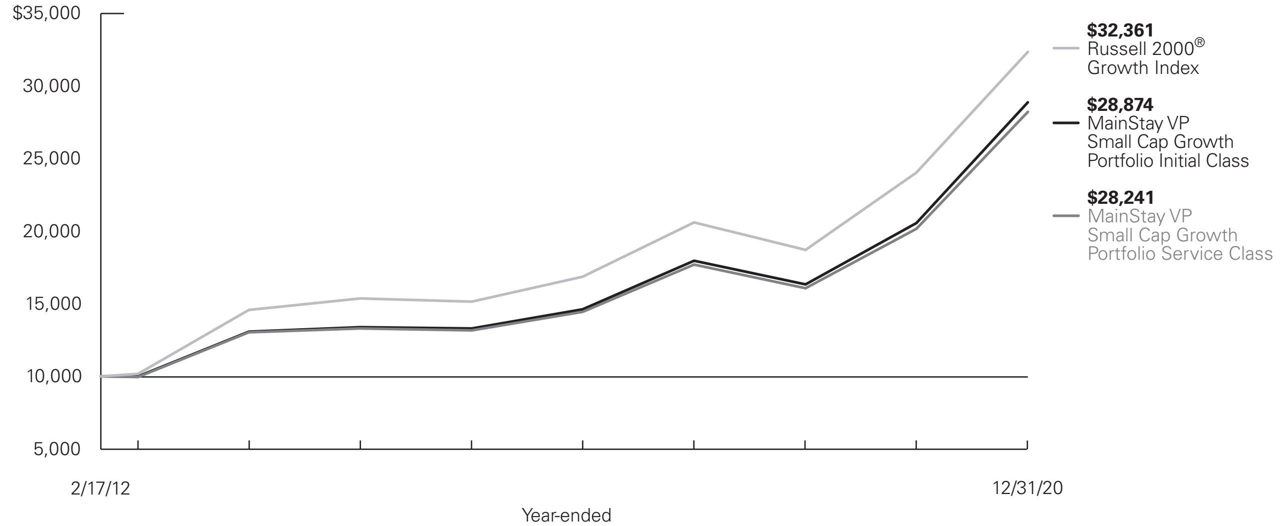
Kirk C. Lehneis
President

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

Investment and Performance Comparison[1] (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.



Average Annual Total Returns for the Year-Ended December 31, 2020

Class	Inception Date	One Year	Five Years	Since Inception[2]	Gross Expense Ratio[3]
Initial Class Shares	2/17/2012	40.48%	16.79%	12.69%	0.85%
Service Class Shares	2/17/2012	40.13	16.49	12.41	1.10

Benchmark Performance	One Year	Five Years	Since Inception
Russell 2000® Growth Index[4]	34.63%	16.36%	14.16%
Morningstar Small Growth Category Average[5]	36.92	17.31	13.77

1. 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.
2. The Portfolio replaced its subadvisor and modified its principal investment strategies as of May 1, 2020. Therefore, the performance information shown in this report prior to May 1, 2020 reflects the Portfolio's prior subadvisor and its principal investment strategies.
3. The gross expense ratios presented reflect the Portfolio's "Total Annual Portfolio Operating Expenses" from the most recent Prospectus, as supplemented, and may differ from other expense ratios disclosed in this report.
4. The Russell 2000® Growth Index is the Portfolio's primary broad-based securities market index for comparison purposes. The Russell 2000® Growth Index measures the performance of the small-cap growth segment of the U.S. equity universe. It includes those Russell 2000® Index companies with higher price-to-book ratios and higher forecasted growth values. Results assume reinvestment of all dividends and capital gains. An investment cannot be made directly in an index.
5. The Morningstar Small Growth Category Average is representative of funds that focus on faster-growing companies whose shares are at the lower end of the market-capitalization range. These funds tend to favor companies in up-and-coming industries or young firms in their early growth stages. 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 Small Cap Growth Portfolio (Unaudited)

The example below is intended to describe the fees and expenses borne by shareholders during the six-month period from July 1, 2020, to December 31, 2020, 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, distribution and/or service (12b-1) 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, 2020, to December 31, 2020. 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, 2020. 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 7/1/20	Ending Account Value (Based on Actual Returns and Expenses) 12/31/20	Expenses Paid During Period[1]	Ending Account Value (Based on Hypothetical 5% Annualized Return and Actual Expenses) 12/31/20	Expenses Paid During Period[1]	Net Expense Ratio During Period[2]
Initial Class Shares	$1,000.00	$1,400.20	$5.13	$1,020.86	$4.32	0.85%
Service Class Shares	$1,000.00	$1,398.50	$6.63	$1,019.61	$5.58	1.10%

1. Expenses are equal to the Portfolio's annualized expense ratio of each class multiplied by the average account value over the period, divided by 366 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 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.
2. Expenses are equal to the Portfolio's annualized expense ratio to reflect the six-month period.

Industry Composition as of December 31, 2020 (Unaudited)

Software	9.6%
Biotechnology	7.3
IT Services	6.6
Semiconductors & Semiconductor Equipment	6.2
Commercial Services & Supplies	4.8
Health Care Equipment & Supplies	4.8
Life Sciences Tools & Services	4.8
Health Care Providers & Services	4.5
Hotels, Restaurants & Leisure	4.1
Diversified Consumer Services	3.4
Insurance	3.1
Health Care Technology	2.9
Aerospace & Defense	2.8
Chemicals	2.6
Professional Services	2.6
Machinery	2.5
Capital Markets	2.3
Food Products	2.2
Equity Real Estate Investment Trusts	2.0
Internet & Direct Marketing Retail	2.0
Pharmaceuticals	1.6
Entertainment	1.4
Banks	1.3
Diversified Telecommunication Services	1.3%
Electronic Equipment, Instruments & Components	1.1
Electrical Equipment	1.0
Leisure Products	1.0
Specialty Retail	1.0
Trading Companies & Distributors	1.0
Building Products	0.9
Food & Staples Retailing	0.9
Road & Rail	0.9
Household Durables	0.7
Interactive Media & Services	0.6
Auto Components	0.5
Consumer Finance	0.5
Multiline Retail	0.5
Media	0.4
Construction & Engineering	0.3
Communications Equipment	0.2
Energy Equipment & Services	0.2
Short-Term Investments	2.0
Other Assets, Less Liabilities	–0.4
	100.0%

See Portfolio of Investments beginning on page 12 for specific holdings within these categories. The Portfolio's holdings are subject to change.

Top Ten Holdings as of December 31, 2020 (excluding short-term investments) (Unaudited)

1. Bright Horizons Family Solutions, Inc.
2. Entegris, Inc.
3. Workiva, Inc.
4. IAA, Inc.
5. Charles River Laboratories International, Inc.
6. Genpact, Ltd.
7. Globant S.A.
8. Zynga, Inc., Class A
9. Envestnet, Inc.
10. Hain Celestial Group, Inc.

Portfolio Management Discussion and Analysis (Unaudited)

Answers to the questions reflect the views of portfolio managers Bert L. Boksen, CFA, Eric Mintz, CFA, and Christopher Sassouni of Eagle Asset Management, Inc. ("Eagle"), the Portfolio's former Subadvisor, Brian C. Fitzsimons, CFA, and Mitch S. Begun, CFA, of Segall Bryant & Hamill, LLC ("SBH"), one of the Portfolio's current Subadvisors, and Christopher A. Berrier and George Sakellaris, CFA, of Brown Advisory LLC ("Brown Advisory"), the Portfolio's other current Subadvisor.

How did MainStay VP Small Cap Growth Portfolio perform relative to its benchmark and peers during the 12 months ended December 31, 2020?

For the 12 months ended December 31, 2020, MainStay VP Small Cap Growth Portfolio returned 40.48% for Initial Class shares and 40.13% for Service Class shares. Over the same period, both share classes outperformed the 34.63% return of the Russell 2000® Growth Index, which is the Portfolio's broad-based securities-market index, and the 36.92% return of the Morningstar Small Growth Category Average.[1]

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

Eagle

Eagle Asset Management, Inc. subadvised the Portfolio from January 1, 2020 through April 30, 2020, during which time the Portfolio saw positive returns relative to the Russell 2000® Growth Index due in large part to the Eagle team's success in identifying several secular growth trends prior to the onset of the pandemic. Although the team did not forecast the severity of the economic fallout from the pandemic, they did see a number of these trends accelerate rapidly, with most appearing to have considerable staying power. These trends included cloud computing, work-from-home, telemedicine and remote learning.

SBH

Segall Bryant & Hamill, LLC co-subadvised the Portfolio from May 1, 2020 through December 31, 2020, during which time the portion of the Portfolio subadvised by SBH outperformed the Russell 2000® Growth Index primarily due to security selection and, to a lesser degree, sector allocation decisions.

Brown Advisory

Brown Advisory LLC co-subadvised the Portfolio from May 1, 2020 through December 31, 2020, during which time the portion of the Portfolio subadvised by Brown Advisory underperformed the Russell 2000® Growth Index. This relative underperformance was primarily due to a sharp market advance in November and December led by low-quality, low-price, high-beta,[2] high-value, loss-making companies. As such companies generally fail to meet our investment criteria, their advance created a headwind to relative performance. Another headwind resulted from the strong performance of the benchmark's biotechnology stocks, an area in which the Portfolio held underweight exposure. The Portfolio's small cash holdings also detracted from relative returns.

During the reporting period, were there any market events that materially impacted the Portfolio's performance or liquidity?

Eagle

From January 1, 2020 through April 30, 2020, the Portfolio saw unprecedented volatility throughout the capital markets, with the stock market experiencing one of its steepest declines on record. However, toward the end of this portion of the reporting period, the government began to take swift action through both monetary and massive fiscal stimulus to dampen the economic blow.

SBH

From May 1, 2020 through December 31, 2020, we do not believe the liquidity of the portion of the Portfolio subadvised by SBH was affected, but performance was influenced by the remarkable rebound in equities. In our opinion, this was largely due to the liquidity provided by the Federal Reserve, along with the prospects and ultimate approval of COVID-19 vaccines. Additionally, many companies showed accelerating growth as beneficiaries of new work-from-home requirements.

Brown Advisory

From May 1, 2020 through December 31, 2020, the COVID-19 pandemic continued to affect the U.S. economy and equity markets. The pandemic did not, however, have an impact on the liquidity of the portion of the Portfolio subadvised by Brown Advisory.

Were there any changes to the Portfolio during the reporting period?

Effective May 1, 2020, several changes to the Portfolio were made. The Portfolio was renamed MainStay VP Small Cap Growth Portfolio and the Portfolio's principal investment strategies and principal risks were modified. Eagle, as subadvisor, was removed along with Bert L. Boksen, Eric Mintz and Christopher Sassouni as the portfolio managers. Brian C. Fitzsimons and Mitch S. Begun of SBH, as well as Christopher A. Berrier and George Sakellaris of Brown Advisory, became the new portfolio managers as SBH and Brown Advisory were named co-subadvisors of the Portfolio. For more information about these changes, refer to the supplement dated March 19, 2020.

1. See page 5 for more information on benchmark and peer group returns.
2. 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.

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

Eagle

Although all sectors saw negative returns on an absolute basis from January 1 through April 30, 2020, strong stock selections in health care, consumer staples and information technology provided positive contributions to the Portfolio's outperformance relative to the Russell 2000® Growth Index. (Contributions take weightings and total returns into account.) Slightly overweight exposure relative to the benchmark in the materials and energy sectors detracted most from the Portfolio's performance. Disappointing stock selections in real estate also dragged slightly on relative performance, but to a lesser degree.

SBH

Relative to the Russell 2000® Growth Index, the three sectors that contributed most to the relative performance of the portion of the Portfolio subadvised by SBH were health care, financials and industrials. Only two sectors detracted from the portfolio's performance relative to its benchmark during the reporting period: real estate and communication services. Cash holdings also detracted from relative returns.

Brown Advisory

The three sectors making the strongest contribution to the relative performance of the portion of the Portfolio subadvised by Brown Advisory were information technology, consumer discretionary and materials, with nearly all positive contributions the result of stock selection. The weakest-contributing sector by far was industrials, which failed to keep pace with the strong returns of the Russell 2000® Growth Index's industrial stocks during the last few months of the year. The health care and communication services sectors also detracted from relative returns.

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

Eagle

The leading individual stocks contributing to the Portfolio's absolute performance from January 1 through April 30, 2020 included telemedicine provider Teladoc; fast-casual chicken wing restaurant chain Wingstop; and biotechnology company Acceleron Pharma. Teladoc saw shares rise sharply as the firm's unique value proposition rose to the forefront of the health care industry, enabling patients and physicians to connect virtually in an environment in which physical contact was heavily restricted. Wingstop reported very strong comparable same-store sales and earnings. Their business model is very well suited for digital ordering and delivery, both of which combined to drive the strong performance. Shares in Acceleron Pharma jumped as the firm's Phase-2 drug candidate for patients with severe pulmonary arterial hypertension successfully met both primary clinical endpoints. Another notably positive contributor to performance, real-time communications platform Everbridge, benefited due to the firm's platform usage by states and local governments to alert their constituents of important issues via alerts and text messages throughout the COVID-19 pandemic.

During the same portion of the reporting period, the stocks that detracted most from the Portfolio's absolute performance included casino gaming manufacturer Everi; aerospace control system manufacturer Woodward; and real estate investment trust ("REIT") Seritage Growth Properties. Everi performed poorly as widespread, pandemic-related closures of casinos swept across the United States, weighing heavily on shares. Woodward saw shares fall as the firm's previously announced strategic acquisition of an aerospace composite components producer was sidelined, while sudden demand slowdowns weighed on the key business segments. Seritage Growth Properties suffered as social distancing and stay-at-home orders brought consumer foot traffic to a standstill, undermining the firm's efforts to attract retail tenants.

SBH

The three strongest performing holdings in the portion of the Portfolio subadvised by SBH included pet insurance provider Trupanion; independent insurance agency Goosehead Insurance; and information technology services provider Globant. All three companies reported strong results during the reporting period, exhibiting resilience in their growth trajectories despite the economic slowdown triggered by the COVID-19 pandemic. Other notably strong performing holdings included freelance work marketplace Upwork and backup power generation provider Generac. Upwork strengthened its position serving both small and larger businesses during the pandemic. In our view, this may set the stage for increased user activity of Upwork going forward. Generac benefited from new product growth, a surge in storm-related demand and work-from-home trends that drove customers to improve backup power capabilities. We sold the Portfolio's position as Generac's market cap rose outside of our investment universe.

The stocks that detracted most from absolute performance were telecommunications service provider Cogent Communications; consulting services firm Huron Consulting Group; and aerospace & defense technology provider Mercury Systems. Both Cogent and Mercury stock prices fell during the reporting period, while Huron shares rose slightly. Cogent's connectivity solutions in-office enterprises struggled to grow as more employees worked from home. Huron's two primary end markets, hospitals and education, faced material headwinds due to the COVID-19 pandemic. Mercury Systems suffered from weaker bookings and margin pressure due to cyclical pressures from the pandemic.

Brown Advisory

The three strongest performing holdings in the portion of the Portfolio subadvised by Brown Advisory included contract provider of laboratory testing and research services Charles River Laboratories International; leading software-as-a-service company Workiva; and student-first connected learning platform Chegg. Charles River Laboratories stock experienced a robust rebound as its pre-clinical research activities proved resilient in the face of the pandemic. Workiva was able to navigate pandemic-related headwinds early in the year and appeared poised to see its subscription revenue growth accelerate thanks to a number of product and go-to-market initiatives. The stock benefited from the expansion of its relatively cheap valuation as more investors recognized the large market opportunity ahead. Chegg witnessed its subscriber growth accelerate due to the pandemic-related need for remote learning and the company's ability to effectively "bundle" its wide array of subject matter into a simple, affordable subscription. Management stated that it believed the current environment will enable the company to expand into international markets faster than originally anticipated.

The stocks that detracted most from absolute performance were clinical-stage biopharmaceutical company Global Blood Therapeutics; patient-specific, data-driven technology and solutions provider Tabula Rasa Healthcare; and leading pediatric medical device company OrthoPediatrics. Global Blood Therapeutics declined over concerns that the pandemic has and will continue to slow scripts for its lead asset, a treatment for sickle cell anemia. Tabula Rasa possesses a compelling core health care information technology and database asset; however, inconsistent operational execution and "strategic" mergers and acquisitions, that prompted more questions than answers, led us to sell the Portfolio's position as we no longer felt it met our "3G" investment criteria. OrthoPediatrics was targeted by two reports recommending that investors short the stock, which caused shares to decline, although, in our opinion, many of the reports' claims appeared dubious, at best.

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

Eagle

Significant purchases included shares of digital sports and gaming company DraftKings and cloud-based software provider Smartsheet. DraftKings appeared to be in an attractive position to capitalize on the secular trend toward increasing online sports betting and gaming. Smartsheet saw encouraging demand for their online work management platform from both federal agencies and health care companies amid the pandemic. Notable sales included casino entertainment and resort company Eldorado Resorts and human resources software developer Cornerstone OnDemand. We sold the Portfolio's position in Eldorado Resorts to lower exposure to the casino and gaming industry during the global pandemic. We sold the Portfolio's position in Cornerstone OnDemand after the company reported disappointing financial results and provided, in our view, underwhelming future guidance in the wake of a questionable acquisition.

SBH

Significant new purchases included information technology services provider Endava and engineering consultant Tetra Tech. We believed Endava was well positioned to consistently grow its cash flows over time due to a strong competitive position in next-generation digital technologies for enterprises. We were attracted to Tetra Tech's leading position in the water services industry, where outdated infrastructure demands significant investments.

Significant sales included positions in security software provider Zendesk; backup power generation provider Generac; and semiconductor company Inphi. Like Generac, described earlier, we sold the Portfolio's position in Zendesk as its market capitalization rose beyond the small-cap universe. We sold the position in Inphi due to the announcement of its acquisition by semiconductor company Marvell Technology.

Brown Advisory

Significant purchases included industrial properties REIT EastGroup Properties and semiconductor maker Lattice Semiconductor. EastGroup's real estate portfolio focuses on smaller (80,000 to 130,000 square foot), multi-tenant properties in "in-fill" locations close to urban areas. This contrasts with most industrial REITs that focus on "big box" warehouses in the 250,000 to 1 million square foot range that serve regional supply chain needs. Lattice Semiconductor offers three types of semiconductor devices, including programmable logic devices, video connectivity application-specific standard products and millimeter wave devices. The company operates worldwide.

Significant sales included the Portfolio's positions in Broadridge, a provider of investor communications and technology-driven solutions to the financial services industry, and Blackbaud, a cloud software company. We sold the Portfolio's Broadridge position because, in our view, the company's market capitalization and stock valuation were higher than warranted by fundamentals. Blackbaud shares were sold due to our concern that the company may not achieve a return on its heavy sales & marketing expenditures in the form of accelerating revenue growth.

How did the Portfolio's sector weightings change during the reporting period?

Eagle

From January 1 through April 30, 2020, the Portfolio increased the size of its overweight exposure to the consumer discretionary sector relative to the Russell 2000® Growth Index and increased its consumer staples exposure from slightly underweight to mildly overweight relative to the benchmark. During the same portion of the reporting period, the Portfolio significantly trimmed its relatively overweight exposure to the information technology sector and increased the degree of its underweight position in health care.

SBH

From May 1 through December 31, 2020, the portion of the Portfolio subadvised by SBH made its largest sector increases relative to the Russell 2000® Growth Index in industrials and financials, and its largest sector decreases relative to the benchmark in information technology and consumer discretionary.

Brown Advisory

From May 1 through December 31, 2020, the portion of the Portfolio subadvised by Brown Advisory increased its exposure to the health care sector relative to the Russell 2000® Growth Index, although the Portfolio's exposure to the sector remained relatively underweight. The Portfolio also trimmed its exposure to industrials, although it continued to maintain overweight exposure to the sector relative to the benchmark.

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

Eagle

As of April 30, 2020, the Portfolio's largest overweight positions relative to the Russell 2000® Growth Index were in the consumer discretionary and information technology sectors, while its most underweight positions were in the real estate and health care sectors.

SBH

As of December 31, 2020, the portion of the Portfolio subadvised by SBH held its largest overweight exposures relative to the Russell 2000® Growth Index in the financials and industrials sectors. As of the same date, this portion of the Portfolio's most relatively underweight position was in health care, primarily due to materially underweight exposure to biotechnology companies that we believe will struggle to generate consistent cash flows over time. Other underweight sector positions included information technology and consumer staples.

Brown Advisory

As of December 31, 2020, the portion of the Portfolio subadvised by Brown Advisory held relatively overweight exposure to the consumer services, industrials and information technology sectors. As of the same date, this portion of the Portfolio maintained underweight exposure relative to the Russell 2000® Growth Index in the health care, financials and materials sectors.

Portfolio of Investments December 31, 2020

	Shares	Value
Common Stocks 98.4%†		
Aerospace & Defense 2.8%		
AeroVironment, Inc. (a)	23,255	$ 2,020,859
BWX Technologies, Inc.	51,550	3,107,434
Hexcel Corp.	67,270	3,261,922
Kratos Defense & Security Solutions, Inc. (a)	121,196	3,324,406
Mercury Systems, Inc. (a)	51,124	4,501,980
		16,216,601
Auto Components 0.5%		
Fox Factory Holding Corp. (a)	26,462	2,797,298
Banks 1.3%		
Bank OZK	39,204	1,225,909
Eagle Bancorp, Inc.	51,054	2,108,530
Prosperity Bancshares, Inc.	59,274	4,111,245
		7,445,684
Biotechnology 7.3%		
Abcam PLC, Sponsored ADR (a)(b)	52,260	1,126,203
Acceleron Pharma, Inc. (a)	18,001	2,303,048
Amicus Therapeutics, Inc. (a)	126,611	2,923,448
Biohaven Pharmaceutical Holding Co., Ltd. (a)	34,469	2,954,338
Blueprint Medicines Corp. (a)	55,821	6,260,325
Fate Therapeutics, Inc. (a)	47,499	4,319,084
FibroGen, Inc. (a)	24,806	920,055
Global Blood Therapeutics, Inc. (a)	21,764	942,599
Iovance Biotherapeutics, Inc. (a)	31,855	1,478,072
Natera, Inc. (a)	54,155	5,389,506
Neurocrine Biosciences, Inc. (a)	27,910	2,675,173
Turning Point Therapeutics, Inc. (a)	33,591	4,093,063
Twist Bioscience Corp. (a)	29,312	4,141,492
Xencor, Inc. (a)	59,252	2,585,165
		42,111,571
Building Products 0.9%		
Trex Co., Inc. (a)	60,588	5,072,427
Capital Markets 2.3%		
Ares Management Corp., Class A	54,229	2,551,474
Evercore, Inc., Class A	18,712	2,051,584
Focus Financial Partners, Inc., Class A (a)	54,886	2,387,541
Hamilton Lane, Inc., Class A	52,609	4,106,132
Houlihan Lokey, Inc.	34,216	2,300,342
		13,397,073
Chemicals 2.6%		
Avient Corp.	67,983	2,738,355
Ingevity Corp. (a)	44,816	3,393,916
Innospec, Inc.	21,384	1,940,170
Livent Corp. (a)(b)	140,690	2,650,600
Quaker Chemical Corp.	17,651	4,472,587
		15,195,628

	Shares	Value
Commercial Services & Supplies 4.8%		
IAA, Inc. (a)	136,094	$ 8,843,388
MSA Safety, Inc.	21,382	3,194,257
Ritchie Brothers Auctioneers, Inc.	58,888	4,095,660
Tetra Tech, Inc.	40,039	4,635,715
Waste Connections, Inc.	65,287	6,696,488
		27,465,508
Communications Equipment 0.2%		
Infinera Corp. (a)	123,172	1,290,843
Construction & Engineering 0.3%		
Ameresco, Inc., Class A (a)	37,806	1,974,985
Consumer Finance 0.5%		
LendingTree, Inc. (a)(b)	9,893	2,708,604
Diversified Consumer Services 3.4%		
Bright Horizons Family Solutions, Inc. (a)	92,480	15,998,115
Chegg, Inc. (a)	41,264	3,727,377
		19,725,492
Diversified Telecommunication Services 1.3%		
Cogent Communications Holdings, Inc.	124,600	7,459,802
Electrical Equipment 1.0%		
TPI Composites, Inc. (a)	103,356	5,455,130
Electronic Equipment, Instruments & Components 1.1%		
Littelfuse, Inc.	13,481	3,433,071
Novanta, Inc. (a)	24,058	2,844,137
		6,277,208
Energy Equipment & Services 0.2%		
Cactus, Inc., Class A	39,062	1,018,346
Entertainment 1.4%		
Zynga, Inc., Class A (a)	836,672	8,257,953
Equity Real Estate Investment Trusts 2.0%		
Americold Realty Trust	62,191	2,321,590
EastGroup Properties, Inc.	29,805	4,114,878
QTS Realty Trust, Inc., Class A	67,627	4,184,759
Terreno Realty Corp.	18,266	1,068,744
		11,689,971
Food & Staples Retailing 0.9%		
Casey's General Stores, Inc.	27,335	4,882,578
Food Products 2.2%		
Hain Celestial Group, Inc. (a)	198,617	7,974,473
Simply Good Foods Co. (a)	140,809	4,415,770
		12,390,243

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

	Shares	Value
Common Stocks (continued)		
Health Care Equipment & Supplies 4.8%		
Cardiovascular Systems, Inc. (a)	63,707	$ 2,787,818
CONMED Corp.	42,488	4,758,656
Establishment Labs Holdings, Inc. (a)	63,359	2,384,833
Globus Medical, Inc., Class A (a)	76,090	4,962,590
Inari Medical, Inc. (a)	12,712	1,109,630
Integra LifeSciences Holdings Corp. (a)	38,581	2,504,679
LivaNova PLC (a)	26,195	1,734,371
Nevro Corp. (a)	9,035	1,563,958
OrthoPediatrics Corp. (a)	45,618	1,881,742
Silk Road Medical, Inc. (a)	60,766	3,827,043
		27,515,320
Health Care Providers & Services 4.5%		
Addus HomeCare Corp. (a)	39,650	4,642,619
Amedisys, Inc. (a)	25,661	7,527,141
Castle Biosciences, Inc. (a)	44,990	3,021,079
Encompass Health Corp.	38,389	3,174,386
HealthEquity, Inc. (a)	54,919	3,828,404
Oak Street Health, Inc. (a)	25,783	1,576,888
Progyny, Inc. (a)	53,934	2,286,262
		26,056,779
Health Care Technology 2.9%		
Accolade, Inc. (a)	47,216	2,053,896
Inspire Medical Systems, Inc. (a)	28,600	5,379,374
Omnicell, Inc. (a)	40,896	4,908,338
Phreesia, Inc. (a)	84,056	4,560,878
		16,902,486
Hotels, Restaurants & Leisure 4.1%		
Choice Hotels International, Inc.	25,059	2,674,547
Churchill Downs, Inc.	39,400	7,674,726
Shake Shack, Inc., Class A (a)	64,758	5,490,183
Vail Resorts, Inc.	17,000	4,742,320
Wingstop, Inc.	23,798	3,154,425
		23,736,201
Household Durables 0.7%		
TopBuild Corp. (a)	23,113	4,254,641
Insurance 3.1%		
Goosehead Insurance, Inc., Class A	54,682	6,822,126
Palomar Holdings, Inc. (a)	45,253	4,020,277
Trupanion, Inc. (a)	56,023	6,706,513
		17,548,916
Interactive Media & Services 0.6%		
ANGI Homeservices, Inc. (a)(b)	130,244	1,718,570
Eventbrite, Inc., Class A (a)(b)	90,525	1,638,502
		3,357,072
Internet & Direct Marketing Retail 2.0%		
Etsy, Inc. (a)	7,055	1,255,155

	Shares	Value
Internet & Direct Marketing Retail (continued)		
MakeMyTrip, Ltd. (a)	128,393	$ 3,791,445
Revolve Group, Inc. (a)	121,533	3,788,184
Stitch Fix, Inc., Class A (a)	45,766	2,687,379
		11,522,163
IT Services 6.6%		
Endava PLC, Sponsored ADR (a)	73,271	5,623,549
Evo Payments, Inc., Class A (a)	199,565	5,390,251
Genpact, Ltd.	203,606	8,421,144
Globant S.A. (a)	38,491	8,376,026
ManTech International Corp., Class A	33,533	2,982,425
MAXIMUS, Inc.	59,499	4,354,732
WEX, Inc. (a)	15,518	3,158,379
		38,306,506
Leisure Products 1.0%		
Callaway Golf Co.	161,652	3,881,264
Clarus Corp.	106,350	1,637,790
		5,519,054
Life Sciences Tools & Services 4.8%		
Adaptive Biotechnologies Corp. (a)	64,596	3,819,561
Bruker Corp.	54,523	2,951,330
Charles River Laboratories International, Inc. (a)	34,386	8,591,686
NanoString Technologies, Inc. (a)	42,327	2,830,830
NeoGenomics, Inc. (a)	127,148	6,845,648
PRA Health Sciences, Inc. (a)	22,899	2,872,451
		27,911,506
Machinery 2.5%		
ESCO Technologies, Inc.	11,631	1,200,552
IDEX Corp.	10,755	2,142,396
John Bean Technologies Corp.	47,335	5,390,037
Proto Labs, Inc. (a)	22,453	3,444,290
Woodward, Inc.	16,389	1,991,755
		14,169,030
Media 0.4%		
Liberty Broadband Corp., Class C (a)	—	16
New York Times Co., Class A	48,649	2,518,559
		2,518,575
Multiline Retail 0.5%		
Ollie's Bargain Outlet Holdings, Inc. (a)	33,893	2,771,431
Pharmaceuticals 1.6%		
Catalent, Inc. (a)	59,996	6,243,784
Certara, Inc. (a)	30,195	1,018,175
Pacira BioSciences, Inc. (a)	35,996	2,154,001
		9,415,960
Professional Services 2.6%		
ASGN, Inc. (a)	32,700	2,731,431
FTI Consulting, Inc. (a)	25,856	2,888,632
Huron Consulting Group, Inc. (a)	53,726	3,167,148

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, 2020 (continued)

	Shares	Value
Common Stocks (continued)		
Professional Services (continued)		
Upwork, Inc. (a)	181,065	$ 6,250,364
		15,037,575
Road & Rail 0.9%		
Knight-Swift Transportation Holdings, Inc.	43,015	1,798,887
Saia, Inc. (a)	19,513	3,527,951
		5,326,838
Semiconductors & Semiconductor Equipment 6.2%		
CMC Materials, Inc.	24,591	3,720,618
Entegris, Inc.	104,069	10,001,031
Impinj, Inc. (a)	54,173	2,268,223
Lattice Semiconductor Corp. (a)	116,220	5,325,200
Onto Innovation, Inc. (a)	69,498	3,304,630
Power Integrations, Inc.	40,987	3,355,196
Silicon Laboratories, Inc. (a)	39,293	5,003,571
SiTime Corp. (a)	24,548	2,747,658
		35,726,127
Software 9.6%		
Anaplan, Inc. (a)	57,375	4,122,394
Aspen Technology, Inc. (a)	11,135	1,450,334
Blackline, Inc. (a)	37,691	5,027,226
Dynatrace, Inc. (a)	77,267	3,343,343
Envestnet, Inc. (a)	98,563	8,110,749
Everbridge, Inc. (a)	28,615	4,265,638
Guidewire Software, Inc. (a)	10,438	1,343,684
Mimecast, Ltd. (a)	106,151	6,033,623
Nuance Communications, Inc. (a)	113,415	5,000,467
PROS Holdings, Inc. (a)	52,880	2,684,718
RealPage, Inc. (a)	27,621	2,409,656
Sumo Logic, Inc. (a)(b)	20,797	594,378
Workiva, Inc. (a)	97,756	8,956,405
Zuora, Inc., Class A (a)	126,549	1,762,827
		55,105,442
Specialty Retail 1.0%		
National Vision Holdings, Inc. (a)	102,400	4,637,696
Vroom, Inc. (a)	33,582	1,375,855
		6,013,551
Trading Companies & Distributors 1.0%		
Siteone Landscape Supply, Inc. (a)	37,301	5,917,058
Total Common Stocks (Cost $368,649,274)		567,465,176

		Shares	Value
Short-Term Investments 2.0%			
Affiliated Investment Company 1.7%			
MainStay U.S. Government Liquidity Fund, 0.01% (c)		9,588,153	$ 9,588,153
Unaffiliated Investment Company 0.3%			
State Street Navigator Securities Lending Government Money Market Portfolio, 0.08% (c)(d)		1,801,812	1,801,812
Total Short-Term Investments (Cost $11,389,965)			11,389,965
Total Investments (Cost $380,039,239)	100.4%		578,855,141
Other Assets, Less Liabilities	(0.4)		(2,111,765)
Net Assets	100.0%		$576,743,376

† Percentages indicated are based on Portfolio net assets.

(a) Non-income producing security.

(b) All or a portion of this security was held on loan. As of December 31, 2020, the aggregate market value of securities on loan was $5,629,744; the total market value of collateral held by the Portfolio was $5,897,977. The market value of the collateral held included non-cash collateral in the form of U.S. Treasury securities with a value of $4,096,165 (See Note 2(H)).

(c) Current yield as of December 31, 2020.

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

The following abbreviations are used in the preceding pages:

ADR—American Depositary Receipt

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

The following is a summary of the fair valuations according to the inputs used as of December 31, 2020, 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	$567,465,176	$ —	$ —	$567,465,176
Short-Term Investments				
Affiliated Investment Company	9,588,153	—	—	9,588,153
Unaffiliated Investment Company	1,801,812	—	—	1,801,812
Total Short-Term Investments	11,389,965	—	—	11,389,965
Total Investments in Securities	$578,855,141	$ —	$ —	$578,855,141

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

Statement of Assets and Liabilities as of December 31, 2020

Assets

Investment in unaffiliated securities, at value (identified cost $370,451,086) including securities on loan of $5,629,744	$569,266,988
Investment in affiliated investment company, at value (identified cost $9,588,153)	9,588,153
Cash	2,071
Receivables:	
Investment securities sold	1,553,993
Portfolio shares sold	584,488
Dividends	187,973
Securities lending	1,843
Total assets	581,185,509

Liabilities

Cash collateral received for securities on loan	1,801,812
Payables:	
Investment securities purchased	2,011,094
Manager (See Note 3)	386,225
Portfolio shares redeemed	148,224
Professional fees	36,589
NYLIFE Distributors (See Note 3)	31,832
Shareholder communication	18,278
Custodian	7,133
Trustees	656
Accrued expenses	290
Total liabilities	4,442,133
Net assets	$576,743,376

Composition of Net Assets

Shares of beneficial interest outstanding (par value of $.001 per share) unlimited number of shares authorized	$ 32,014
Additional paid-in capital	304,116,116
	304,148,130
Total distributable earnings (loss)	272,595,246
Net assets	$576,743,376

Initial Class

Net assets applicable to outstanding shares	$422,200,089
Shares of beneficial interest outstanding	23,252,691
Net asset value per share outstanding	$ 18.16

Service Class

Net assets applicable to outstanding shares	$154,543,287
Shares of beneficial interest outstanding	8,761,235
Net asset value per share outstanding	$ 17.64

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

Statement of Operations for the year ended December 31, 2020

Investment Income (Loss)

Income	
Dividends-unaffiliated (a)	$ 1,995,838
Securities lending	87,409
Dividends-affiliated	26,096
Other	20
Total income	2,109,363
Expenses	
Manager (See Note 3)	3,912,874
Distribution/Service—Service Class (See Note 3)	304,502
Professional fees	85,063
Shareholder communication	49,441
Custodian	26,960
Trustees	11,845
Miscellaneous	21,167
Total expenses before waiver/reimbursement	4,411,852
Expense waiver/reimbursement from Manager (See Note 3)	(9,950)
Net expenses	4,401,902
Net investment income (loss)	(2,292,539)

Realized and Unrealized Gain (Loss)

Net realized gain (loss) on:	
Unaffiliated investment transactions	76,227,835
Foreign currency transactions	67
Net realized gain (loss)	76,227,902
Net change in unrealized appreciation (depreciation) on unaffiliated investments	100,556,905
Net realized and unrealized gain (loss)	176,784,807
Net increase (decrease) in net assets resulting from operations	$174,492,268

(a) Dividends recorded net of foreign withholding taxes in the amount of $18,390.

Statements of Changes in Net Assets

for the years ended December 31, 2020 and December 31, 2019

	2020	2019
Increase (Decrease) in Net Assets		
Operations:		
Net investment income (loss)	$ (2,292,539)	$ (1,914,324)
Net realized gain (loss)	76,227,902	15,222,386
Net change in unrealized appreciation (depreciation)	100,556,905	75,200,132
Net increase (decrease) in net assets resulting from operations	174,492,268	88,508,194
Distributions to shareholders:		
Initial Class	(11,171,351)	(35,509,408)
Service Class	(3,851,068)	(15,063,430)
Total distributions to shareholders	(15,022,419)	(50,572,838)
Capital share transactions:		
Net proceeds from sale of shares	73,550,635	96,615,245
Net asset value of shares issued to shareholders in reinvestment of distributions	15,022,419	50,572,838
Cost of shares redeemed	(129,080,099)	(75,386,760)
Increase (decrease) in net assets derived from capital share transactions	(40,507,045)	71,801,323
Net increase (decrease) in net assets	118,962,804	109,736,679
Net Assets		
Beginning of year	457,780,572	348,043,893
End of year	$ 576,743,376	$457,780,572

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

Financial Highlights selected per share data and ratios

Initial Class	Year ended December 31, 2020	2019	2018	2017	2016
Net asset value at beginning of year	$ 13.31	$ 12.20	$ 14.09	$ 12.03	$ 11.53
Net investment income (loss) (a)	(0.06)	(0.06)	(0.06)	(0.06)	(0.05)
Net realized and unrealized gain (loss) on investments	5.36	2.96	(1.04)	2.78	1.19
Net realized and unrealized gain (loss) on foreign currency transactions	0.00 ‡	—	—	—	—
Total from investment operations	5.30	2.90	(1.10)	2.72	1.14
Less distributions:					
From net realized gain on investments	(0.45)	(1.79)	(0.79)	(0.66)	(0.64)
Net asset value at end of year	$ 18.16	$ 13.31	$ 12.20	$ 14.09	$ 12.03
Total investment return (b)	40.48%	25.59%	(8.88%)	22.83%	10.01%
Ratios (to average net assets)/Supplemental Data:					
Net investment income (loss)	(0.41%)	(0.41%)	(0.40%)	(0.48%)	(0.41%)
Net expenses (c)	0.85% (d)	0.85%	0.85%	0.85%	0.86%
Portfolio turnover rate	101%	46%	41%	41%	36%
Net assets at end of year (in 000's)	$ 422,200	$ 332,474	$ 251,547	$ 312,106	$ 282,378

‡ Less than one cent per share.
(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 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.
(d) Expense waiver/reimbursement less than 0.01%.

Service Class	Year ended December 31, 2020	2019	2018	2017	2016
Net asset value at beginning of year	$ 12.97	$ 11.96	$ 13.87	$ 11.88	$ 11.42
Net investment income (loss) (a)	(0.09)	(0.09)	(0.09)	(0.09)	(0.07)
Net realized and unrealized gain (loss) on investments	5.21	2.89	(1.03)	2.74	1.17
Net realized and unrealized gain (loss) on foreign currency transactions	0.00 ‡	—	—	—	—
Total from investment operations	5.12	2.80	(1.12)	2.65	1.10
Less distributions:					
From net realized gain on investments	(0.45)	(1.79)	(0.79)	(0.66)	(0.64)
Net asset value at end of year	$ 17.64	$ 12.97	$ 11.96	$ 13.87	$ 11.88
Total investment return (b)	40.13%	25.28%	(9.11%)	22.53%	9.73%
Ratios (to average net assets)/Supplemental Data:					
Net investment income (loss)	(0.66%)	(0.65%)	(0.64%)	(0.72%)	(0.66%)
Net expenses (c)	1.10% (d)	1.10%	1.10%	1.10%	1.11%
Portfolio turnover rate	101%	46%	41%	41%	36%
Net assets at end of year (in 000's)	$ 154,543	$ 125,306	$ 96,497	$ 90,887	$ 70,131

‡ Less than one cent per share.
(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 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.
(d) Expense waiver/reimbursement less than 0.01%.

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 Small Cap Growth Portfolio (formerly known as MainStay VP Eagle Small Cap Growth Portfolio) (the "Portfolio"), a "diversified" portfolio, as that term is defined in the 1940 Act, as interpreted or modified by regulatory authorities having jurisdiction, from time to time.

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 Portfolios 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 Moderate Growth Allocation Portfolio and MainStay VP Growth Allocation Portfolio, which operate as "funds-of-funds," and other variable insurance funds.

The Portfolio currently offers two classes of shares. Initial Class and Service Class shares commenced operations on 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. Under the terms of the Fund's multiple class plan adopted pursuant to Rule 18f-3 under the 1940 Act, the classes differ in that, among other things, Service Class shares of the Portfolio pay a combined distribution and service fee of 0.25% of average daily net assets attributable to Service Class shares of the Portfolio to the Distributor (as defined in Note 3(B)) pursuant to a plan adopted in accordance with Rule 12b-1 under the 1940 Act. Contract owners of variable annuity contracts purchased after June 2, 2003, are permitted to invest only in the Service Class 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 Standard 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").

The Board of Trustees of the Fund (the "Board") adopted procedures establishing methodologies for the valuation of the Portfolio's securities and other assets and delegated the responsibility for valuation determinations under those procedures to the Valuation Committee of the Fund (the "Valuation Committee"). The procedures state that, subject to the oversight of the Board and unless otherwise noted, the responsibility for the day-to-day valuation of portfolio assets (including fair value measurements for the Portfolio's assets and liabilities) rests with New York Life Investment Management LLC ("New York Life Investments" or the "Manager"), aided to whatever extent necessary by the Subadvisors (as defined in Note 3(A)). To assess the appropriateness of security valuations, the Manager, the Subadvisors or the Portfolio's third-party service provider, who is subject to oversight by the Manager, regularly compares prior day prices, prices on comparable securities and the sale prices to the prior and current day prices and challenges prices with changes exceeding certain tolerance levels with third-party pricing services or broker sources.

The Board authorized the Valuation Committee to appoint a Valuation Subcommittee (the "Subcommittee") to establish the prices of securities for which market quotations are not readily available or the prices of which are not otherwise readily determinable under the procedures. The Subcommittee meets (in person, via electronic mail or via teleconference) on an as-needed basis. The Valuation Committee meets to ensure that actions taken by the Subcommittee were appropriate.

For those securities valued through either a standardized fair valuation methodology or a fair valuation measurement, the Subcommittee deals with such valuation and the Valuation Committee reviews and affirms, if appropriate, the reasonableness of the valuation based on such methodologies and measurements on a regular basis after considering information that is reasonably available and deemed relevant by the Valuation Committee. Any action taken by the Subcommittee with respect to the valuation of a portfolio security or other asset is submitted for review and ratification (if appropriate) to the Valuation Committee and the Board at the next regularly scheduled meeting.

"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 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, 2020, 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 market values cannot be measured using the methodologies described above is valued by methods deemed reasonable in good faith by the Valuation Committee, following the procedures established by the Board, to represent fair value. Under these procedures, the Portfolio 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 Portfolio 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 Portfolio's valuation procedures may differ from valuations for the same security determined by other funds using their own valuation procedures. Although the Portfolio's 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, 2020, 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; (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 for which the market price is not readily available from a third-party pricing source or, if so provided, does not, in the opinion of the Manager or the Subadvisors, reflect the security's market value; (vi) a security subject to trading collars for which no or limited trading takes place; and (vii) 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 3 in the hierarchy. No securities held by the Portfolio as of December 31, 2020, were fair valued in such a manner.

Equity securities 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 as of the close of the Exchange 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) 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. Unless a shareholder elects otherwise, 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.

(D) 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.

Investment income and realized and unrealized gains and losses on investments of the Portfolio are allocated pro rata to the separate classes of shares based upon their relative net assets on the date the income is earned or realized and unrealized gains and losses are incurred.

(E) 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. Expenses (other than fees incurred under the distribution and service plans, further discussed in Note 3(B), which are charged directly to the Service Class shares) are allocated to separate classes of shares pro rata based upon their relative net assets on the date the expenses are incurred. 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 Portfolio's Statement of Operations or in the expense ratios included in the Financial Highlights.

(F) 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.

(G) Repurchase Agreements. The Portfolio may enter into repurchase agreements (i.e., buy a security from another party with the agreement that it will be sold back in the future) to earn income. The Portfolio may enter into repurchase agreements only with counterparties, usually financial institutions, that are deemed by the Manager or the Subadvisors to be creditworthy, pursuant to guidelines established by the Board. During the term of any repurchase agreement, the Manager or the Subadvisors will continue to monitor the creditworthiness of the counterparty. Under the 1940 Act, repurchase agreements are considered to be collateralized loans by the Portfolio to the counterparty secured by the securities transferred to the Portfolio.

Repurchase agreements are subject to counterparty risk, meaning the Portfolio could lose money by the counterparty's failure to perform under the terms of the agreement. The Portfolio mitigates this risk by ensuring the repurchase agreement is collateralized by cash, U.S. government securities, fixed income securities and/or other securities. The collateral is held by the Portfolio's custodian and valued daily on a mark to market basis to determine if the value, including accrued interest, exceeds the repurchase price. In the event of the counterparty's default on the obligation to repurchase, the Portfolio has the right to liquidate the collateral and apply the proceeds in satisfaction of the obligation. Under certain circumstances, such as in the event of default or bankruptcy by the counterparty, realization and/or retention of the collateral may be limited or subject to delay, to legal proceedings and possible realized loss to the Portfolio. As of December 31, 2020, the Portfolio did not hold any repurchase agreements.

(H) 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, State Street Bank and Trust Company ("State Street"), acting as securities lending agent on behalf of the Portfolio (See Note 12 for securities lending agent change). Under the current arrangement, State Street will manage the Portfolio's collateral in accordance with the securities lending agency agreement between the Portfolio and State Street, 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. 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. As of December 31, 2020, the Portfolio had securities on loan with an aggregate market value of $5,629,744; the total market value of collateral held by the Portfolio was $5,897,977. The market value of the collateral held included non-cash collateral, in the form of U.S. Treasury securities, with a value of $4,096,165 and cash collateral, which was invested into the State Street Navigator Securities

Lending Government Money Market Portfolio, with a value of $1,801,812.

(I) 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 Subadvisors. 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 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. The Portfolio's subadvisor changed effective May 1, 2020, due to the termination of Eagle Asset Managment, Inc. as the Portfolio's subadvisor and the appointment of Segall Bryant & Hamill, LLC ("SBH" or a "Subadvisor") and Brown Advisory LLC ("Brown Advisory" or a "Subadvisor", and together, with SBH, the "subadvisors"), as the Portfolio's subadvisors. SBH, a registered investment adviser, serves as a Subadvisor to the Portfolio, pursuant to the terms of a Subadvisory Agreement between New York Life Investments and SBH. Brown Advisory, a registered investment adviser, serves as a Subadvisor to the Portfolio, pursuant to the terms of a Subadvisory Agreement between New York Life Investments and Brown Advisory. Each Subadvisor is responsible for managing a portion of the Portfolio's assets, as designated by the Manager from time to time. New York Life Investments pays for the services of the Subadvisors.

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 percentage of the average daily net assets as follows: 0.81% up to $1 billion and 0.785% in excess of $1 billion. During the year ended December 31, 2020, the effective management fee rate was 0.81% (exclusive of any applicable waivers/reimbursements).

During the year ended December 31, 2020, New York Life Investments earned fees from the Portfolio in the amount of $3,912,874 and voluntarily waived fees/reimbursed expenses in the amount of $9,950 and paid Eagle Asset Management, SBH and Brown Advisory in the amount of $605,574, $664,875 and $692,205, respectively.

State Street provides sub-administration and sub-accounting services to the Portfolio pursuant to an agreement with New York Life Investments (See Note 12 for sub-administration and sub-accounting service provider change). 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, State Street 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.

(B) Distribution and Service Fees. The Fund, on behalf of the Portfolio, has entered into a distribution agreement with NYLIFE Distributors LLC (the "Distributor"), an affiliate of New York Life Investments. The Portfolio has adopted a distribution plan (the "Plan") in accordance with the provisions of Rule 12b-1 under the 1940 Act. Under the Plan, the Distributor has agreed to provide, through its affiliates or independent third parties, various distribution-related, shareholder and administrative support services to the Service Class shareholders. For its services, the Distributor is entitled to a combined distribution and service fee accrued daily and paid monthly at an annual rate of 0.25% of the average daily net assets attributable to the Service Class shares of the Portfolio.

(C) Investments in Affiliates (in 000's). During the year ended December 31, 2020, purchases and sales transactions, income earned from investments and shares held of investment companies managed by New York Life Investments or its affiliates were as follows:

Affiliated Investment Company	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	$7,407	$207,910	$(205,729)	$—	$—	$9,588	$26	$—	9,588

Note 4–Federal Income Tax

As of December 31, 2020, 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	$380,411,680	$201,134,876	$(2,691,415)	$198,443,461

As of December 31, 2020, 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)
$34,492,307	$39,599,004	$60,474	$198,443,461	$272,595,246

The difference between book-basis and tax-basis unrealized appreciation (depreciation) is primarily due to wash sale adjustments. The other temporary differences are primarily due to deferred dividends from real estate investment trusts ("REITs").

The following table discloses the current year reclassifications between total distributable earnings (loss) and additional paid-in capital arising from permanent differences; net assets as of December 31, 2020, were not affected.

Total Distributable Earnings (Loss)	Additional Paid-In Capital
$179,115	$(179,115)

The reclassifications for the Portfolio are primarily due to prior year post financial statement adjustments.

During the years ended December 31, 2020, and December 31, 2019, the tax character of distributions paid as reflected in the Statements of Changes in Net Assets were as follows:

2020		2019	
Tax-Based Distributions from Ordinary Income	Tax-Based Distributions from Long-Term Gains	Tax-Based Distributions from Ordinary Income	Tax-Based Distributions from Long-Term Gains
$—	$15,022,419	$—	$50,572,838

Note 5–Custodian

State Street is the custodian of cash and securities held by the Portfolio (See Note 12 for custodian change). 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 28, 2020, 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 Chase Bank, N.A., 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 or the one-month London Interbank Offered Rate ("LIBOR"), whichever is higher. The Credit Agreement expires on July 27, 2021, 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 28, 2020, the aggregate commitment amount and the commitment fee were the same as those under the current Credit Agreement, but State Street served as agent to the syndicate. During the year ended December 31, 2020, there were no borrowings made or outstanding with respect to the Portfolio under the Credit Agreement or the credit agreement for which State Street served as agent.

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, 2020, 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, 2020, purchases and sales of securities, other than short-term securities, were $475,306 and $535,162, respectively.

Note 9–Capital Share Transactions

Transactions in capital shares for the years ended December 31, 2020 and December 31, 2019, were as follows:

Initial Class	Shares	Amount
Year ended December 31, 2020:		
Shares sold	3,917,901	$ 53,281,864
Shares issued to shareholders in reinvestment of distributions	737,251	11,171,351
Shares redeemed	(6,390,605)	(93,305,819)
Net increase (decrease)	(1,735,453)	$(28,852,604)
Year ended December 31, 2019:		
Shares sold	5,034,102	$ 68,113,782
Shares issued to shareholders in reinvestment of distributions	3,010,535	35,509,408
Shares redeemed	(3,675,671)	(50,983,840)
Net increase (decrease)	4,368,966	$ 52,639,350

Service Class	Shares	Amount
Year ended December 31, 2020:		
Shares sold	1,540,640	$ 20,268,771
Shares issued to shareholders in reinvestment of distributions	261,458	3,851,068
Shares redeemed	(2,702,909)	(35,774,280)
Net increase (decrease)	(900,811)	$(11,654,441)
Year ended December 31, 2019:		
Shares sold	2,098,915	$ 28,501,463
Shares issued to shareholders in reinvestment of distributions	1,309,425	15,063,430
Shares redeemed	(1,814,114)	(24,402,920)
Net increase (decrease)	1,594,226	$ 19,161,973

Note 10–Recent Accounting Pronouncement

In March 2020, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update 2020-04 ("ASU 2020-04"), which provides optional guidance to ease the potential accounting burden associated with transitioning away from LIBOR and other reference rates that are expected to be discontinued. ASU 2020-04 was effective immediately upon release of the update on March 12, 2020, and remains effective through December 31, 2022. At this time, the Manager is evaluating the implications of certain other provisions of ASU 2020-04 related to new disclosure requirements and any impact on the financial statement disclosures has not yet been determined.

Note 11–Other Matters

An outbreak of COVID-19, first detected in December 2019, has developed into a global pandemic and has resulted in travel restrictions, closure of international borders, certain businesses and securities markets, restrictions on securities trading activities, prolonged quarantines, supply chain disruptions, and lower consumer demand, as well as general concern and uncertainty. The continued impact of COVID-19 is uncertain and could further adversely affect the global economy, national economies, individual issuers and capital markets in unforeseeable ways and result in a substantial and extended economic downturn. Developments that disrupt global economies and financial markets, such as COVID-19, may magnify factors that affect the Portfolio's performance.

Note 12–Subsequent Events

In connection with the preparation of the financial statements of the Portfolio as of and for the year ended December 31, 2020, events and transactions subsequent to December 31, 2020, 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 other than the following:

Effective at the close of business on February 19, 2021, all services provided by State Street, with the exception of certain aspects of the Portfolio's administrative operations, will be transitioned to JPMorgan Chase Bank, N.A.

Report of Independent Registered Public Accounting Firm

To the Board of Trustees of MainStay VP Funds Trust and Shareholders of
MainStay VP Small Cap Growth Portfolio

Opinion on the Financial Statements

We have audited the accompanying statement of assets and liabilities, including the portfolio of investments, of MainStay VP Small Cap Growth Portfolio (one of the portfolios constituting MainStay VP Funds Trust, referred to hereafter as the "Portfolio") as of December 31, 2020, the related statement of operations for the year ended December 31, 2020, the statements of changes in net assets for each of the two years in the period ended December 31, 2020, including the related notes, and the financial highlights for each of the five years in the period ended December 31, 2020 (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, 2020, 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, 2020 and the financial highlights for each of the five years in the period ended December 31, 2020 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, 2020 by correspondence with the custodian, transfer agent and brokers; when replies were not received from brokers, we performed other auditing procedures. We believe that our audits provide a reasonable basis for our opinion.

PricewaterhouseCoopers LLP
New York, New York
February 19, 2021

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 (Unaudited)

The continuation of the Management Agreement with respect to the MainStay VP Small Cap Growth Portfolio ("Portfolio") and New York Life Investment Management LLC ("New York Life Investments"), following an initial term of up to two years, 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 9–10, 2020 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 the Management Agreement for a one-year period.

In reaching the decision to approve the continuation of the Management Agreement, the Board considered information furnished by New York Life Investments in connection with an annual contract review process undertaken by the Board that took place at meetings of the Board and its Contracts Committee during September 2020 through December 2020, as well as other information furnished to the Board and its Committees throughout the year, as deemed relevant by the Trustees. Information 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 Strategic Insight Mutual Fund Research and Consulting, LLC ("Strategic Insight"), 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 that follow investment strategies similar to those of the Portfolio, if any, and, when applicable, the rationale for any differences in the Portfolio's management fee and the fees charged to those other investment advisory clients. In addition, the Board considered information furnished by New York Life Investments 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.

The Board took into account information provided in connection with its meetings throughout the year, including, among other items, information regarding the legal standards and fiduciary obligations applicable to its consideration of the continuation of the Management Agreement and investment performance reports on the Portfolio as well as presentations from New York Life Investments personnel. The Board also took into account other information received from 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. The contract review process, including the structure and format for 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 a portion thereof, with senior management of New York Life Investments.

In addition to information provided to the Board throughout the year, the Board received information in connection with its June 2020 meeting provided specifically in response to requests prepared on behalf of the Board, and in consultation with the Independent Trustees, by independent legal counsel regarding the Portfolio's distribution arrangements. In addition, the Board received information regarding the Portfolio's asset levels, share purchase and redemption activity and the payment of Rule 12b-1 and/or other fees by applicable share classes of the Portfolio, among other information.

In considering the continuation of the Management Agreement, 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 and through the exercise of their own business judgment. Although individual Trustees may have weighed certain factors or information differently, the factors considered by the Board are described in greater 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; (ii) the qualifications of the portfolio managers of the Portfolio and the historical investment performance of the Portfolio and New York Life Investments; (iii) the costs of the services provided, and profits realized, by New York Life Investments from its relationship with the Portfolio; (iv) the extent to which economies of scale have been realized or may be realized as the Portfolio grows and the extent to which economies of scale have benefited or may benefit the Portfolio's shareholders; and (v) the reasonableness of the Portfolio's management fee 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 Strategic Insight. 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.

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. The Board's decision with respect to the Management Agreement may have also been based, in part, on the Board's knowledge of New York Life Investments resulting from, among other things, the Board's consideration of the Management Agreement 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 the Portfolio's shareholders and such shareholders, having had the opportunity to consider other investment options, have chosen to invest in the Portfolio.

The factors that figured prominently in the Board's decision to approve the continuation of the Management Agreement during its December 9–10, 2020 meeting are summarized in more detail below, and the Board did not consider any factor or information controlling in reaching such decision.

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

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. 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. 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 as well as New York Life Investments' reputation and financial condition. The Board observed that New York Life Investments devotes significant resources and time to providing management and non-advisory services 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. The Board noted that New York Life Investments provides certain other non-advisory services to the Portfolio. In addition, the Board considered New York Life Investments' willingness to invest in personnel, infrastructure, technology, operational enhancements, cyber security, information security, shareholder privacy resources and business continuity planning designed to 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 has provided an increasingly broad array of non-advisory services to the MainStay Group of Funds as a result of regulatory and other developments, including in connection with the designation of New York Life Investments as the administrator of the MainStay Group of Funds' liquidity risk management program adopted under the 1940 Act.

The Board also examined the nature, extent and quality of the investment advisory services that New York Life Investments provides to the Portfolio and considered the terms of the Management Agreement. The Board evaluated New York Life Investments' experience in serving as investment adviser to the Portfolio and advising other portfolios and New York Life Investments' track record and experience in providing investment advisory services, the experience of investment advisory, senior management and administrative personnel at New York Life Investments and New York Life Investments' overall resources, legal and compliance environment, capabilities 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 acknowledged New York Life Investments' commitment to further developing and strengthening compliance programs relating to the Portfolio. The Board reviewed New York Life Investments' ability to attract and retain qualified investment professionals and willingness to invest in personnel to service and support the Portfolio. In this regard, the Board considered the 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 discussions with New York Life Investments regarding the implementation of its business continuity plans and recognized steps taken by New York Life Investments to continue to provide the same nature, extent and quality of services to the Portfolio during the COVID-19 pandemic.

Based on these considerations, 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 relevant investment categories 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 Strategic Insight showing the investment performance of the Portfolio as compared to peer funds.

The Board also gave weight to its discussions with senior management at New York Life Investments concerning the Portfolio's investment performance as well as discussions between the Portfolio's portfolio managers and the members of the Board's Investment Committee, which generally occur on an annual basis. In addition, the Board considered any specific actions that New York Life Investments had taken, or had agreed to take, to seek to enhance Portfolio investment performance and the results of those actions.

Based on these considerations, the Board concluded that its review of the Portfolio's investment performance and related information supported a determination to approve the continuation of the Management Agreement.

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

The Board considered the costs of the services provided under the Management Agreement. The Board also considered the profits realized by New York Life Investments and its affiliates due to their relationships with 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 profits realized by New York Life Investments and its affiliates, the Board considered, among other factors, New York Life Investments' continuing investments in, or willingness to invest in, personnel, systems, equipment and other resources and infrastructure to support and further enhance the management of the Portfolio. The Board also considered the financial resources of New York Life Investments and acknowledged that New York Life Investments must be in a position to attract and retain experienced professional personnel and to maintain a strong financial position for New York Life Investments 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 previously engaged an independent consultant to review the methods used to allocate costs among the funds in the MainStay Group of Funds. The Board noted that the independent consultant had 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 are reasonable and that New York Life Investments continued to use the same method of calculating profit and allocating costs since the independent consultant's review. The Board recognized the difficulty in calculating and evaluating a manager's profitability with respect to the Portfolio and noted 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 due to their relationships with the Portfolio, including reputational and other indirect benefits. In addition, the Board considered its review of 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 requested and reviewed information regarding the Portfolio's securities lending activity and the corresponding potential dividend received tax deduction for insurance company affiliates of New York Life Investments.

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 for managing the Portfolio, New York Life Investments' affiliates also earn revenues from serving the Portfolio in various other capacities, including as the Portfolio's distributor. The Board considered information about these other revenues and their impact on the profitability of the relationship with the Portfolio to New York Life Investments and its affiliates. The Board noted that, although it assessed the overall profitability of 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 and its affiliates 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.

Management Fee and Total Ordinary Operating Expenses

The Board evaluated the reasonableness of the fee paid under the Management Agreement and the Portfolio's total ordinary operating expenses.

In assessing the reasonableness of the Portfolio's fees and expenses, the Board primarily considered comparative data provided by Strategic Insight on the fees and expenses charged by similar mutual funds managed by other investment advisers. In addition, the Board considered information provided by New York Life Investments 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 similarities and differences in the contractual management fee schedules of the Portfolio and these similarly-managed accounts and/or funds, taking into account the rationale for any differences in fee schedules. The Board also took into account explanations 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, the Board concluded that the Portfolio's management fee and total ordinary operating expenses were 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 the Portfolio's expense structure permits economies of scale to be appropriately shared with the Portfolio's beneficial 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 management fee breakpoints, initially setting management fee rates at scale or making additional investments to enhance services. 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 Strategic Insight 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 reflected for the benefit of the Portfolio's beneficial shareholders through the Portfolio's 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 the Management Agreement.

Proxy Voting Policies and Procedures and Proxy Voting Record

A description of the policies and procedures that New York Life Investments uses to vote proxies related to the Portfolio's securities is available free of charge upon request (i) by calling 800-598-2019; (ii) by visiting New York Life Investments' website at *newyorklifeinvestments.com*; or (iii) by visiting the SEC's website at *sec.gov.*

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. The Portfolio's most recent Form N-PX or proxy voting record is available free of charge upon request (i) by calling 800-598-2019; (ii) by visiting New York Life Investments' website at *newyorklifeinvestments.com*; or (iii) by visiting the SEC's website at *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 *sec.gov.*

Board of Trustees and Officers (Unaudited)

The Trustees and officers of the Funds 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, the Manager and the Subadvisors, and elects the officers of the Funds who are responsible for the day-to-day operations of the Funds. 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 Fund ("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	**Yie-Hsin Hung*** 1962	***MainStay VP Funds Trust:*** Trustee since 2017	Senior Vice President of New York Life since joining in 2010, Member of the Executive Management Committee since 2017, Chief Executive Officer, New York Life Investment Management Holdings LLC & New York Life Investment Management LLC since 2015. Senior Managing Director and Co-President of New York Life Investment Management LLC from 2014 to May 2015. Previously held positions of increasing responsibility, including head of NYLIM International, Alternative Growth Businesses, and Institutional investments since joining New York Life in 2010.	78	*MainStay Funds:* Trustee since 2017 (12 funds); *MainStay Funds Trust:* Trustee since 2017 (34 funds); and *MainStay MacKay DefinedTerm* Municipal Opportunities Fund: Trustee since 2017.

* This Trustee is considered to be an "interested person" of the MainStay Group of Funds, MainStay VP Funds Trust and MainStay MacKay DefinedTerm Municipal Opportunities Fund, within the meaning of the 1940 Act because of her affiliation with New York Life Insurance Company, New York Life Investment Management LLC, Candriam Belgium S.A., Candriam Luxembourg S.C.A., IndexIQ Advisors LLC, MacKay Shields LLC, NYL Investors LLC, NYLIFE Securities LLC and/or NYLIFE Distributors LLC, 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 2016, Advisory Board Member (June 2015 to December 2015)	Founder and CEO, DanCourt Management, LLC since 1999	78	*MainStay Funds:* Trustee since 2016, Advisory Board Member (June 2015 to December 2015) (12 funds); *MainStay Funds Trust:* Trustee since 2016, Advisory Board Member (June 2015 to December 2015) (34 funds); *MainStay MacKay DefinedTerm Municipal Opportunities Fund:* Trustee since 2016, Advisory Board Member (June 2015 to December 2015); *Market Vectors Group of Exchange-Traded Funds:* Independent Chairman of the Board of Trustees since 2008 and Trustee since 2006 (56 portfolios); and *Berea College of Kentucky:* Trustee since 2009, Chair of the Investment Committee since 2018.
Susan B. Kerley 1951	***MainStay VP Funds Trust:*** Chairman since 2017 and Trustee since 2007***	President, Strategic Management Advisors LLC since 1990	78	*MainStay Funds:* Chairman since 2017 and Trustee since 2007 (12 funds); *MainStay Funds Trust:* Chairman since 2017 and Trustee since 1990 (34 funds)**; *MainStay MacKay DefinedTerm Municipal Opportunities Fund:* Chairman since 2017 and Trustee since 2011; and *Legg Mason Partners Funds:* Trustee since 1991 (45 portfolios).
Alan R. Latshaw 1951	***MainStay VP Funds Trust:*** Trustee and Audit Committee Financial Expert 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)	78	*MainStay Funds:* Trustee (12 funds); *MainStay Funds Trust:* Trustee and Audit Committee Financial Expert since 2007 (34 funds)**; *MainStay MacKay DefinedTerm Municipal Opportunities Fund:* Trustee and Audit Committee Financial Expert since 2011; and *State Farm Associates Funds Trusts:* Trustee since 2005 (4 portfolios).
Richard H. Nolan, Jr. 1946	***MainStay VP Funds Trust:*** Trustee since 2006***	Managing Director, ICC Capital Management since 2004; President—Shields/Alliance, Alliance Capital Management (1994 to 2004)	78	*MainStay Funds:* Trustee since 2007 (12 funds); *MainStay Funds Trust:* Trustee since 2007 (34 funds)**; and *MainStay MacKay DefinedTerm Municipal Opportunities Fund:* Trustee since 2011.
Jacques P. Perold 1958	***MainStay VP Funds Trust:*** Trustee since 2016, Advisory Board Member (June 2015 to December 2015)	Founder and Chief Executive Officer, CapShift LLC since 2018; President, Fidelity Management & Research Company (2009 to 2014); Founder, President and Chief Executive Officer, Geode Capital Management, LLC (2001 to 2009)	78	*MainStay Funds:* Trustee since 2016, Advisory Board Member (June 2015 to December 2015) (12 funds); *MainStay Funds Trust:* Trustee since 2016, Advisory Board Member (June 2015 to December 2015) (34 funds); *MainStay MacKay DefinedTerm Municipal Opportunities Fund:* Trustee since 2016, Advisory Board Member (June 2015 to December 2015); *Partners in Health*: Trustee since 2019; *Allstate Corporation:* Director since 2015; *MSCI, Inc.:* and Director since 2017.

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	**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)	78	*MainStay Funds:* Trustee since 1994 (12 funds); *MainStay Funds Trust:* Trustee since 2007 (34 funds)**; and *MainStay MacKay DefinedTerm Municipal Opportunities Fund:* Trustee since 2011.

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

*** Includes prior service as a Director of MainStay VP Series Fund, Inc., the predecessor to MainStay VP 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 MacKay DefinedTerm Municipal Opportunities Fund, MainStay Funds and MainStay Funds Trust since 2017; Senior Managing Director, Global Product Development (2015 to 2016); Managing Director, Product Development (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 MacKay DefinedTerm Municipal Opportunities Fund since 2011, MainStay Funds since 2007 and MainStay Funds Trust since 2009; and Assistant Treasurer, New York Life Investment Management Holdings LLC (2008 to 2012)
Yi-Chia Kuo 1981	Vice President and Chief Compliance Officer, MainStay VP Funds Trust since January 2020	Chief Compliance Officer, Index IQ Trust, Index IQ ETF Trust and Index IQ Active ETF Trust since January 2020; Vice President and Chief Compliance Officer, MainStay MacKay DefinedTerm Municipal Opportunities Fund, MainStay Funds and MainStay Funds Trust since January 2020; Director and Associate General Counsel, New York Life Insurance Company (2015 to 2019)
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 MacKay DefinedTerm Municipal Opportunities Fund since 2011 and MainStay Funds and MainStay Funds Trust since 2010
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 MacKay DefinedTerm Municipal Opportunities Fund since 2011, MainStay Funds Trust since 2009 and MainStay Funds since 2005

* The officers listed above are considered to be "interested persons" of the MainStay Group of Funds, MainStay VP Funds Trust 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, 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.

This page intentionally left blank

This page intentionally left blank

This page intentionally left blank

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 Portfolios

MainStay VP Emerging Markets Equity Portfolio
MainStay VP Epoch U.S. Equity Yield Portfolio
MainStay VP Fidelity Institutional AM® Utilities Portfolio†
MainStay VP MacKay Common Stock Portfolio
MainStay VP MacKay Growth Portfolio
MainStay VP MacKay International Equity Portfolio
MainStay VP MacKay Mid Cap Core Portfolio
MainStay VP MacKay S&P 500 Index Portfolio
MainStay VP MacKay Small Cap Core Portfolio
MainStay VP Mellon Natural Resources Portfolio
MainStay VP Small Cap Growth Portfolio
MainStay VP T. Rowe Price Equity Income Portfolio
MainStay VP Winslow Large Cap Growth Portfolio

Mixed Asset Portfolios

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

Income Portfolios

MainStay VP Bond Portfolio
MainStay VP Floating Rate Portfolio
MainStay VP Indexed Bond Portfolio
MainStay VP MacKay Government Portfolio
MainStay VP MacKay High Yield Corporate Bond Portfolio
MainStay VP MacKay Unconstrained 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 Portfolios

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

Manager

New York Life Investment Management LLC
New York, New York

Subadvisors

Brown Advisory LLC
Baltimore, Maryland

Candriam Belgium S.A.*
Brussels, Belgium

CBRE Clarion Securities LLC
Radnor, Pennsylvania

Epoch Investment Partners, Inc.
New York, New York

FIAM LLC
Smithfield, Rhode Island

IndexIQ Advisors LLC*
New York, New York

Janus Capital Management LLC
Denver, Colorado

MacKay Shields LLC*
New York, New York

Mellon Investments Corporation
Boston, Massachusetts

NYL Investors LLC*
New York, New York

Pacific Investment Management Company LLC
Newport Beach, California

Segall Bryant & Hamill, LLC
Chicago, Illinois

T. Rowe Price Associates, Inc.
Baltimore, Maryland

Winslow Capital Management, LLC
Minneapolis, Minnesota

Distributor

NYLIFE Distributors LLC*
Jersey City, New Jersey

Custodian

State Street Bank and Trust Company
Boston, Massachusetts

Independent Registered Public Accounting Firm

PricewaterhouseCoopers LLP
New York, New York

Legal Counsel

Dechert LLP
Washington, District of Columbia

Some Portfolios may not be available in all products.
† Fidelity Institutional AM is a registered trade mark of FMR LLC. Used with permission.
* An affiliate of New York Life Investment Management LLC

2020 Annual Report

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

www.newyorklife.com

Printed on recycled paper

nylinvestments.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

1801884

MSVPESCG11-02/21
(NYLIAC) NI515