

MainStay VP Winslow Large Cap Growth Portfolio

Message from the President and Semiannual Report

Unaudited | June 30, 2021

Sign up for e-delivery of your shareholder reports. For full details on e-delivery, including who can participate and what you can receive via e-delivery, please log in to newyorklifeinvestments.com/accounts.

Not FDIC/NCUA Insured

Not a Deposit

May Lose Value

No Bank Guarantee

Not Insured by Any Government Agency



INVESTMENTS

This page intentionally left blank

Message from the President

The COVID-19 pandemic continued to afflict our personal lives and broad segments of the U.S. and global economy throughout the six-month reporting period ended June 30, 2021. However, with the deployment of multiple vaccines around the world, including three highly effective versions approved for emergency use in the United States, investors began to turn their attention toward the gradual reopening of the economy and the shape the “new normal” would take.

The first half of the reporting period saw increasing inflationary concerns as fiscal stimulus business reopenings drove accelerating economic growth, rising commodity prices and increased consumer spending. However, the U.S. Federal Reserve noted that price increases were likely to prove temporary and made clear their intention to remain accommodative for the foreseeable future. Accordingly, after moving higher in the first quarter of 2021, interest rates declined in the second quarter.

In response to the uncertain inflation outlook, equity market leadership shifted from value in the first quarter of the year to growth in the second quarter. Nevertheless, investor sentiment remained buoyant throughout the reporting period, with all eleven sectors in the S&P 500[®] Index, a widely regarded benchmark of market performance, producing positive returns. Energy led the market’s rise fueled by rapidly increasing oil and gas prices, followed by financials and real estate, which benefited from rising interest rates and the economic reopening, respectively. Communication services produced the slowest growth, followed by the traditionally defensive utilities and consumer staples

sectors. In the fixed income market, lower-credit-quality issues tended to outperform their higher-grade counterparts, with high-yield corporate bonds generating the strongest performance. Among securitized products, commercial mortgage-backed securities generally produced the strongest returns, followed by mortgage-backed securities and asset-backed securities, while Treasury securities lagged.

Despite the tremendous progress we’ve seen so far this year, the United States and the world continue to face significant pandemic-related challenges. Newer, more contagious variants of COVID-19 threaten the return of restrictions and lockdowns that could stall the economic recovery. At the same time, supply chain shortages have led to rising prices on everything from laptops to autos, stoking fears of uncontrolled inflation despite reassurance from the U.S. Federal Reserve. At New York Life Investments, we recognize that the shape that the “new normal” eventually takes may differ from our expectations. You can depend on us to keep a sharp watch for the unexpected, and to continue to help you find your way through this rapidly evolving investment landscape.

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

Semiannual Report

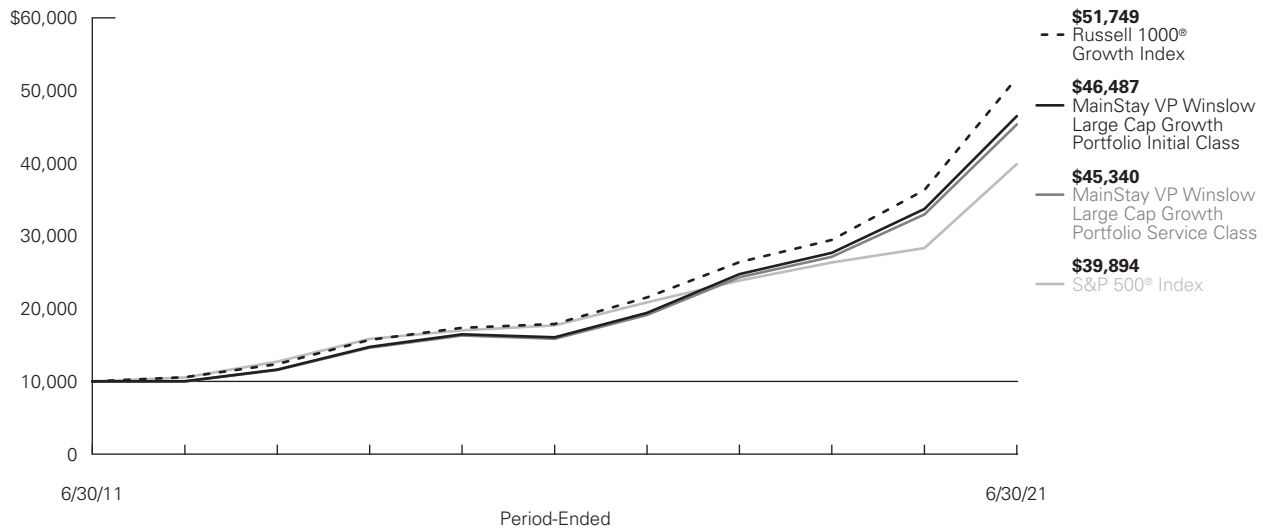
Investment and Performance Comparison	5
Portfolio Management Discussion and Analysis	8
Portfolio of Investments	10
Financial Statements	12
Notes to Financial Statements	16
Discussion of the Operation and Effectiveness of the Portfolio's Liquidity Risk Management Program	23
Proxy Voting Record	24
Shareholder Reports and Quarterly Portfolio Disclosure	24

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

Investment and Performance Comparison (Unaudited)

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

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



Average Annual Total Returns for the Period-Ended June 30, 2021

Class	Inception Date	Six Months	One Year	Five Years	Ten Years	Gross Expense Ratio ¹
Initial Class Shares	5/1/1998	12.69%	37.88%	23.68%	16.61%	0.75%
Service Class Shares	6/6/2003	12.55	37.54	23.37	16.32	1.00

1. 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.

Benchmark Performance	Six Months	One Year	Five Years	Ten Years
Russell 1000 [®] Growth Index ¹	12.99%	42.50%	23.66%	17.87%
S&P 500 [®] Index ²	15.25	40.79	17.65	14.84
Morningstar Large Growth Category Average ³	12.82	41.56	21.40	15.41

- The Russell 1000[®] Growth Index is the Portfolio's primary benchmark. The Russell 1000[®] Growth Index is a broad-based benchmark that measures the performance of the large-cap growth segment of the U.S. equity universe. It includes those Russell 1000[®] 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.
- The S&P 500[®] Index is the Portfolio's secondary benchmark. "S&P 500[®]" is a trademark of The McGraw-Hill Companies, Inc. The S&P 500[®] Index is widely regarded as the standard index for measuring large-cap U.S. stock market performance. Results assume reinvestment of all dividends and capital gains. An investment cannot be made directly in an index.
- The Morningstar Large Growth Category Average is representative of funds that invest primarily in big U.S. companies that are projected to grow faster than other large-cap stocks. Stocks in the top 70% of the capitalization of the U.S. equity market are defined as large cap. Growth is defined based on fast growth and high valuations. Most of these funds focus on companies in rapidly expanding industries. 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 Winslow Large Cap Growth Portfolio (Unaudited)

The example below is intended to describe the fees and expenses borne by shareholders during the six-month period from January 1, 2021 to June 30, 2021, 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 January 1, 2021 to June 30, 2021. 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 June

30, 2021. 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 1/1/21	Ending Account Value (Based on Actual Returns and Expenses) 6/30/21	Expenses Paid During Period ¹	Ending Account Value (Based on Hypothetical 5% Annualized Return and Actual Expenses) 6/30/21	Expenses Paid During Period ¹	Net Expense Ratio During Period ²
Initial Class Shares	\$1,000.00	\$1,126.90	\$3.90	\$1,021.13	\$3.71	0.74%
Service Class Shares	\$1,000.00	\$1,125.50	\$5.22	\$1,019.89	\$4.96	0.99%

- Expenses are equal to the Portfolio's annualized expense ratio of each class multiplied by the average account value over the period, divided by 365 and multiplied by 181 (to reflect the six-month period). The table above represents the actual expenses incurred during the six-month period. In addition to the fees and expenses which the Portfolio bears directly, it also indirectly bears a pro rata share of the fees and expenses of the underlying funds in which it invests. Such indirect expenses are not included in the above-reported expense figures.
- Expenses are equal to the Portfolio's annualized expense ratio to reflect the six-month period.

Industry Composition as of June 30, 2021 (Unaudited)

Software	20.0%	Health Care Technology	1.4%
IT Services	13.0	Health Care Providers & Services	1.3
Interactive Media & Services	11.9	Personal Products	1.3
Internet & Direct Marketing Retail	8.0	Electronic Equipment, Instruments & Components	1.2
Semiconductors & Semiconductor Equipment	5.9	Commercial Services & Supplies	1.2
Hotels, Restaurants & Leisure	5.2	Entertainment	1.1
Textiles, Apparel & Luxury Goods	4.9	Professional Services	1.1
Technology Hardware, Storage & Peripherals	3.7	Machinery	1.1
Life Sciences Tools & Services	3.5	Biotechnology	1.1
Health Care Equipment & Supplies	2.9	Containers & Packaging	1.1
Capital Markets	1.9	Real Estate Management & Development	0.0‡
Pharmaceuticals	1.7	Short-Term Investment	0.3
Specialty Retail	1.7	Other Assets, Less Liabilities	0.3
Chemicals	1.6		<u>100.0%</u>
Air Freight & Logistics	1.6		

‡ Less than one-tenth of percent.

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

Top Ten Holdings as of June 30, 2021 (excluding short-term investments) (Unaudited)

1. Microsoft Corp.	6. Apple, Inc.
2. Amazon.com, Inc.	7. Adobe, Inc.
3. Alphabet, Inc.	8. NIKE, Inc., Class B
4. Visa, Inc., Class A	9. Mastercard, Inc., Class A
5. Facebook, Inc., Class A	10. NVIDIA Corp.

Portfolio Management Discussion and Analysis (Unaudited)

Answers to the questions reflect the views of portfolio managers Justin H. Kelly, CFA, and Patrick M. Burton, CFA, of Winslow Capital Management, LLC, the Portfolio's Subadvisor.

How did MainStay VP Winslow Large Cap Growth Portfolio perform relative to its benchmarks and peers during the six months ended June 30, 2021?

For the six months ended June 30, 2021, MainStay VP Winslow Large Cap Growth Portfolio returned 12.69% for Initial Class shares and 12.55% for Service Class shares. Over the same period, both share classes underperformed the 12.99% return of the Russell 1000[®] Growth Index, which is the Portfolio's primary benchmark, and the 15.25% return of the S&P 500[®] Index, which is a secondary benchmark of the Portfolio. For the six months ended June 30, 2021, both share classes underperformed the 12.82% return of the Morningstar Large Growth Category Average.¹

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

During the reporting period, the Portfolio's performance relative to the Russell 1000[®] Growth Index was undermined by security selection in the industrials and consumer discretionary sectors, and by sector allocations. These negative effects were partly offset by strong stock selection in the information technology and health care sectors.

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

In the first half of 2021, markets continued to reflect the recovery sentiment that started to take hold at the end of 2020. Vaccine delivery accelerated, further confirming the light at the end of the pandemic tunnel. Another major fiscal stimulus measure was implemented in the first quarter of 2021, providing additional near-term support in the economy's transition to "reopening." The prospect of additional significant infrastructure spending over the next decade and continued support from the U.S. Federal Reserve, both in liquidity measures and accommodative interest rate policy, provided further tailwinds to economic growth expectations.

Importantly for equity investors, corporate earnings proved stronger than forecasted and corporate sentiment returned to, and in fact, moved ahead of pre-pandemic levels, supporting the positive macroeconomic outlook.

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

The sectors making the strongest positive contributions to the Portfolio's performance relative to the Russell 1000[®] Growth Index included information technology, health care and consumer staples. (Contributions take weightings and total returns into account.) Within information technology and health care, the

strongest positive contributions were driven predominantly by security selection. The relative outperformance of the Portfolio in the consumer staples sector was predominantly the result of relatively underweight exposure to this weak-performing sector, although stock selection within the sector further enhanced relative performance.

The three weakest-contributing sectors to the Portfolio's performance relative to the Index were industrials, consumer discretionary and real estate.

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

The leading positive contributors to the Portfolio's absolute performance during the reporting period included holdings in Alphabet (the holding company of Internet advertising firm Google), software company Microsoft and computer graphics chip maker NVIDIA. All three companies were major beneficiaries of the ongoing global transition to a digitally driven economy.

Notable detractors from the Portfolio's absolute performance during the same period included social media company Pinterest, cryptocurrency platform Coinbase Global, and information and risk management solutions provider TransUnion. While Pinterest has benefited from the ongoing shift to digital advertising and the monetization of its large user base, the company guided lower on a key user metric during the reporting period. This disappointment coincided with a shift in market sentiment away from price-to-revenue stocks. Coinbase's initial public offering during the same period preceded a meaningful sell-off in crypto currencies, resulting in decline in the company's stock. TransUnion underperformed as market sentiment shifted to favor more economically sensitive cyclical sectors and industries. The Portfolio sold all three positions during the reporting period.

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

The Portfolio's three largest purchases during the reporting period included shares in home improvement specialty retailer Lowe's, logistics and package delivery company United Parcel Service and specialty coffee company Starbucks. The purchase of Lowe's stock reflected our view that home improvement trends are likely to remain strong over the coming 2+ years given housing price appreciation and the general lack of home supply. The investment in United Parcel Service was based on our strong outlook for both domestic and global economies, which we believe should be positive for the company. We believe Starbucks will show strong same-store sale comparative growth and a recovery to pre-pandemic margin levels.

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

Significant sales during the reporting period included positions in consumer electronics company Apple, ride-hailing and food delivery company Uber Technologies and American pharmaceutical firm Eli Lilly and Company. While Apple shares are still held in the Portfolio, our research points to a likely pull forward in demand for many of the company's products and services over the near term. While we expect Apple's upcoming June 2021 quarter to be strong, we are concerned about the potential for revenue decline in fiscal year 2022, which would likely result in free cash flow deterioration. Regarding Uber, concern over potential regulatory risk involving their workforce created a near-term overhang on the company's stock price, leading to the decision to sell the Portfolio's position. We exited the Portfolio's position in Eli Lilly as limited upside to our price target weighed on future return potential.

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

During the reporting period the Portfolio's sector weightings relative to the Russell 1000[®] Growth Index underwent shifts due to both structural changes within the Portfolio as well as the reconstitution of the Index. In absolute terms the Portfolio's exposure to the consumer discretionary and communication services sectors increased. The largest declines in absolute exposure came from information technology, while real estate exposure fell to essentially zero at the reporting period's end. On a relative basis, the largest shift came in information technology, where the Portfolio transitioned from a notably overweight position at the beginning of the reporting period to a nearly equal-weight position as of June 30, 2021.

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

As of June 30, 2021, the Portfolio held meaningfully overweight sector positions relative to the Russell 1000[®] Growth Index in the health care sector and, to a lesser degree, materials. As of the same date, the Portfolio held its most significantly underweight position in consumer staples, and a smaller underweight position in real estate. All of the Portfolio's other sector weights were more closely in line with the Index.

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

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

Portfolio of Investments June 30, 2021[†] (Unaudited)

	Shares	Value
Common Stocks 99.4%		
Air Freight & Logistics 1.6%		
United Parcel Service, Inc., Class B	140,900	\$ 29,302,973
Biotechnology 1.1%		
AbbVie, Inc.	176,900	19,926,016
Capital Markets 1.9%		
Moody's Corp.	61,340	22,227,776
MSCI, Inc.	23,200	12,367,456
		34,595,232
Chemicals 1.6%		
Linde plc	101,750	29,415,925
Commercial Services & Supplies 1.2%		
Cintas Corp.	56,600	21,621,200
Containers & Packaging 1.1%		
Ball Corp.	240,700	19,501,514
Electronic Equipment, Instruments & Components 1.2%		
TE Connectivity Ltd.	165,550	22,384,016
Entertainment 1.1%		
Netflix, Inc. (a)	38,600	20,388,906
Health Care Equipment & Supplies 2.9%		
Align Technology, Inc. (a)	46,410	28,356,510
Edwards Lifesciences Corp. (a)	240,100	24,867,157
		53,223,667
Health Care Providers & Services 1.3%		
UnitedHealth Group, Inc.	59,430	23,798,149
Health Care Technology 1.4%		
Doximity, Inc., Class A (a)	59,600	3,468,720
Veeva Systems, Inc., Class A (a)	68,500	21,300,075
		24,768,795
Hotels, Restaurants & Leisure 5.2%		
Airbnb, Inc., Class A (a)	139,800	21,408,972
Chipotle Mexican Grill, Inc. (a)	17,050	26,433,297
Hilton Worldwide Holdings, Inc. (a)	186,800	22,531,816
Starbucks Corp.	224,600	25,112,526
		95,486,611

	Shares	Value
Interactive Media & Services 11.9%		
Alphabet, Inc. (a)		
Class A	24,780	\$ 60,507,556
Class C	25,214	63,194,353
Facebook, Inc., Class A (a)	206,510	71,805,592
Snap, Inc., Class A (a)	315,800	21,518,612
		217,026,113
Internet & Direct Marketing Retail 8.0%		
Amazon.com, Inc. (a)	42,535	146,327,206
IT Services 13.0%		
Mastercard, Inc., Class A	163,850	59,819,996
Payoneer, Inc. (a)(b)	148,000	1,493,320
PayPal Holdings, Inc. (a)	167,550	48,837,474
Square, Inc., Class A (a)	108,000	26,330,400
Visa, Inc., Class A	342,400	80,059,968
Wix.com Ltd. (a)	67,850	19,695,498
		236,236,656
Life Sciences Tools & Services 3.5%		
Agilent Technologies, Inc.	195,490	28,895,377
Bio-Techne Corp.	22,300	10,040,798
IQVIA Holdings, Inc. (a)	100,950	24,462,204
		63,398,379
Machinery 1.1%		
Parker-Hannifin Corp.	65,500	20,115,705
Personal Products 1.3%		
Estee Lauder Cos., Inc. (The), Class A	72,700	23,124,416
Pharmaceuticals 1.7%		
Zoetis, Inc.	169,650	31,615,974
Professional Services 1.1%		
CoStar Group, Inc. (a)	245,950	20,369,579
Real Estate Management & Development 0.0% ‡		
Compass, Inc., Class A (a)(c)	54,700	718,758
Semiconductors & Semiconductor Equipment 5.9%		
Analog Devices, Inc.	113,600	19,557,376
ASML Holding NV (Registered)	47,010	32,476,388
NVIDIA Corp.	69,300	55,446,930
		107,480,694

	Shares	Value
Common Stocks (continued)		
Software 20.0%		
Adobe, Inc. (a)	109,650	\$ 64,215,426
Atlassian Corp. plc, Class A (a)	81,400	20,908,404
Intuit, Inc.	65,050	31,885,558
Microsoft Corp.	597,500	161,862,750
PTC, Inc. (a)	112,900	15,948,254
salesforce.com, Inc. (a)	82,530	20,159,603
ServiceNow, Inc. (a)	52,850	29,043,718
Workday, Inc., Class A (a)	91,300	21,796,962
		<u>365,820,675</u>
Specialty Retail 1.7%		
Lowe's Cos., Inc.	155,400	<u>30,142,938</u>
Technology Hardware, Storage & Peripherals 3.7%		
Apple, Inc.	498,000	<u>68,206,080</u>
Textiles, Apparel & Luxury Goods 4.9%		
Lululemon Athletica, Inc. (a)	75,500	27,555,235
NIKE, Inc., Class B	395,250	61,062,172
		<u>88,617,407</u>
Total Common Stocks		
(Cost \$1,053,611,303)		<u>1,813,613,584</u>

	Shares	Value
Short-Term Investment 0.3%		
Affiliated Investment Company 0.3%		
MainStay U.S. Government Liquidity Fund, 0.01% (d)	6,475,279	\$ 6,475,279
Total Short-Term Investment (Cost \$6,475,279)		<u>6,475,279</u>
Total Investments (Cost \$1,060,086,582)	99.7%	1,820,088,863
Other Assets, Less Liabilities	0.3	5,277,002
Net Assets	100.0%	<u>\$ 1,825,365,865</u>

† Percentages indicated are based on Portfolio net assets.

‡ Less than one-tenth of a percent.

(a) Non-income producing security.

(b) Restricted security. (See Note 5)

(c) All or a portion of this security was held on loan. As of June 30, 2021, the aggregate market value of securities on loan was \$105,567. The market value of the collateral held included non-cash collateral in the form of U.S. Treasury securities with a value of \$111,013. (See Note 2(H))

(d) Current yield as of June 30, 2021.

The following is a summary of the fair valuations according to the inputs used as of June 30, 2021, 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	\$ 1,812,120,264	\$ 1,493,320	\$ —	\$ 1,813,613,584
Short-Term Investment				
Affiliated Investment Company	6,475,279	—	—	6,475,279
Total Investments in Securities	<u>\$ 1,818,595,543</u>	<u>\$ 1,493,320</u>	<u>\$ —</u>	<u>\$ 1,820,088,863</u>

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

Statement of Assets and Liabilities as of June 30, 2021 (Unaudited)

Assets

Investment in unaffiliated securities, at value (identified cost \$1,053,611,303) including securities on loan of \$105,567	\$1,813,613,584
Investment in affiliated investment companies, at value (identified cost \$6,475,279)	6,475,279
Receivables:	
Investment securities sold	18,404,460
Dividends	105,883
Portfolio shares sold	61,185
Securities lending	424
Other assets	<u>23,935</u>
Total assets	<u>1,838,684,750</u>

Liabilities

Payables:	
Investment securities purchased	11,770,899
Manager (See Note 3)	1,043,981
NYLIFE Distributors (See Note 3)	245,325
Shareholder communication	115,501
Portfolio shares redeemed	66,928
Professional fees	60,194
Custodian	<u>16,057</u>
Total liabilities	<u>13,318,885</u>
Net assets	<u>\$1,825,365,865</u>

Composition of Net Assets

Shares of beneficial interest outstanding (par value of \$.001 per share) unlimited number of shares authorized	\$ 51,758
Additional paid-in-capital	<u>824,411,442</u>
	824,463,200
Total distributable earnings (loss)	<u>1,000,902,665</u>
Net assets	<u>\$1,825,365,865</u>

Initial Class

Net assets applicable to outstanding shares	<u>\$ 591,882,833</u>
Shares of beneficial interest outstanding	<u>16,031,892</u>
Net asset value per share outstanding	<u>\$ 36.92</u>

Service Class

Net assets applicable to outstanding shares	<u>\$1,233,483,032</u>
Shares of beneficial interest outstanding	<u>35,726,219</u>
Net asset value per share outstanding	<u>\$ 34.53</u>

Statement of Operations for the six months ended June 30, 2021 (Unaudited)

Investment Income (Loss)

Income

Dividends-unaffiliated (net of foreign tax withholding of \$14,054)	\$ 3,574,677
Securities lending	9,636
Dividends-affiliated	<u>907</u>
Total income	<u>3,585,220</u>

Expenses

Manager (See Note 3)	6,054,105
Distribution/Service—Service Class (See Note 3)	1,417,284
Professional fees	74,739
Shareholder communication	63,960
Trustees	16,411
Custodian	13,647
Miscellaneous	<u>18,954</u>
Total expenses before waiver/reimbursement	7,659,100
Expense waiver/reimbursement from Manager (See Note 3)	<u>(13,940)</u>
Net expenses	<u>7,645,160</u>
Net investment income (loss)	<u>(4,059,940)</u>

Realized and Unrealized Gain (Loss)

Net realized gain (loss) on unaffiliated investments	106,468,622
Net change in unrealized appreciation (depreciation) on unaffiliated investments	<u>103,509,661</u>
Net realized and unrealized gain (loss)	<u>209,978,283</u>
Net increase (decrease) in net assets resulting from operations	<u><u>\$205,918,343</u></u>

Statements of Changes in Net Assets

for the six months ended June 30, 2021 (Unaudited) and the year ended December 31, 2020

	2021	2020
Increase (Decrease) in Net Assets		
Operations:		
Net investment income (loss)	\$ (4,059,940)	\$ (4,447,507)
Net realized gain (loss)	106,468,622	138,815,013
Net change in unrealized appreciation (depreciation)	103,509,661	308,412,770
Net increase (decrease) in net assets resulting from operations	205,918,343	442,780,276
Distributions to shareholders:		
Initial Class	—	(32,083,765)
Service Class	—	(68,003,617)
Total distributions to shareholders	—	(100,087,382)
Capital share transactions:		
Net proceeds from sales of shares	87,040,327	205,574,641
Net asset value of shares issued to shareholder in reinvestment of distributions	—	100,087,382
Cost of shares redeemed	(96,405,357)	(282,706,153)
Increase (decrease) in net assets derived from capital share transactions	(9,365,030)	22,955,870
Net increase (decrease) in net assets	196,553,313	365,648,764
Net Assets		
Beginning of period	1,628,812,552	1,263,163,788
End of period	\$1,825,365,865	\$1,628,812,552

Financial Highlights selected per share data and ratios

Initial Class	Six months ended June 30, 2021*	Year Ended December 31,				
		2020	2019	2018	2017	2016
Net asset value at beginning of period	\$ 32.76	\$ 25.51	\$ 21.64	\$ 23.92	\$ 18.71	\$ 20.83
Net investment income (loss) (a)	(0.05)	(0.04)	0.00‡	0.00‡	0.02	0.01
Net realized and unrealized gain (loss) on investments	4.21	9.36	6.95	1.36	6.00	(0.43)
Total from investment operations	4.16	9.32	6.95	1.36	6.02	(0.42)
Less distributions:						
From net realized gain on investments	—	(2.07)	(3.08)	(3.64)	(0.81)	(1.70)
Net asset value at end of period	\$ 36.92	\$ 32.76	\$ 25.51	\$ 21.64	\$ 23.92	\$ 18.71
Total investment return (b)	12.70%(c)	37.16%	33.64%	3.57%	32.39%	(2.27)%
Ratios (to average net assets)/Supplemental Data:						
Net investment income (loss)	(0.31)%††	(0.16)%	0.01%	0.01%	0.10%	0.07%
Net expenses (d)	0.74%††(e)	0.75%(e)	0.76%(e)	0.76%(e)	0.76%(e)	0.77%
Portfolio turnover rate	31%	54%	56%	58%	53%	94%
Net assets at end of period (in 000's)	\$ 591,883	\$ 534,965	\$ 438,089	\$ 238,174	\$ 368,861	\$ 518,425

* Unaudited.

‡ Less than one cent per share.

†† Annualized.

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

(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) Total investment return may reflect adjustments to conform to generally accepted accounting principles.

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

(e) Expense waiver/reimbursement less than 0.01%.

Service Class	Six months ended June 30, 2021*	Year Ended December 31,				
		2020	2019	2018	2017	2016
Net asset value at beginning of period	\$ 30.68	\$ 24.05	\$ 20.60	\$ 22.96	\$ 18.03	\$ 20.18
Net investment income (loss) (a)	(0.09)	(0.11)	(0.06)	(0.06)	(0.03)	(0.03)
Net realized and unrealized gain (loss) on investments	3.94	8.81	6.59	1.34	5.77	(0.42)
Total from investment operations	3.85	8.70	6.53	1.28	5.74	(0.45)
Less distributions:						
From net realized gain on investments	—	(2.07)	(3.08)	(3.64)	(0.81)	(1.70)
Net asset value at end of period	\$ 34.53	\$ 30.68	\$ 24.05	\$ 20.60	\$ 22.96	\$ 18.03
Total investment return (b)	12.55%	36.81%	33.30%	3.31%	32.06%	(2.52)%
Ratios (to average net assets)/Supplemental Data:						
Net investment income (loss)	(0.56)%††	(0.41)%	(0.25)%	(0.23)%	(0.15)%	(0.17)%
Net expenses (c)	0.99%††(d)	1.00%(d)	1.01%(d)	1.01%(d)	1.01%(d)	1.02%
Portfolio turnover rate	31%	54%	56%	58%	53%	94%
Net assets at end of period (in 000's)	\$ 1,233,483	\$ 1,093,847	\$ 825,075	\$ 623,836	\$ 575,514	\$ 435,029

* Unaudited.

†† Annualized.

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

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

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

(d) Expense waiver/reimbursement less than 0.01%.

Notes to Financial Statements (Unaudited)

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 Winslow Large 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 Growth Allocation Portfolio (formerly known as MainStay VP Moderate Growth Allocation Portfolio) and MainStay VP Equity Allocation Portfolio (formerly known as MainStay VP Growth Allocation Portfolio), which operate as "funds-of-funds," and other variable insurance funds.

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

Class	Commenced Operations
Initial Class	May 1, 1998
Service Class	June 6, 2003

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 growth of capital.

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 Subadvisor (as defined in Note 3(A)). To assess the appropriateness of security valuations, the Manager, the Subadvisor 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 June 30, 2021, 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 six-month period ended June 30, 2021, 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 Subadvisor, 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 June 30, 2021 were fair valued in such a manner.

Certain securities held by the Portfolio may principally trade in foreign markets. Events may occur between the time the foreign markets close and the time at which the Portfolio's NAVs are calculated. These events may include, but are not limited to, situations relating to a single issuer in a market sector, significant fluctuations in U.S. or foreign markets, natural disasters, armed conflicts, governmental actions or other developments not tied directly to the securities markets. Should the Manager or the Subadvisor conclude that such events may have affected the accuracy of the last price of such securities reported on the local foreign market, the Subcommittee may, pursuant to procedures adopted by the Board, adjust the value of the local price to reflect the estimated impact on the price of such securities as a result of such events. In this instance, securities are generally categorized as Level 3 in the hierarchy. Additionally, certain foreign equity securities are also fair valued whenever the movement of a particular index exceeds certain thresholds. In such cases, the securities are fair valued by applying factors provided by a third-party vendor in accordance with valuation procedures adopted by the Board and are generally categorized as Level 2 in the hierarchy. No foreign equity securities held by the Portfolio as of June 30, 2021 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

Notes to Financial Statements (Unaudited) (continued)

from the principal market in which each security trades. These securities are generally categorized as Level 1 in the hierarchy.

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

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

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

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

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

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

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

(D) Dividends and Distributions to Shareholders. Dividends and distributions are recorded on the ex-dividend date. The Portfolio intends to declare and pay dividends from net investment income and distributions from net realized capital and currency gains, if any, at least annually. 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.

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

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.

(F) Expenses. Expenses of the Fund are allocated to the individual Portfolios in proportion to the net assets of the respective Portfolios when the expenses are incurred, except where direct allocations of expenses can be made. 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 Statement of Operations or in the expense ratios included in the Financial Highlights.

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

(H) Securities Lending. In order to realize additional income, the Portfolio may engage in securities lending, subject to the limitations set forth in the 1940 Act and relevant guidance by the staff of the Securities and Exchange Commission ("SEC"). If the Portfolio engages in securities lending, the Portfolio will lend through its custodian, JPMorgan Chase Bank, N.A., ("JPMorgan"), acting as securities lending agent on behalf of the Portfolio. Under the current arrangement, JPMorgan will manage the Portfolio's collateral in accordance with the securities lending agency agreement between the Portfolio and JPMorgan, and indemnify the Portfolio against counterparty risk. The loans will be collateralized by cash (which may be invested in a money market fund) and/or non-cash collateral (which may include U.S. Treasury securities and/or U.S. government agency securities issued or guaranteed by the United States government or its agencies or instrumentalities) at least equal at all times to the market value of the securities loaned. 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. Securities on loan as of June 30, 2021, are shown in the Portfolio of Investments.

Prior to February 22, 2021, these services were provided by State Street Bank and Trust Company ("State Street").

(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 Subadvisor. New York Life Investments, a registered investment adviser and an indirect, wholly-owned subsidiary of New York Life, serves as the Fund'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 Fund. Except for the portion of salaries and expenses that are the responsibility of the Fund, the Manager pays the salaries and expenses of all personnel affiliated with the Fund and certain operational expenses of the Fund. The Fund reimburses New York Life Investments in an amount equal to the portion of the compensation of the Chief Compliance Officer attributable to the Fund. Winslow Capital Management, LLC. ("Winslow" or the "Subadvisor"), a registered investment adviser, serves as Subadvisor to the Fund and is responsible for the day-to-day portfolio management of the Fund. Pursuant to the terms of a Subadvisory Agreement ("Subadvisory Agreement") between New York Life Investments and Winslow, New York Life Investments pays for the services of the Subadvisor.

Pursuant to the Management Agreement, the Fund pays the Manager, on behalf of the Portfolio, a monthly fee for the services performed and the facilities furnished at an annual rate of the Portfolio's average daily net assets as follows: 0.75% up to \$500 million; 0.725% from \$500 million to \$750 million; 0.71% from \$750 million to \$1 billion; 0.70% from \$1 billion to \$2 billion; 0.66% from \$2 billion to \$3 billion; 0.61% from \$3 billion to \$7 billion; 0.585% from \$7 billion to \$9 billion; and 0.575% in excess of \$9 billion.

New York Life Investments has voluntarily agreed to waive a portion of its management fee when the subadvisory fee is reduced as a result of achieving breakpoints in the subadvisory fee schedule. The savings that result from the reduced subadvisory fee will be shared equally with the Portfolio provided that the amount of the management fee retained by New York Life Investments, after payment of the subadvisory fee, exceeds 0.35% of the average daily net assets of the Portfolio. This waiver may be discontinued at any time.

New York Life Investments has contractually agreed to waive a portion of its management fee so that the management fee does not exceed 0.55% of the Portfolio's average daily net assets from \$11 billion to \$13 billion; and 0.525% of the Portfolio's average daily net assets over \$13 billion. This agreement expires May 1, 2022, and may only be amended or terminated prior to that date by action of the Board. During the six-month period ended June 30, 2021, the effective management fee rate was 0.72% (exclusive of any applicable waivers/reimbursements).

Notes to Financial Statements (Unaudited) (continued)

During the six-month period ended June 30, 2021, New York Life Investments earned fees from the Portfolio in the amount of \$6,054,105 and waived fees and/or reimbursed expenses in the amount of \$13,940 and paid the Subadvisor fees in the amount of \$2,165,077.

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

Prior to February 22, 2021, these services were provided by State Street.

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 six-month period ended June 30, 2021, 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 Companies	Value, Beginning of Period	Purchases at Cost	Proceeds from Sales	Net Realized Gain/(Loss) on Sales	Change in Unrealized Appreciation/(Depreciation)	Value, End of Period	Dividend Income	Other Distributions	Shares End of Period
MainStay U.S. Government Liquidity Fund	\$ 14,908	\$ 135,650	\$ (144,083)	\$ —	\$ —	\$ 6,475	\$ 1	\$ —	6,475

Note 4-Federal Income Tax

As of June 30, 2021, 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	\$1,060,407,558	\$762,805,652	\$(3,124,347)	\$759,681,305

During the year ended December 31, 2020, the tax character of distributions paid as reflected in the Statements of Changes in Net Assets was as follows:

	2020
Distributions paid from:	
Long-Term Capital Gains	\$100,087,382

Note 5-Restricted Securities

Restricted securities are subject to legal or contractual restrictions on resale. Private placement securities are generally considered to be restricted except for those securities traded between qualified institutional investors under the provisions of Rule 144A of the Securities Act of 1933, as amended. Disposal of restricted securities may involve time consuming negotiations and expenses, and prompt sale at an acceptable price may be difficult to achieve.

As of June 30, 2021, restricted securities held by the Portfolio were as follows:

Security	Date of Acquisition	Shares	Cost	6/30/21 Value	Percent of Net Assets
Payoneer, Inc. Common Stock	6/25/21	148,000	\$ 1,480,000	\$ 1,493,320	0.1%

Note 6—Custodian

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

Prior to February 22, 2021, these services were provided by State Street. The services provided by State Street were a direct expense of the Portfolio and are included in the Statement of Operations as Custodian fees which totaled \$3,770 for the period January 1, 2021 through February 21, 2021.

Note 7—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 27, 2021, under the credit agreement (the "Credit Agreement"), the aggregate commitment amount is \$600,000,000 with an additional uncommitted amount of \$100,000,000. The commitment fee is an annual rate of 0.15% of the average commitment amount payable quarterly, regardless of usage, to JPMorgan, who serves as the agent to the syndicate. The commitment fee is allocated among the Portfolio and certain other funds managed by New York Life Investments based upon their respective net assets and other factors. Interest on any revolving credit loan is charged based upon the Federal Funds Rate or the one-month London Interbank Offered Rate ("LIBOR"), whichever is higher. The Credit Agreement expires on July 26, 2022, 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 27, 2021, the aggregate commitment amount and the commitment fee were the same as those under the current Credit Agreement. During the six-month period ended June 30, 2021, there were no borrowings made or outstanding with respect to the Portfolio under the Credit Agreement.

Note 8—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 six-month period ended June 30, 2021, there were no interfund loans made or outstanding with respect to the Portfolio.

Note 9—Purchases and Sales of Securities (in 000's)

During the six-month period ended June 30, 2021, purchases and sales of securities, other than short-term securities, were \$523,877 and \$534,765, respectively.

Note 10—Capital Share Transactions

Transactions in capital shares for the six-month period ended June 30, 2021 and the year ended December 31, 2020, were as follows:

Initial Class	Shares	Amount
Period ended June 30, 2021:		
Shares sold	1,288,740	\$ 43,567,551
Shares redeemed	(1,585,093)	(54,364,365)
Net increase (decrease)	(296,353)	\$ (10,796,814)
Year ended December 31, 2020:		
Shares sold	1,607,424	\$ 47,202,241
Shares issued to shareholders in reinvestment of distributions	1,053,301	32,083,765
Shares redeemed	(3,506,165)	(99,452,086)
Net increase (decrease)	(845,440)	\$ (20,166,080)

Service Class	Shares	Amount
Period ended June 30, 2021:		
Shares sold	1,384,321	\$ 43,472,776
Shares redeemed	(1,314,554)	(42,040,992)
Net increase (decrease)	69,767	\$ 1,431,784
Year ended December 31, 2020:		
Shares sold	5,983,502	\$ 158,372,400
Shares issued to shareholders in reinvestment of distributions	2,382,965	68,003,617
Shares redeemed	(7,019,980)	(183,254,067)
Net increase (decrease)	1,346,487	\$ 43,121,950

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 and related new variants 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.

Notes to Financial Statements (Unaudited) (continued)

Note 12—Subsequent Events

In connection with the preparation of the financial statements of the Portfolio as of and for the six-month period ended June 30, 2021, events and transactions subsequent to June 30, 2021, 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.

Discussion of the Operation and Effectiveness of the Portfolio's Liquidity Risk Management Program (Unaudited)

In compliance with Rule 22e-4 under the Investment Company Act of 1940, as amended (the "Liquidity Rule"), the Portfolio has adopted and implemented a liquidity risk management program (the "Program"), which New York Life Investment Management LLC believes is reasonably designed to assess and manage the Portfolio's liquidity risk (the risk that the Portfolio could not meet requests to redeem shares issued by the Portfolio without significant dilution of remaining investors' interests in the Portfolio). The Board of Trustees of MainStay VP Funds Trust (the "Board") designated New York Life Investment Management LLC as administrator of the Program (the "Administrator"). The Administrator has established a Liquidity Risk Management Committee to assist the Administrator in the implementation and day-to-day administration of the Program and to otherwise support the Administrator in fulfilling its responsibilities under the Program.

At a meeting of the Board held on March 8, 2021, the Administrator provided the Board with a written report addressing the Program's operation and assessing its adequacy and effectiveness of implementation for the period from January 1, 2020 through December 31, 2020 (the "Review Period"), as required under the Liquidity Rule. The report noted that the Administrator concluded that (i) the Program operated effectively to assess and manage the Portfolio's liquidity risk, (ii) the Program has been adequately and effectively implemented to monitor and, as applicable, respond to the Portfolio's liquidity developments and (iii) the Portfolio's investment strategy continues to be appropriate for an open-end fund. In addition, the report discussed notable events that impacted liquidity risk during the Review Period, including the COVID-19 pandemic and the resulting economic shutdown.

In accordance with the Program, the Portfolio's liquidity risk is assessed no less frequently than annually taking into consideration certain factors, as applicable, such as (i) investment strategy and liquidity of portfolio investments, (ii) short-term and long-term cash flow projections and (iii) holdings of cash and cash equivalents, as well as borrowing arrangements and other funding sources. Certain factors are considered under both normal and reasonably foreseeable stressed conditions.

Each Portfolio portfolio investment is classified into one of four liquidity categories. The classification is based on a determination of the number of days it is reasonably expected to take to convert the investment into cash, or sell or dispose of the investment, in current market conditions without significantly changing the market value of the investment. The Administrator has delegated liquidity classification determinations to the Portfolio's subadvisor, subject to appropriate oversight by the Administrator, and classification determinations are made by taking into account the Portfolio's reasonably anticipated trade size, various market, trading and investment-specific considerations, as well as market depth, and, in certain cases, third-party vendor data.

The Liquidity Rule requires portfolios that do not primarily hold assets that are highly liquid investments to adopt a minimum amount of net assets that must be invested in highly liquid investments that are assets (an "HLIM"). In addition, the Liquidity Rule limits a portfolio's investments in illiquid investments. Specifically, the Liquidity Rule prohibits acquisition of illiquid investments if doing so would result in a portfolio holding more than 15% of its net assets in illiquid investments that are assets. The Program includes provisions reasonably designed to determine, periodically review and comply with the HLIM requirement, as applicable, and to comply with the 15% limit on illiquid investments.

There can be no assurance that the Program will achieve its objectives under all circumstances in the future. Please refer to the Portfolio's prospectus for more information regarding the Portfolio's exposure to liquidity risk and other risks to which it may be subject.

Proxy Voting Record

The Portfolio is required to file with the SEC its proxy voting records 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 <https://www.nylinvestments.com/mainstay/products-and-performance/mainstay-vp-funds-trust>; or (iii) by visiting the SEC's website at www.sec.gov.

Shareholder Reports and Quarterly Portfolio Disclosure

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

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

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

Mixed Asset

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

Income

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

Money Market

MainStay VP U.S. Government Money Market Portfolio

Alternative

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

Asset Allocation

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

Manager

New York Life Investment Management LLC
New York, New York

Subadvisors

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

Wellington Management Company LLP
Boston, Massachusetts

Winslow Capital Management, LLC
Minneapolis, Minnesota

Legal Counsel

Dechert LLP
Washington, District of Columbia

Independent Registered Public Accounting Firm

PricewaterhouseCoopers LLP
New York, New York

Distributor

NYLIFE Distributors LLC*
Jersey City, New Jersey

Custodian

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

Some Portfolios may not be available in all products.

[†] Fidelity Institutional AM is a registered trade mark of FMR LLC. Used with permission.

* An affiliate of New York Life Investment Management LLC

2021 Semiannual Report

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

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

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

New York Life Insurance Company

New York Life Insurance and Annuity
Corporation (NYLIAC) (A Delaware Corporation)
51 Madison Avenue, Room 551
New York, NY 10010
newyorklife.com

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

©2021 by NYLIFE Distributors LLC. All rights reserved.

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

Not FDIC Insured

No Bank Guarantee

May Lose Value