# **Vanguard**°

Annual Report | December 31, 2023

Vanguard Inflation-Protected Securities Fund

See the inside front cover for important information about your fund's annual and semiannual shareholder reports.

# Important information about shareholder reports

Beginning in July 2024, amendments adopted by the Securities and Exchange Commission will substantially impact the design, content, and transmission of shareholder reports. Shareholder reports will provide key fund information in a clear and concise format and must be mailed to each shareholder that has not elected to receive the reports electronically. Financial statements will no longer be included in the shareholder report but will be available at vanguard.com, can be mailed upon request, or can be accessed on the SEC's website at www.sec.gov.

You may elect to receive shareholder reports and other communications from the fund electronically by contacting your financial intermediary (such as a broker-dealer or bank) or, if you invest directly with the fund, by calling Vanguard at one of the phone numbers on the back cover of this report or by logging on to vanguard.com.

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Please note: The opinions expressed in this report are just that—informed opinions. They should not be considered promises or advice. Also, please keep in mind that the information and opinions cover the period through the date on the front of this report. Of course, the risks of investing in your fund are spelled out in the prospectus.

# Your Fund's Performance at a Glance

- The financial markets delivered very robust returns for the 12 months ended December 31, 2023. The returns for Vanguard Inflation-Protected Securities Fund ranged from 3.65% for Investor Shares to 3.85% for Institutional Shares. Those results lagged the 3.90% return of the fund's expense-free benchmark, the Bloomberg U.S. Treasury Inflation Protected Securities Index.
- With inflation continuing to ease, a number of major central banks left off hiking interest rates. Global growth, employment, and consumer spending showed resilience, but the prospect of rates remaining high for an extended period spurred volatility at times. Toward year-end, however, global stocks and bonds rallied as falling inflation and softening economic growth raised market expectations for rate cuts in 2024.
- Given the volatility in interest rates in 2023, the duration and yield-curve positioning of the fund contributed to its modest underperformance versus its benchmark.
- An allocation to nominal Treasuries for liquidity purposes also detracted slightly, as those securities lagged their inflation-protected counterparts.

#### Market Barometer

	Average Annual Total Returns Periods Ended December 31, 2023			
	One Year	Three Years	Five Years	
Stocks				
Russell 1000 Index (Large-caps)	26.53%	8.97%	15.52%	
Russell 2000 Index (Small-caps)	16.93	2.22	9.97	
Russell 3000 Index (Broad U.S. market)	25.96	8.54	15.16	
FTSE All-World ex US Index (International)	15.82	1.98	7.52	
Bonds				
Bloomberg U.S. Aggregate Float Adjusted Index (Broad taxable market)	5.60%	-3.33%	1.17%	
Bloomberg Municipal Bond Index (Broad tax-exempt market)	6.40	-0.40	2.25	
FTSE Three-Month U.S. Treasury Bill Index	5.26	2.24	1.91	
СРІ				
Consumer Price Index	3.35%	5.60%	4.07%	

# Advisor's Report

For the 12 months ended December 31, 2023, the returns for Vanguard Inflation-Protected Securities Fund ranged from 3.65% for Investor Shares to 3.85% for Institutional Shares. The fund lagged its benchmark, the Bloomberg U.S. Treasury Inflation Protected Securities Index, which returned 3.90%.

TIPS lagged the broad investment-grade bond market (+5.60%) and nominal Treasury securities (+4.05%)—which don't include an automatic adjustment for inflation—according to the Bloomberg U.S. Aggregate Float-Adjusted Index.

For much of the period, concerns about inflation and whether policymakers' efforts to rein it in might spur a global recession were top of mind for many investors.

Early on, energy prices continued to cool amid an outlook for slower economic growth, but price increases then began to broaden to other categories, notably the services sector, which felt the effects of tight labor markets.

In the first part of the year, the prospect of inflation remaining stubbornly high kept central banks, including the Federal Reserve, the European Central Bank, and the Bank of England, raising interest rates, but through less aggressive hikes than at some policy meetings in 2022.

Progress was slow in developed markets, but toward the end of the period signs of inflation moderating and a growing belief that the Fed may have come to the end of its rate hiking cycle contributed to a strong rally in both stocks and bonds.

Bond yields were volatile in 2023. The bellwether 10-year U.S. Treasury yield surged when the markets were anticipating rates to stay higher for longer, breaking above 4% in early March and climbing to around 5% in the fall. Its March decline—and another toward year-end—stemmed from stress in the banking sector and the Fed's pivot from a tight monetary policy stance to signaling rate cuts in 2024. The yield nevertheless finished the year almost where it started, at just under 3.9%. Short-term Treasury yields, however, ended the year lower.

Across the maturity spectrum, real yields of U.S. Treasury inflation-protected securities finished the year up modestly.

# Management of the fund

The fund's modest underperformance versus its benchmark was largely the

Yields of U.S. Treasury Inflation-Protected Securities (Real Yields)

Maturity	December 31, 2022	December 31, 2023
5 Years	1.64%	1.71%
10 Years	1.57	1.71
30 Years	1.65	1.90

Source: Vanguard.

result of duration and yield-curve positioning. We entered the year expecting to see the economy slow and the Fed bring its rate hiking cycle to a close. However, the economy in fact proved quite resilient, allowing the Fed to keep raising rates in the first part of the year to combat inflation. In an environment where yields continued to rise and the curve flattened further, being slightly long duration and positioned for the yield curve steepening worked against us. (Duration is a measure of the sensitivity of the portfolio to changes in interest rates.)

Our yield-curve positioning added some value toward the end of the year as the Fed pivoted on monetary policy and the market started placing greater odds on significant rate cuts in 2024.

## Outlook

Although some market participants are counting on a Goldilocks scenario in which inflation moderates without a slowdown in the economy, we see that as unlikely for several reasons. Even without further interest rate increases, the tightening in monetary policy that has already occurred will continue working its way through the financial system. There's a risk that wage gains could contribute to inflation remaining sticky and above target, and consumers have been spending down the savings they accumulated during the pandemic.

We therefore continue to expect a mild recession in the U.S. in late 2024, which will eventually bring inflation closer to the

Fed's 2% target. And while the Fed may start cutting interest rates later this year, they are likely to remain for some time well above the low levels we have become accustomed to since the global financial crisis.

Whatever the markets may bring, our experienced global team of portfolio managers, traders, and credit analysts will continue to seek out attractive opportunities to produce competitive returns for our investors.

John Madziyire, CFA

Vanguard Fixed Income Group

January 17, 2024

# About Your Fund's Expenses

As a shareholder of the fund, you incur ongoing costs, which include costs for portfolio management, administrative services, and shareholder reports (like this one), among others. Operating expenses, which are deducted from a fund's gross income, directly reduce the investment return of the fund.

A fund's expenses are expressed as a percentage of its average net assets. This figure is known as the expense ratio. The following examples are intended to help you understand the ongoing costs (in dollars) of investing in your fund and to compare these costs with those of other mutual funds. The examples are based on an investment of \$1,000 made at the beginning of the period shown and held for the entire period.

The accompanying table illustrates your fund's costs in two ways:

• Based on actual fund return. This section helps you to estimate the actual expenses that you paid over the period. The "Ending Account Value" shown is derived from the fund's actual return, and the third column shows the dollar amount that would have been paid by an investor who started with \$1,000 in the fund. You may use the information here, together with the amount you invested, to estimate the expenses that you paid over the period.

To do so, 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 given for your fund under the heading "Expenses Paid During Period."

• Based on hypothetical 5% yearly return. This section is intended to help you compare your fund's costs with those of other mutual funds. It assumes that the fund had a yearly return of 5% before expenses, but that the expense ratio is unchanged. In this case—because the return used is not the fund's actual return—the results do not apply to your investment. The example is useful in making comparisons because the Securities and Exchange Commission requires all mutual funds to calculate expenses based on a 5% return. You can assess your fund's costs by comparing this hypothetical example with the hypothetical examples that appear in shareholder reports of other funds.

Note that the expenses shown in the table are meant to highlight and help you compare *ongoing* costs only and do not reflect transaction costs incurred by the fund for buying and selling securities. Further, the expenses do not include any purchase, redemption, or account service fees described in the fund prospectus. If such fees were applied to your account, your costs would be higher. Your fund does not carry a "sales load."

The calculations assume no shares were bought or sold during the period. Your actual costs may have been higher or lower, depending on the amount of your investment and the timing of any purchases or redemptions.

You can find more information about the fund's expenses, including annual expense ratios, in the Financial Statements section of this report. For additional information on operating expenses and other shareholder costs, please refer to your fund's current prospectus.

# Six Months Ended December 31, 2023

	Beginning Account Value 6/30/2023	Ending Account Value 12/31/2023	Expenses Paid During Period
Based on Actual Fund Return			
Inflation-Protected Securities Fund			
Investor Shares	\$1,000.00	\$1,018.40	\$1.02
Admiral™ Shares	1,000.00	1,019.10	0.51
Institutional Shares	1,000.00	1,019.50	0.36
Based on Hypothetical 5% Yearly Return			
Inflation-Protected Securities Fund			
Investor Shares	\$1,000.00	\$1,024.20	\$1.02
Admiral Shares	1,000.00	1,024.70	0.51
Institutional Shares	1,000.00	1,024.85	0.36

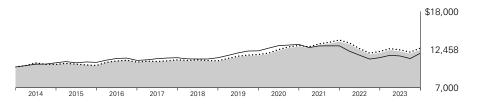
The calculations are based on expenses incurred in the most recent six-month period. The fund's annualized six-month expense ratios for that period are 0.20% for Investor Shares, 0.10% for Admiral Shares, and 0.07% for Institutional Shares. The dollar amounts shown as "Expenses Paid" are equal to the annualized expense ratio multiplied by the average account value over the period, multiplied by the number of days in the most recent six-month period, then divided by the number of days in the most recent 12-month period (184/365).

# Inflation-Protected Securities Fund

# Performance Summary

All of the returns in this report represent past performance, which is not a guarantee of future results that may be achieved by the fund. (Current performance may be lower or higher than the performance data cited. For performance data current to the most recent month-end, visit our website at vanguard.com/performance.) Note, too, that both investment returns and principal value can fluctuate widely, so an investor's shares, when sold, could be worth more or less than their original cost. The returns shown do not reflect taxes that a shareholder would pay on fund distributions or on the sale of fund shares.

Cumulative Performance: December 31, 2013, Through December 31, 2023 Initial Investment of \$10,000



	Periods Ended December 31, 2023			
	One Year	Five Years	Ten Years	Final Value of a \$10,000 Investment
Inflation-Protected Securities Fund Investor Shares	3.65%	2.92%	2.22%	\$12,458
Bloomberg U.S. Treasury Inflation Protected Securities Index	3.90	3.15	2.42	12,702
—— Bloomberg U.S. Aggregate Bond Index	5.53	1.10	1.81	11,964

Average Appual Total Returns

	One Year	Five Years	Ten Years	Final Value of a \$50,000 Investment
Inflation-Protected Securities Fund Admiral Shares	3.79%	3.02%	2.33%	\$62,954
Bloomberg U.S. Treasury Inflation Protected Securities Index	3.90	3.15	2.42	63,509
Bloomberg U.S. Aggregate Bond Index	5.53	1.10	1.81	59,821

# Average Annual Total Returns Periods Ended December 31, 2023

	One Year	Five Years	Ten Years	Final Value of a \$5,000,000 Investment		
Inflation-Protected Securities Fund Institutional Shares	3.85%	3.05%	2.36%	\$6,315,607		
Bloomberg U.S. Treasury Inflation Protected Securities Index	3.90	3.15	2.42	6,350,875		
Bloomberg U.S. Aggregate Bond Index	5.53	1.10	1.81	5,982,089		

# Distribution by Stated Maturity As of December 31, 2023

0 - 5 Years	46.3%
5 - 10 Years	40.0
15 - 20 Years	3.8
20 - 25 Years	5.5
Over 25 Years	4.4

The table reflects the fund's investments, except for short-term investments and derivatives.

# **Financial Statements**

# Schedule of Investments

As of December 31, 2023

The fund files its complete schedule of portfolio holdings with the Securities and Exchange Commission (SEC) for the first and third quarters of each fiscal year as an exhibit to its reports on Form N-PORT. The fund's Form N-PORT reports are available on the SEC's website at www.sec.gov.

	Coupon	Maturity Date	Face Amount (\$000)	Market Value• (\$000)
U.S. Government and Agency Obligations (96.1%)				
U.S. Government Securities (96.1%)				
United States Treasury Inflation Indexed Bonds	0.250%	1/15/25	410,877	398,865
United States Treasury Inflation Indexed Bonds	2.375%	1/15/25	427,082	423,738
United States Treasury Inflation Indexed Bonds	0.125%	4/15/25	679,432	655,110
United States Treasury Inflation Indexed Bonds	0.375%	7/15/25	932,643	903,484
United States Treasury Inflation Indexed Bonds	0.125%	10/15/25	827,082	795,155
United States Treasury Inflation Indexed Bonds	0.625%	1/15/26	422,804	407,999
United States Treasury Inflation Indexed Bonds	2.000%	1/15/26	18,179	18,034
United States Treasury Inflation Indexed Bonds	0.125%	4/15/26	638,226	607,307
United States Treasury Inflation Indexed Bonds	0.125%	7/15/26	782,090	745,174
United States Treasury Inflation Indexed Bonds	0.125%	10/15/26	883,871	839,255
United States Treasury Inflation Indexed Bonds	0.375%	1/15/27	728,733	692,746
United States Treasury Inflation Indexed Bonds	2.375%	1/15/27	364,710	368,010
United States Treasury Inflation Indexed Bonds	0.125%	4/15/27	903,370	849,011
United States Treasury Inflation Indexed Bonds	0.375%	7/15/27	803,715	763,774
United States Treasury Inflation Indexed Bonds	1.625%	10/15/27	905,694	898,893
United States Treasury Inflation Indexed Bonds	0.500%	1/15/28	828,857	784,553
United States Treasury Inflation Indexed Bonds	1.750%	1/15/28	321,435	319,622
United States Treasury Inflation Indexed Bonds	1.250%	4/15/28	894,463	871,805
United States Treasury Inflation Indexed Bonds	3.625%	4/15/28	353,016	378,220
United States Treasury Inflation Indexed Bonds	0.750%	7/15/28	221,855	212,492
United States Treasury Inflation Indexed Bonds	2.375%	10/15/28	773,473	797,032
United States Treasury Inflation Indexed Bonds	0.875%	1/15/29	1,058,877	1,014,362
United States Treasury Inflation Indexed Bonds	2.500%	1/15/29	447,356	462,867
United States Treasury Inflation Indexed Bonds	3.875%	4/15/29	402,842	444,441
United States Treasury Inflation Indexed Bonds	0.250%	7/15/29	726,503	672,123
United States Treasury Inflation Indexed Bonds	0.125%	1/15/30	817,968	742,166
United States Treasury Inflation Indexed Bonds	0.125%	7/15/30	906,015	819,371
United States Treasury Inflation Indexed Bonds	0.125%	1/15/31	940,816	840,840
United States Treasury Inflation Indexed Bonds	0.125%	7/15/31	958,194	853,085
United States Treasury Inflation Indexed Bonds	0.125%	1/15/32	1,046,109	920,396
United States Treasury Inflation Indexed Bonds	3.375%	4/15/32	143,920	161,189
United States Treasury Inflation Indexed Bonds	0.625%	7/15/32	1,085,424	993,653
United States Treasury Inflation Indexed Bonds	1.125%	1/15/33	1,059,519	1,004,537
United States Treasury Inflation Indexed Bonds	1.375%	7/15/33	1,384,245	1,344,867
United States Treasury Inflation Indexed Bonds	2.125%	2/15/40	190,259	195,993
United States Treasury Inflation Indexed Bonds	2.125%	2/15/41	274,332	282,729
United States Treasury Inflation Indexed Bonds	0.750%	2/15/42	445,450	362,410
United States Treasury Inflation Indexed Bonds	0.625%	2/15/43	267,318	209,593
United States Treasury Inflation Indexed Bonds	1.375%	2/15/44	453,785	406,770

		Coupon	Maturity Date	Face Amount (\$000)	Market Value• (\$000)
	United States Treasury Inflation Indexed Bonds	0.750%	2/15/45	531,647	417,254
	United States Treasury Inflation Indexed Bonds	1.000%	2/15/46	272,430	223,730
	United States Treasury Inflation Indexed Bonds	0.875%	2/15/47	333,430	263,877
	United States Treasury Inflation Indexed Bonds	1.000%	2/15/48	242,052	196,210
	United States Treasury Inflation Indexed Bonds	1.000%	2/15/49	227,422	183,891
1	United States Treasury Inflation Indexed Bonds	0.250%	2/15/50	343,464	225,073
	United States Treasury Inflation Indexed Bonds	0.125%	2/15/51	345,668	215,391
	United States Treasury Inflation Indexed Bonds	0.125%	2/15/52	387,943	239,431
	United States Treasury Inflation Indexed Bonds	1.500%	2/15/53	396,842	361,801
	United States Treasury Note/Bond	3.875%	9/30/29	170,000	169,814
	United States Treasury Note/Bond	4.000%	2/28/30	64,000	64,380
	United States Treasury Note/Bond	3.625%	3/31/30	80,000	78,837
	United States Treasury Note/Bond	3.750%	6/30/30	185,000	183,526
	United States Treasury Note/Bond	4.125%	11/15/32	118,500	120,629
	United States Treasury Note/Bond	3.500%	2/15/33	75,000	72,832
	United States Treasury Note/Bond	3.875%	8/15/33	35,000	35,011
Total U.S. Government and Agency Obligations (Cost \$29,462,641) 27,5					27,513,358

		Shares	
Temporary Cash Investments (3.1%)			
Money Market Fund (3.1%) <sup>2</sup> Vanguard Market Liquidity Fund (Cost \$903,148)	5.435%	9,032,478	903,067
Total Investments (99.2%) (Cost \$30,365,789)			28,416,425
Other Assets and Liabilities – Net (0.8%)			218,144
Net Assets (100%)	<u> </u>		28,634,569

## Cost is in \$000.

<sup>•</sup> See Note A in Notes to Financial Statements.

<sup>1</sup> Securities with a value of \$14,428,000 have been segregated as initial margin for open futures contracts.

<sup>2</sup> Affiliated money market fund available only to Vanguard funds and certain trusts and accounts managed by Vanguard. Rate shown is the 7-day yield.

# Derivative Financial Instruments Outstanding as of Period End

## **Futures Contracts**

				(\$000)
	Expiration	Number of Long (Short) Contracts	Notional Amount	Value and Unrealized Appreciation (Depreciation)
Long Futures Contracts				
10-Year U.S. Treasury Note	March 2024	4,675	527,764	10,121
Short Futures Contracts				
2-Year U.S. Treasury Note	March 2024	(4,101)	(844,454)	(4,044)
5-Year U.S. Treasury Note	March 2024	(400)	(43,509)	(57)
Ultra 10-Year U.S. Treasury Note	March 2024	(12)	(1,416)	(33)
Ultra Long U.S. Treasury Bond	March 2024	(680)	(90,844)	(3,591)
				(7,725)
			-	2,396
			-	

# Statement of Assets and Liabilities

As of December 31, 2023

(\$000s, except shares, footnotes, and per-share amounts)	Amount
Assets	
Investments in Securities, at Value	
Unaffiliated Issuers (Cost \$29,462,641)	27,513,358
Affiliated Issuers (Cost \$903,148)	903,067
Total Investments in Securities	28,416,425
Investment in Vanguard	948
Cash	4,414
Receivables for Investment Securities Sold	755,816
Receivables for Accrued Income	92,728
Receivables for Capital Shares Issued	28,919
Variation Margin Receivable—Futures Contracts	335
Other Assets	117
Total Assets	29,299,702
Liabilities	
Payables for Investment Securities Purchased	594,381
Payables for Capital Shares Redeemed	69,523
Payables to Vanguard	1,229
Total Liabilities	665,133
Net Assets	28,634,569

## Statement of Assets and Liabilities (continued)

At December 31, 2023, net assets consisted of:	
(\$000s, except shares, footnotes, and per-share amounts)	Amount
Paid-in Capital	32,664,630
Total Distributable Earnings (Loss)	(4,030,061)
Net Assets	28,634,569
Investor Shares—Net Assets	
Applicable to 222,795,012 outstanding \$.001 par value shares of beneficial interest (unlimited authorization)	2,613,906
Net Asset Value Per Share—Investor Shares	\$11.73
Admiral Shares—Net Assets	
Applicable to 631,116,083 outstanding \$.001 par value shares of beneficial interest (unlimited authorization)	14,535,412
Net Asset Value Per Share—Admiral Shares	\$23.03
Institutional Shares—Net Assets	
Applicable to 1,224,171,046 outstanding \$.001 par value shares of beneficial interest (unlimited authorization)	11,485,251
Net Asset Value Per Share—Institutional Shares	\$9.38

# Statement of Operations

Year Ended December 31, 2023

	(\$000)
Investment Income	
Income	
Interest <sup>1</sup>	1,287,834
Total Income	1,287,834
Expenses	
The Vanguard Group—Note B	
Investment Advisory Services	3,174
Management and Administrative—Investor Shares	5,119
Management and Administrative—Admiral Shares	13,186
Management and Administrative—Institutional Shares	6,421
Marketing and Distribution—Investor Shares	180
Marketing and Distribution—Admiral Shares	902
Marketing and Distribution—Institutional Shares	472
Custodian Fees	37
Auditing Fees	37
Shareholders' Reports—Investor Shares	85
Shareholders' Reports—Admiral Shares	230
Shareholders' Reports—Institutional Shares	218
Trustees' Fees and Expenses	18
Other Expenses	16
Total Expenses	30,095
Net Investment Income	1,257,739
Realized Net Gain (Loss)	
Investment Securities Sold <sup>1</sup>	(991,477)
Futures Contracts	(63,080)
Realized Net Gain (Loss)	(1,054,557)
Change in Unrealized Appreciation (Depreciation)	
Investment Securities <sup>1</sup>	917,701
Futures Contracts	(1,942)
Change in Unrealized Appreciation (Depreciation)	915,759
Net Increase (Decrease) in Net Assets Resulting from Operations	1,118,941

<sup>1</sup> Interest income, realized net gain (loss), capital gain distributions received, and change in unrealized appreciation (depreciation) from an affiliated company of the fund were \$21,944,000, (\$46,000), \$7,000, and (\$123,000), respectively. Purchases and sales are for temporary cash investment purposes.

# Statement of Changes in Net Assets

	Year Ended Decembe	
	2023 (\$000)	2022 (\$000)
Increase (Decrease) in Net Assets		
Operations		
Net Investment Income	1,257,739	2,770,308
Realized Net Gain (Loss)	(1,054,557)	(1,017,213)
Change in Unrealized Appreciation (Depreciation)	915,759	(6,580,561)
Net Increase (Decrease) in Net Assets Resulting from Operations	1,118,941	(4,827,466)
Distributions		
Investor Shares	(112,949)	(260,797)
Admiral Shares	(651,917)	(1,498,041)
Institutional Shares	(502,748)	(1,006,969)
Total Distributions	(1,267,614)	(2,765,807)
Capital Share Transactions		
Investor Shares	(457,430)	(215,595)
Admiral Shares	(2,375,026)	(1,625,032)
Institutional Shares	(483,943)	(233,139)
Net Increase (Decrease) from Capital Share Transactions	(3,316,399)	(2,073,766)
Total Increase (Decrease)	(3,465,072)	(9,667,039)
Net Assets		
Beginning of Period	32,099,641	41,766,680
End of Period	28,634,569	32,099,641

# Financial Highlights

### Investor Shares

For a Share Outstanding	Year Ended December 31,			ember 31,	
Throughout Each Period	2023	2022	2021	2020	2019
Net Asset Value, Beginning of Period	\$11.80	\$14.49	\$14.43	\$13.18	\$12.47
Investment Operations					
Net Investment Income <sup>1</sup>	.468	.965	.766	.193	.290
Net Realized and Unrealized Gain (Loss) on Investments	(.045)	(2.672)	.023	1.242	.713
Total from Investment Operations	.423	(1.707)	.789	1.435	1.003
Distributions					
Dividends from Net Investment Income	(.493)	(.983)	(.728)	(.185)	(.293)
Distributions from Realized Capital Gains	_	_	(.001)	_	_
Total Distributions	(.493)	(.983)	(.729)	(.185)	(.293)
Net Asset Value, End of Period	\$11.73	\$11.80	\$14.49	\$14.43	\$13.18
Total Return <sup>2</sup>	3.65%	-11.95%	5.56%	10.90%	8.06%
Ratios/Supplemental Data					
Net Assets, End of Period (Millions)	\$2,614	\$3,082	\$4,024	\$3,570	\$3,402
Ratio of Total Expenses to Average Net Assets	0.20%	0.20%3	0.20%	0.20%	0.20%
Ratio of Net Investment Income to Average Net Assets	3.95%	7.33%	5.26%	1.38%	2.24%
Portfolio Turnover Rate	34%	28%	24%	48%	26%

<sup>1</sup> Calculated based on average shares outstanding.

<sup>2</sup> Total returns do not include account service fees that may have applied in the periods shown. Fund prospectuses provide information about any applicable account service fees.

<sup>3</sup> The ratio of expenses to average net assets for the period net of reduction from custody fee offset arrangements was 0.20%.

# Financial Highlights

### **Admiral Shares**

For a Share Outstanding	Year Ended December 31,			ember 31,	
Throughout Each Period	2023	2022	2021	2020	2019
Net Asset Value, Beginning of Period	\$23.16	\$28.44	\$28.32	\$25.88	\$24.48
Investment Operations					
Net Investment Income <sup>1</sup>	.947	1.929	1.534	.421	.600
Net Realized and Unrealized Gain (Loss) on Investments	(.085)	(5.252)	.045	2.411	1.394
Total from Investment Operations	.862	(3.323)	1.579	2.832	1.994
Distributions					
Dividends from Net Investment Income	(.992)	(1.957)	(1.458)	(.392)	(.594)
Distributions from Realized Capital Gains	_	_	(.001)	_	
Total Distributions	(.992)	(1.957)	(1.459)	(.392)	(.594)
Net Asset Value, End of Period	\$23.03	\$23.16	\$28.44	\$28.32	\$25.88
Total Return <sup>2</sup>	3.79%	-11.85%	5.68%	10.96%	8.16%
Ratios/Supplemental Data					
Net Assets, End of Period (Millions)	\$14,535	\$16,985	\$22,745	\$18,143	\$14,310
Ratio of Total Expenses to Average Net Assets	0.10%	0.10%3	0.10%	0.10%	0.10%
Ratio of Net Investment Income to Average Net Assets	4.07%	7.46%	5.37%	1.54%	2.34%
Portfolio Turnover Rate	34%	28%	24%	48%	26%
·					

<sup>1</sup> Calculated based on average shares outstanding.

<sup>2</sup> Total returns do not include account service fees that may have applied in the periods shown. Fund prospectuses provide information about any applicable account service fees.

<sup>3</sup> The ratio of expenses to average net assets for the period net of reduction from custody fee offset arrangements was 0.10%.

# Financial Highlights

## Institutional Shares

For a Share Outstanding	Year Ended December 3			ember 31,	
Throughout Each Period	2023	2022	2021	2020	2019
Net Asset Value, Beginning of Period	\$9.43	\$11.59	\$11.54	\$10.54	\$9.97
Investment Operations					
Net Investment Income <sup>1</sup>	.390	.781	.626	.174	.249
Net Realized and Unrealized Gain (Loss) on Investments	(.033)	(2.141)	.021	.989	.565
Total from Investment Operations	.357	(1.360)	.647	1.163	.814
Distributions					
Dividends from Net Investment Income	(.407)	(.800)	(.597)	(.163)	(.244)
Distributions from Realized Capital Gains	_	_	(.000)2	_	_
Total Distributions	(.407)	(.800)	(.597)	(.163)	(.244)
Net Asset Value, End of Period	\$9.38	\$9.43	\$11.59	\$11.54	\$10.54
Total Return	3.85%	-11.90%	5.72%	11.05%	8.18%
Ratios/Supplemental Data					
Net Assets, End of Period (Millions)	\$11,485	\$12,033	\$14,998	\$12,587	\$10,250
Ratio of Total Expenses to Average Net Assets	0.07%	0.07%3	0.07%	0.07%	0.07%
Ratio of Net Investment Income to Average Net Assets	4.12%	7.42%	5.37%	1.56%	2.37%
Portfolio Turnover Rate	34%	28%	24%	48%	26%

<sup>1</sup> Calculated based on average shares outstanding.

<sup>2</sup> Distribution was less than \$.001 per share.

<sup>3</sup> The ratio of expenses to average net assets for the period net of reduction from custody fee offset arrangements was 0.07%.

# Notes to Financial Statements

Vanguard Inflation-Protected Securities Fund is registered under the Investment Company Act of 1940 as an open-end investment company, or mutual fund. The fund offers three classes of shares: Investor Shares, Admiral Shares, and Institutional Shares. Each of the share classes has different eligibility and minimum purchase requirements, and is designed for different types of investors.

- **A.** The following significant accounting policies conform to generally accepted accounting principles for U.S. investment companies. The fund consistently follows such policies in preparing its financial statements.
- 1. Security Valuation: Securities are valued as of the close of trading on the New York Stock Exchange (generally 4 p.m., Eastern time) on the valuation date. Bonds and other temporary cash investments 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. Investments in Vanguard Market Liquidity Fund are valued at that fund's net asset value. Securities for which market quotations are not readily available, or whose values have been affected by events occurring before the fund's pricing time but after the close of the securities' primary markets, are valued by methods deemed by the valuation designee to represent fair value and subject to oversight by the board of trustees.
- 2. Futures Contracts: The fund uses futures contracts to invest in fixed income asset classes with greater efficiency and lower cost than is possible through direct investment, to add value when these instruments are attractively priced, or to adjust sensitivity to changes in interest rates. The primary risks associated with the use of futures contracts are imperfect correlation between changes in market values of bonds held by the fund and the prices of futures contracts, and the possibility of an illiquid market. Counterparty risk involving futures is mitigated because a regulated clearinghouse is the counterparty instead of the clearing broker. To further mitigate counterparty risk, the fund trades futures contracts on an exchange, monitors the financial strength of its clearing brokers and clearinghouse, and has entered into clearing agreements with its clearing brokers. The clearinghouse imposes initial margin requirements to secure the fund's performance and requires daily settlement of variation margin representing changes in the market value of each contract. Any securities pledged as initial margin for open contracts are noted in the Schedule of Investments.

Futures contracts are valued at their quoted daily settlement prices. The notional amounts of the contracts are not recorded in the Statement of Assets and Liabilities. Fluctuations in the value of the contracts are recorded in the Statement of Assets and Liabilities as an asset (liability) and in the Statement of Operations as unrealized appreciation (depreciation) until the contracts are closed, when they are recorded as realized gains (losses) on futures contracts.

During the year ended December 31, 2023, the fund's average investments in long and short futures contracts represented 3% and 2% of net assets, respectively, based on the average of the notional amounts at each guarter-end during the period.

3. Federal Income Taxes: The fund intends to continue to qualify as a regulated investment company and distribute virtually all of its taxable income. The fund's tax returns are open to examination by the relevant tax authorities until expiration of the applicable statute of limitations, which is generally three years after the filing of the tax return. Management has analyzed the fund's tax positions taken for all open federal and state income tax years, and has concluded that no provision for income tax is required in the fund's financial statements.

- 4. Distributions: Distributions to shareholders are recorded on the ex-dividend date. Distributions are determined on a tax basis at the fiscal year-end and may differ from net investment income and realized capital gains for financial reporting purposes.
- 5. Credit Facilities and Interfund Lending Program: The fund and certain other funds managed by The Vanguard Group ("Vanguard") participate in a \$4.3 billion committed credit facility provided by a syndicate of lenders pursuant to a credit agreement and an uncommitted credit facility provided by Vanguard. Both facilities may be renewed annually. Each fund is individually liable for its borrowings, if any, under the credit facilities. Borrowings may be utilized for temporary or emergency purposes and are subject to the fund's regulatory and contractual borrowing restrictions. With respect to the committed credit facility, the participating funds are charged administrative fees and an annual commitment fee of 0.10% of the undrawn committed amount of the facility, which are allocated to the funds based on a method approved by the fund's board of trustees and included in Management and Administrative expenses on the fund's Statement of Operations. Any borrowings under either facility bear interest at an agreed-upon spread plus the higher of the federal funds effective rate, the overnight bank funding rate, or the Daily Simple Secured Overnight Financing Rate inclusive of an additional agreed-upon spread. However, borrowings under the uncommitted credit facility may bear interest based upon an alternate rate agreed to by the fund and Vanguard.

In accordance with an exemptive order (the "Order") from the SEC, the fund may participate in a joint lending and borrowing program that allows registered open-end Vanguard funds to borrow money from and lend money to each other for temporary or emergency purposes (the "Interfund Lending Program"), subject to compliance with the terms and conditions of the Order, and to the extent permitted by the fund's investment objective and investment policies. Interfund loans and borrowings normally extend overnight but can have a maximum duration of seven days. Loans may be called on one business day's notice. The interest rate to be charged is governed by the conditions of the Order and internal procedures adopted by the board of trustees. The board of trustees is responsible for overseeing the Interfund Lending Program.

For the year ended December 31, 2023, the fund did not utilize the credit facilities or the Interfund Lending Program.

6. Other: Interest income includes income distributions received from Vanguard Market Liquidity Fund and is accrued daily. Premiums and discounts on debt securities are amortized and accreted, respectively, to interest income over the lives of the respective securities, except for premiums on certain callable debt securities that are amortized to the earliest call date. Inflation adjustments to the face amount of inflation-indexed securities are included in interest income. Security transactions are accounted for on the date securities are bought or sold. Costs used to determine realized gains (losses) on the sale of investment securities are those of the specific securities sold.

Each class of shares has equal rights as to assets and earnings, except that each class separately bears certain class-specific expenses related to maintenance of shareholder accounts (included in Management and Administrative expenses) and shareholder reporting. Marketing and distribution expenses are allocated to each class of shares based on a method approved by the board of trustees. Income, other non-class-specific expenses, and gains and losses on investments are allocated to each class of shares based on its relative net assets.

**B.** In accordance with the terms of a Funds' Service Agreement (the "FSA") between Vanguard and the fund, Vanguard furnishes to the fund investment advisory, corporate management, administrative, marketing, and distribution services at Vanguard's cost of operations (as defined by the FSA). These costs of operations are allocated to the fund based on methods and guidelines approved by the board of trustees and are generally settled twice a month.

Upon the request of Vanguard, the fund may invest up to 0.40% of its net assets as capital in Vanguard. At December 31, 2023, the fund had contributed to Vanguard capital in the amount of \$948,000, representing less than 0.01% of the fund's net assets and 0.38% of Vanguard's capital received pursuant to the FSA. The fund's trustees and officers are also directors and employees, respectively, of Vanguard.

**C.** Various inputs may be used to determine the value of the fund's investments and derivatives. These inputs are summarized in three broad levels for financial statement purposes. The inputs or methodologies used to value securities are not necessarily an indication of the risk associated with investing in those securities.

Level 1—Quoted prices in active markets for identical securities.

Level 2—Other significant observable inputs (including quoted prices for similar securities, interest rates, prepayment speeds, credit risk, etc.).

**Level 3**—Significant unobservable inputs (including the fund's own assumptions used to determine the fair value of investments). Any investments and derivatives valued with significant unobservable inputs are noted on the Schedule of Investments.

The following table summarizes the market value of the fund's investments and derivatives as of December 31, 2023, based on the inputs used to value them:

	Level 1 (\$000)	Level 2 (\$000)	Level 3 (\$000)	Total (\$000)
Investments				
Assets				
U.S. Government and Agency Obligations	_	27,513,358	_	27,513,358
Temporary Cash Investments	903,067	_	_	903,067
Total	903,067	27,513,358	_	28,416,425
Derivative Financial Instruments				
Assets				
Futures Contracts <sup>1</sup>	10,121	_	_	10,121
Liabilities				
Futures Contracts <sup>1</sup>	7,725	_	_	7,725

<sup>1</sup> Includes cumulative appreciation (depreciation) on futures contracts and centrally cleared swaps, if any, as reported in the Schedule of Investments. Only current day's variation margin is reported within the Statement of Assets and Liabilities.

**D.** Permanent differences between book-basis and tax-basis components of net assets, if any, are reclassified among capital accounts in the financial statements to reflect their tax character. These reclassifications have no effect on net assets or net asset value per share.

Temporary differences between book-basis and tax-basis components of total distributable earnings (loss) arise when certain items of income, gain, or loss are recognized in different periods

for financial statement and tax purposes; these differences will reverse at some time in the future. The differences are primarily related to capital loss carryforwards; the deferral of losses from wash sales; the deferral of losses from straddles; and the recognition of unrealized gains or losses from certain derivative contracts. As of period end, the tax-basis components of total distributable earnings (loss) are detailed in the table as follows:

	Amount (\$000)
Undistributed Ordinary Income	11,167
Undistributed Long-Term Gains	
Net Unrealized Gains (Losses)	(1,976,778)
Capital Loss Carryforwards	(2,064,450)
Qualified Late-Year Losses	_
Other Temporary Differences	_
Total	(4,030,061)

The tax character of distributions paid was as follows:

	Year Ended D	ecember 31,
	2023 Amount (\$000)	2022 Amount (\$000)
Ordinary Income*	1,267,614	2,765,807
Long-Term Capital Gains	_	_
Total	1,267,614	2,765,807

<sup>\*</sup> Includes short-term capital gains, if any.

As of December 31, 2023, gross unrealized appreciation and depreciation for investments and derivatives based on cost for U.S. federal income tax purposes were as follows:

	Amount (\$000)
Tax Cost	30,393,203
Gross Unrealized Appreciation	141,911
Gross Unrealized Depreciation	(2,118,689)
Net Unrealized Appreciation (Depreciation)	(1,976,778)

E. During the year ended December 31, 2023, the fund purchased \$10,443,244,000 of investment securities and sold \$14,561,154,000 of investment securities, other than temporary cash investments.

## F. Capital share transactions for each class of shares were:

			Year Ended De	ecember 31,
		2023		2022
	Amount (\$000)	Shares (000)	Amount (\$000)	Shares (000)
Investor Shares				
Issued	305,121	25,844	633,109	47,025
Issued in Lieu of Cash Distributions	105,251	8,976	243,251	19,520
Redeemed	(867,802)	(73,298)	(1,091,955)	(83,041)
Net Increase (Decrease)—Investor Shares	(457,430)	(38,478)	(215,595)	(16,496)
Admiral Shares				
Issued	2,521,314	108,488	4,960,474	189,263
Issued in Lieu of Cash Distributions	572,987	24,887	1,315,318	53,724
Redeemed	(5,469,327)	(235,696)	(7,900,824)	(309,302)
Net Increase (Decrease)—Admiral Shares	(2,375,026)	(102,321)	(1,625,032)	(66,315)
Institutional Shares				
Issued	1,919,994	202,062	2,684,315	251,132
Issued in Lieu of Cash Distributions	481,985	51,402	954,665	95,882
Redeemed	(2,885,922)	(304,862)	(3,872,119)	(366,000)
Net Increase (Decrease)—Institutional Shares	(483,943)	(51,398)	(233,139)	(18,986)

**G.** Significant market disruptions, such as those caused by pandemics (e.g., COVID-19 pandemic), natural or environmental disasters, war (e.g., Russia's invasion of Ukraine), acts of terrorism, or other events, can adversely affect local and global markets and normal market operations. Any such disruptions could have an adverse impact on the value of the fund's investments and fund performance.

To the extent the fund's investment portfolio reflects concentration in a particular market, industry, sector, country or asset class, the fund may be adversely affected by the performance of these concentrations and may be subject to increased price volatility and other risks.

Credit risk is the risk that a counterparty to a transaction or an issuer of a financial instrument will fail to pay interest and principal when due, or that perceptions of the issuer's ability to make such payments will cause the price of an investment to decline. Investment in debt securities will generally increase credit risk.

The use of derivatives may expose the fund to various risks. Derivatives can be highly volatile, and any initial investment is generally small relative to the notional amount so that transactions may be leveraged in terms of market exposure. A relatively small market movement may have a potentially larger impact on derivatives than on standard securities. Leveraged derivatives positions can, therefore, increase volatility. Additional information regarding the fund's use of derivative(s) and the specific risks associated is described under significant accounting policies.

H. Management has determined that no events or transactions occurred subsequent to December 31, 2023, that would require recognition or disclosure in these financial statements.

# Report of Independent Registered Public Accounting Firm

To the Board of Trustees of Vanguard Bond Index Funds and Shareholders of Vanguard Inflation-Protected Securities Fund

# Opinion on the Financial Statements

We have audited the accompanying statement of assets and liabilities, including the schedule of investments, of Vanguard Inflation-Protected Securities Fund (one of the funds constituting Vanguard Bond Index Funds, referred to hereafter as the "Fund") as of December 31, 2023, the related statement of operations for the year ended December 31, 2023, the statement of changes in net assets for each of the two years in the period ended December 31, 2023, including the related notes, and the financial highlights for each of the five years in the period ended December 31, 2023 (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Fund as of December 31, 2023, the results of its operations for the year then ended, the changes in its net assets for each of the two years in the period ended December 31, 2023 and the financial highlights for each of the five years in the period ended December 31, 2023 in conformity with accounting principles generally accepted in the United States of America.

## **Basis for Opinion**

These financial statements are the responsibility of the Fund's management. Our responsibility is to express an opinion on the Fund'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 Fund in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

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

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

/s/PricewaterhouseCoopers LLP Philadelphia, Pennsylvania February 15, 2024

We have served as the auditor of one or more investment companies in The Vanguard Group of Funds since 1975.

# Tax information (unaudited)

The fund hereby designates \$1,243,083,000, or if subsequently determined to be different, the maximum amount allowable by law, of interest earned from obligations of the U.S. government which is generally exempt from state income tax.

The fund hereby designates 99.2%, or if subsequently determined to be different, the maximum percentage allowable by law, of ordinary income dividends eligible to be treated as interest income for purposes of section 163(j) and the regulations thereunder for the fiscal year.

The fund hereby designates 100%, or if subsequently determined to be different, the maximum percentage allowable by law, as interest-related dividends eligible for exemption from U.S. withholding tax for nonresident alien shareholders.

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The Inflation-Protected Securities Fund is not sponsored, endorsed, sold or promoted by Bloomberg. Bloomberg does not make any representation or warranty, express or implied, to the owners of or counterparties to the Inflation-Protected Securities Fund or any member of the public regarding the advisability of investing in securities generally or in the Inflation-Protected Securities Fund particularly. The only relationship of Bloomberg to Vanguard is the licensing of certain trademarks, trade names and service marks and of the Bloomberg U.S. Treasury Inflation Protected Securities Index, which is determined, composed and calculated by BISL without regard to Vanguard or the Inflation-Protected Securities Fund. Bloomberg has no obligation to take the needs of Vanguard or the owners of the Inflation-Protected Securities Fund into consideration in determining, composing or calculating the Bloomberg U.S. Treasury Inflation Protected Securities Fund be be issued. Bloomberg is not responsible for and has not participated in the determination of the timing of, prices at, or quantities of the Inflation-Protected Securities Fund to be issued. Bloomberg shall not have any obligation or liability, including, without limitation, to Inflation-Protected Securities Fund customers, in connection with the administration, marketing or trading of the Inflation-Protected Securities Fund.

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# The People Who Govern Your Fund

The trustees of your mutual fund are there to see that the fund is operated and managed in your best interests since, as a shareholder, you are a part owner of the fund. Your fund's trustees also serve on the board of directors of The Vanguard Group, Inc., which is owned by the Vanguard funds and provides services to them.

A majority of Vanguard's board members are independent, meaning that they have no affiliation with Vanguard or the funds they oversee, apart from the sizable personal investments they have made as private individuals. The independent board members have distinguished backgrounds in business, academia, and public service. Each of the trustees and executive officers oversees 208 Vanguard funds.

Information for each trustee and executive officer of the fund appears below. That information, as well as the Vanguard fund count, is as of the date on the cover of this fund report. The mailing address of the trustees and officers is P.O. Box 876, Valley Forge, PA 19482. More information about the trustees is in the *Statement of Additional Information*, which can be obtained, without charge, by contacting Vanguard at 800-662-7447, or online at vanguard.com.

#### Interested Trustee<sup>1</sup>

## Mortimer J. Buckley

Born in 1969. Trustee since January 2018. Principal occupation(s) during the past five years and other experience: chairman of the board (2019-present) of Vanguard and of each of the investment companies served by Vanguard; chief executive officer (2018-present) of Vanguard; chief executive officer, president, and trustee (2018-present) of each of the investment companies served by Vanguard; president and director (2017-present) of Vanguard; and president (2018-present) of Vanguard Marketing Corporation. Chief investment officer (2013-2017), managing director (2002-2017), head of the Retail Investor Group (2006–2012), and chief information officer (2001-2006) of Vanguard. Member of the board of governors of the Investment Company Institute and the board of governors of FINRA.

### **Independent Trustees**

#### Tara Bunch

Born in 1962. Trustee since November 2021. Principal occupation(s) during the past five years and other experience: head of global operations at Airbnb (2020–present). Vice president of AppleCare (2012–2020). Member of the board of directors of Out & Equal, the advisory board of the University of California, Berkeley School of Engineering, and the advisory board of Santa Clara University's Leavey School of Business.

#### Emerson U. Fullwood

Born in 1948. Trustee since January 2008. Principal occupation(s) during the past five years and other experience: executive chief staff and marketing officer for North America and corporate vice president (retired 2008) of Xerox Corporation (document management products and services). Former president of the Worldwide Channels Group, Latin America, and Worldwide Customer Service and executive chief staff officer of Developing Markets of Xerox. Executive in residence and 2009–2010. Distinguished Minett Professor at the Rochester Institute of Technology. Member of the board of directors of the University of Rochester Medical Center, the Monroe Community College Foundation, the United Way of Rochester, North Carolina A&T University, Roberts Wesleyan College, and the Rochester Philharmonic Orchestra. Trustee of the University of Rochester.

## F. Joseph Loughrey

Born in 1949. Trustee since October 2009. Principal occupation(s) during the past five years and other experience: president and chief operating officer (retired 2009) and vice chairman of the board (2008–2009) of Cummins Inc. (industrial machinery). Director of the V Foundation. Member of the advisory council for the College of Arts and Letters at the University of Notre Dame. Chairman of the board of Saint Anselm College.

1 Mr. Buckley is considered an "interested person," as defined in the Investment Company Act of 1940, because he is an officer of the Vanquard funds.

### Mark Loughridge

Born in 1953. Trustee since March 2012. Principal occupation(s) during the past five years and other experience: senior vice president and chief financial officer (retired 2013) of IBM (information technology services). Fiduciary member of IBM's Retirement Plan Committee (2004–2013), senior vice president and general manager (2002–2004) of IBM Global Financing, vice president and controller (1998–2002) of IBM, and a variety of other prior management roles at IBM. Member of the Council on Chicago Booth.

#### Scott C. Malpass

Born in 1962. Trustee since March 2012. Principal occupation(s) during the past five years and other experience: co-founder and managing partner (2022–present) of Grafton Street Partners (investment advisory firm). Chief investment officer (retired 2020) and vice president (retired 2020) of the University of Notre Dame. Chair of the board of Catholic Investment Services, Inc. (investment advisors). Member of the board of superintendence of the Institute for the Works of Religion, the Notre Dame 403(b) Investment Committee, and the board of directors of Paxos Trust Company (finance).

#### Deanna Mulligan

Born in 1963. Trustee since January 2018. Principal occupation(s) during the past five years and other experience: chief executive officer of Purposeful (advisory firm for CEOs and C-level executives; 2021–present). Board chair (2020), chief executive officer (2011–2020), and president (2010–2019) of The Guardian Life Insurance Company of America. Chief operating officer (2010–2011) and executive vice president (2008–2010) of Individual Life and Disability of the Guardian Life Insurance Company of America. Director of DuPont. Member of the board of the Economic Club of New York. Trustee of the Partnership for New York City (business leadership), Chief Executives for Corporate Purpose, and the NewYork-Presbyterian Hospital.

#### André F. Perold

Born in 1952. Trustee since December 2004. Principal occupation(s) during the past five years and other experience: George Gund Professor of Finance and Banking, Emeritus at the Harvard Business School (retired 2011). Chief investment officer and partner of HighVista Strategies (private investment firm). Member of the board of RIT Capital Partners (investment firm).

#### Sarah Bloom Raskin

Born in 1961. Trustee since January 2018. Principal occupation(s) during the past five years and other experience: deputy secretary (2014–2017) of the United States Department of the Treasury. Governor (2010–2014) of the Federal Reserve Board. Commissioner (2007–2010) of financial regulation for the State of Maryland. Colin W. Brown Distinguished Professor of the Practice of Law, Duke Law School (2021–present); Rubenstein Fellow, Duke University (2017–2020); Distinguished Fellow of the Global Financial Markets Center, Duke Law School (2020–2022); and Senior Fellow, Duke Center on Risk (2020–present). Partner of Kaya Partners (climate policy advisory services). Member of the board of directors of Arcadia (energy solution technology).

#### Grant Reid

Born in 1959. Trustee since July 2023. Principal occupation(s) during the past five years and other experience: chief executive officer and president (2014–2022) and member of the board of directors (2015–2022) of Mars, Incorporated (multinational manufacturer). Member of the board of directors of Marriott International, Inc. Chair of Agribusiness Task Force, Sustainable Markets Initiative.

#### David Thomas

Born in 1956. Trustee since July 2021. Principal occupation(s) during the past five years and other experience: president of Morehouse College (2018–present). Professor of business administration, emeritus at Harvard University (2017–2018). Dean (2011–2016) and professor of management (2016–2017) at the Georgetown University McDonough School of Business. Director of DTE Energy Company. Trustee of Common Fund.

#### Peter F. Volanakis

Born in 1955. Trustee since July 2009. Principal occupation(s) during the past five years and other experience: president and chief operating officer (retired 2010) of Corning Incorporated (communications equipment) and director of Corning Incorporated (2000–2010) and Dow Corning (2001–2010). Director (2012) of SPX Corporation (multi-industry manufacturing). Overseer of the Amos Tuck School of Business Administration, Dartmouth College (2001–2013). Member of the BMW Group Mobility Council.

#### **Executive Officers**

## Jacqueline Angell

Born in 1974. Principal occupation(s) during the past five years and other experience: principal of Vanguard. Chief compliance officer (November 2022–present) of Vanguard and of each of the investment companies served by Vanguard. Chief compliance officer (2018–2022) and deputy chief compliance officer (2017–2019) of State Street.

### Christine M. Buchanan

Born in 1970. Principal occupation(s) during the past five years and other experience: principal of Vanguard. Chief financial officer (2021–present) and treasurer (2017–2022) of each of the investment companies served by Vanguard. Partner (2005–2017) at KPMG (audit, tax, and advisory services).

### John Galloway

Born in 1973. Principal occupation(s) during the past five years and other experience: principal of Vanguard. Investment stewardship officer (September 2020–present) of each of the investment companies served by Vanguard. Head of Investor Advocacy (February 2020–present) and head of Marketing Strategy and Planning (2017–2020) at Vanguard. Special assistant to the President of the United States (2015).

## Ashley Grim

Born in 1984. Principal occupation(s) during the past five years and other experience: treasurer (February 2022–present) of each of the investment companies served by Vanguard. Fund transfer agent controller (2019–2022) and director of Audit Services (2017–2019) at Vanguard. Senior manager (2015–2017) at PriceWaterhouseCoopers (audit and assurance, consulting, and tax services).

#### Jodi Miller

Born in 1980. Principal occupation(s) during the past five years and other experience: principal of Vanguard. Finance director (2022–present) of each of the investment companies served by Vanguard. Head of Enterprise Investment Services (2020–present), head of Retail Client Services and Operations (2020–2022), and head of Retail Strategic Support (2018–2020) at Vanguard.

#### Anne E. Robinson

Born in 1970. Principal occupation(s) during the past five years and other experience: general counsel (2016–present) of Vanguard. Secretary (2016–present) of Vanguard and of each of the investment companies served by Vanguard. Managing director (2016–present) of Vanguard. Managing director and general counsel of Global Cards and Consumer Services (2014–2016) at Citigroup. Counsel (2003–2014) at American Express. Nonexecutive director (2022–present) of the board of National Grid (energy).

### Michael Rollings

Born in 1963. Principal occupation(s) during the past five years and other experience: finance director (2017–present) and treasurer (2017) of each of the investment companies served by Vanguard. Managing director (2016–present) of Vanguard. Chief financial officer (2016–present) of Vanguard. Director (2016–present) of Vanguard Marketing Corporation. Executive vice president and chief financial officer (2006–2016) of MassMutual Financial Group.

## Vanguard Senior Management Team

Matthew Benchener Joseph Brennan Mortimer J. Buckley Gregory Davis John James Chris D. McIsaac Thomas M. Rampulla Karin A. Risi Anne E. Robinson Michael Rollings Nitin Tandon Lauren Valente

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