# **Vanguard**<sup>®</sup>

Annual Report | December 31, 2022

# Vanguard U.S. Stock Index Funds Mid-Capitalization Portfolios

Vanguard Extended Market Index Fund Vanguard Mid-Cap Index Fund Vanguard Mid-Cap Growth Index Fund

Vanguard Mid-Cap Value Index Fund

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### Your Fund's Performance at a Glance

- The 12 months ended December 31, 2022, were challenging for financial markets. The returns for the three Vanguard Mid-Cap Index Funds ranged from –28.93% for Investor Shares of Vanguard Mid-Cap Growth Index Fund to –7.88% for Vanguard Mid-Cap Value ETF (based on net asset value). All share classes of Vanguard Extended Market Index Fund, which includes both small- and mid-capitalization holdings, returned approximately –26.5%. Each fund closely tracked its target index.
- Inflation soared, driven by government spending during the pandemic and higher energy and food prices after Russia's invasion of Ukraine. That prompted aggressive tightening by many central banks, which increased fears of recession.
- Technology stocks weighed heaviest on all the funds except the Mid-Cap Value Fund, which suffered most from declines in consumer discretionary stocks. At the end of the period, benchmarks for the other three funds had exposures of 13%–23% in tech companies; the Mid-Cap Value Fund's benchmark had less than 5%.
- Energy stocks soared. But even after the price surges, the sector accounted for less than 10% of each benchmark index.
- Please note that the Extended Market Index Fund uses the Global Industry Classification Standard methodology, while the three other funds use the Industry Classification Benchmark methodology.

#### Market Barometer

	Per	iods Ended Decen	
ussell 1000 Index (Large-caps) ussell 2000 Index (Small-caps) ussell 3000 Index (Broad U.S. market) TSE All-World ex US Index (International)  onds loomberg U.S. Aggregate Float Adjusted Index 3road taxable market) loomberg Municipal Bond Index 3road tax-exempt market)	One Year	Three Years	Five Years
Stocks			
Russell 1000 Index (Large-caps)	-19.13%	7.35%	9.13%
Russell 2000 Index (Small-caps)	-20.44	3.10	4.13
Russell 3000 Index (Broad U.S. market)	-19.21	7.07	8.79
FTSE All-World ex US Index (International)	-15.49	0.61	1.28
Bonds			
Bloomberg U.S. Aggregate Float Adjusted Index (Broad taxable market)	-13.07%	-2.67%	0.06%
Bloomberg Municipal Bond Index (Broad tax-exempt market)	-8.53	-0.77	1.25
FTSE Three-Month U.S. Treasury Bill Index	1.50	0.70	1.24
CPI			
Consumer Price Index	6.45%	4.92%	3.78%

Average Annual Total Returns

### 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, 2022

Six Months Ended December 31, 2022	Beginning Account Value 6/30/2022	Ending Account Value 12/31/2022	Expenses Paid During Period
Based on Actual Fund Return			
Extended Market Index Fund			
Investor Shares	\$1,000.00	\$1,021.80	\$0.97
ETF Shares	1,000.00	1,022.50	0.31
Admiral™ Shares	1,000.00	1,022.40	0.31
Institutional Shares	1,000.00	1,022.50	0.25
Institutional Plus Shares	1,000.00	1,022.50	0.20
Institutional Select Shares	1,000.00	1,022.60	0.10
Mid-Cap Index Fund			
Investor Shares	\$1,000.00	\$1,044.40	\$0.88
ETF Shares	1,000.00	1,045.20	0.21
Admiral Shares	1,000.00	1,045.00	0.26
Institutional Shares	1,000.00	1,045.00	0.21
Institutional Plus Shares	1,000.00	1,045.10	0.15
Mid-Cap Growth Index Fund	,	,	
Investor Shares	\$1,000.00	\$1,029.00	\$0.97
ETF Shares	1,000.00	1,029.70	0.36
Admiral Shares	1,000.00	1,029.70	0.36
Mid-Cap Value Index Fund	,	·	
Investor Shares	\$1,000.00	\$1,058.30	\$0.99
ETF Shares	1,000.00	1,059.10	0.36
Admiral Shares	1,000.00	1,058.90	0.36
Based on Hypothetical 5% Yearly Return	,	,	
Extended Market Index Fund			
Investor Shares	\$1,000.00	\$1,024.25	\$0.97
ETF Shares	1,000.00	1,024.90	0.31
Admiral Shares	1,000.00	1,024.90	0.31
Institutional Shares	1,000.00	1,024.95	0.26
Institutional Plus Shares	1,000.00	1,025.00	0.20
Institutional Select Shares	1,000.00	1,025.10	0.10
Mid-Cap Index Fund			
Investor Shares	\$1,000.00	\$1,024.35	\$0.87
ETF Shares	1,000.00	1,025.00	0.20
Admiral Shares	1,000.00	1,024.95	0.26
Institutional Shares	1,000.00	1,025.00	0.20
Institutional Plus Shares	1,000.00	1,025.05	0.15
Mid-Cap Growth Index Fund			
Investor Shares	\$1,000.00	\$1,024.25	\$0.97
ETF Shares	1,000.00	1,024.85	0.36
Admiral Shares	1,000.00	1,024.85	0.36
Mid-Cap Value Index Fund			
Investor Shares	\$1,000.00	\$1,024.25	\$0.97
ETF Shares			
	1,000.00	1,024.85	0.36

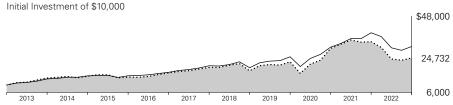
The calculations are based on expenses incurred in the most recent six-month period. The funds' annualized six-month expense ratios for that period are: for the Extended Market Index Fund, 0.19% for Investor Shares, 0.06% for ETF Shares, 0.06% for Admiral Shares, 0.05% for Institutional Shares, 0.04% for Institutional Plus Shares, and 0.02% for Institutional Select Shares; for the Mid-Cap Index Fund, 0.17% for Investor Shares, 0.04% for ETF Shares, 0.05% for Admiral Shares, ond 0.03% for Institutional Plus Shares; for the Mid-Cap Growth Index Fund, 0.19% for Investor Shares, 0.07% for ETF Shares, and 0.07% for Admiral Shares, and 0.03% for Institutional Plus Shares, ond 0.03% for Investor Shares, ond 0.07% for ETF Shares, and 0.07% for Admiral 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).

## **Extended Market Index 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, 2012, Through December 31, 2022



#### Average Annual Total Returns Periods Ended December 31, 2022

	One Year	Five Years	Ten Years	Final Value of a \$10,000 Investment
Extended Market Index Fund Investor Shares	-26.56%	4.74%	9.48%	\$24,732
······ S&P Completion Index	-26.54	4.77	9.52	24,827
Dow Jones U.S. Total Stock Market Float Adjusted Index	-19.53	8.65	12.03	31,151

	One Year	Five Years	Ten Years	Final Value of a \$10,000 Investment
Extended Market Index Fund ETF Shares Net Asset Value	-26.46%	4.87%	9.62%	\$25,052
Extended Market Index Fund ETF Shares Market Price	-26.49	4.87	9.61	25,026
S&P Completion Index	-26.54	4.77	9.52	24,827
Dow Jones U.S. Total Stock Market Float Adjusted Index	-19.53	8.65	12.03	31,151

	One Year	Five Years	Ten Years	Final Value of a \$10,000 Investment
Extended Market Index Fund Admiral Shares	-26.47%	4.88%	9.62%	\$25,053
S&P Completion Index	-26.54	4.77	9.52	24,827
Dow Jones U.S. Total Stock Market Float Adjusted Index	-19.53	8.65	12.03	31,151

#### Average Annual Total Returns Periods Ended December 31, 2022

	One Year	Five Years	Ten Years	Final Value of a \$5,000,000 Investment
Extended Market Index Fund Institutional Shares	-26.46%	4.89%	9.64%	\$12,546,082
S&P Completion Index	-26.54	4.77	9.52	12,413,601
Dow Jones U.S. Total Stock Market Float Adjusted Index	-19.53	8.65	12.03	15,575,514

	One Year	Five Years	Ten Years	Final Value of a \$100,000,000 Investment
Extended Market Index Fund Institutional Plus Shares	-26.45%	4.90%	9.65%	\$251,228,870
S&P Completion Index	-26.54	4.77	9.52	248,272,010
Dow Jones U.S. Total Stock Market Float Adjusted Index	-19.53	8.65	12.03	311,510,280

	One Year	Five Years	Since Inception (6/27/2016)	Final Value of a \$3,000,000,000 Investment
Extended Market Index Fund Institutional Select Shares	-26.44%	4.92%	9.45%	\$5,400,211,200
S&P Completion Index	-26.54	4.77	9.30	5,351,719,500
Dow Jones U.S. Total Stock Market Float Adjusted Index	-19.53	8.65	12.04	6,290,260,800

<sup>&</sup>quot;Since Inception" performance is calculated from the Institutional Select Shares' inception date for both the fund and its comparative standard(s).

#### Cumulative Returns of ETF Shares: December 31, 2012, Through December 31, 2022

	One Year	Five Years	Ten Years
Extended Market Index Fund ETF Shares Market Price	-26.49%	26.86%	150.26%
Extended Market Index Fund ETF Shares Net Asset Value	-26.46	26.86	150.52
S&P Completion Index	-26.54	26.21	148.27

For the ETF Shares, the market price is determined by the midpoint of the bid-offer spread as of the closing time of the New York Stock Exchange (generally 4 p.m., Eastern time). The net asset value is also determined as of the NYSE closing time. For more information about how the ETF Shares' market prices have compared with their net asset value, visit vanguard.com, select your ETF, click on Price, and then scroll down to the Premium/Discount chart. The ETF premium/discount chart there shows the percentage and days on which the ETF Shares' market price was above or below the NAV.

### **Fund Allocation**

As of December 31, 2022

Communication Services	3.8%
Consumer Discretionary	11.2
Consumer Staples	3.0
Energy	4.9
Financials	16.1
Health Care	13.9
Industrials	15.8
Information Technology	18.2
Materials	4.3
Real Estate	6.5
Utilities	2.3

The table reflects the fund's investments, except for short-term investments and derivatives. Sector categories are based on the Global Industry Classification Standard ("GICS"), except for the "Other" category (if applicable), which includes securities that have not been provided a GICS classification as of the effective reporting period.

The fund may invest in derivatives (such as futures and swap contracts) for various reasons, including, but not limited to, attempting to remain fully invested and tracking its target index as closely as possible.

The Global Industry Classification Standard ("GICS") was developed by and is the exclusive property and a service mark of MSCI Inc. ("MSCI") and Standard and Poor's, a division of McGraw-Hill Companies, Inc. ("S&P"), and is licensed for use by Vanguard. Neither MSCI, S&P nor any third party involved in making or compiling the GICS or any GICS classification makes any express or implied warranties or representations with respect to such standard or classification (or the results to be obtained by the use thereof), and all such parties hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability or fitness for a particular purpose with respect to any such standard or classification. Without limiting any of the foregoing, in no event shall MSCI, S&P, any of its affiliates or any third party involved in making or compiling the GICS or any GICS classification have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) even if notified of the possibility of such damages.

## **Financial Statements**

## Schedule of Investments

As of December 31, 2022

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.

		Shares	Market Value* (\$000)			Shares	Market Value* (\$000)
Co	mmon Stocks (99.0%)			*	Lions Gate Entertainment Corp. Class B	1,631,317	8,858
Co	mmunication Services (3.7%)			*	iHeartMedia Inc. Class A	1,423,202	8,724
*	Trade Desk Inc. Class A	6,032,836	270,452	*	Anterix Inc.	266,275	8,566
*	Pinterest Inc. Class A	7,969,834	193,508	*,1 *	Liberty Media CorpLiberty Braves Class A	260,726	8,518
*	Liberty Media CorpLiberty Formula One Class C	2,853,999	170,612	*	Thryv Holdings Inc.	415,187	7,889
*	ROBLOX Corp. Class A	4,948,805	140,843	*	IDT Corp. Class B	276,578	7,791
*	Liberty Broadband Corp. Class C	1,657,755	126,437	*	PubMatic Inc. Class A	600,540	7,693
*	Snap Inc. Class A	13,765,053	123,197	*	Vimeo Inc.	2,231,495	7,654
*	ZoomInfo Technologies Inc. Class A	3,649,589	109,889	Ť	EchoStar Corp. Class A	457,135	7,625
	Nexstar Media Group Inc. Class A	504,967	88,384	*	Clear Channel Outdoor Holdings Inc.	6,747,235	7,085
*	Iridium Communications Inc.	1,704,302	87,601	*	Bandwidth Inc. Class A	306,678	7,038
*	Liberty Global plc Class C	4,391,295	85,323	*	Boston Omaha Corp. Class A	260,016	6,890
*	Frontier Communications Parent Inc.	3,003,825	76,537	*	WideOpenWest Inc.	738,991	6,732
*	Liberty Media CorpLiberty SiriusXM Class C	1,950,673	76,330		Eventbrite Inc. Class A	1,127,844	6,609
	New York Times Co. Class A	2,211,018	71,770	*	ATN International Inc.	129,145	5,852
*	Roku Inc. Class A	1,660,994	67,602	*	AMC Networks Inc. Class A	368,089	5,768
	TEGNA Inc.	3,033,890	64,288	*	Lions Gate Entertainment Corp. Class A	949,860	5,424
	Warner Music Group Corp. Class A	1,550,487	54,298	1	Sciplay Corp. Class A	323,715	5,205
*	Endeavor Group Holdings Inc. Class A	2,380,670	53,660	*,1	Marcus Corp.	348,641	5,017
*	Ziff Davis Inc.	639,884	50,615	*	fuboTV Inc.	2,617,789	4,555
*	IAC Inc.	1,044,084	46,357	*	Integral Ad Science Holding Corp.	517,566	4,549
	Cable One Inc.	64,290	45,765	*	Playstudios Inc.	1,129,252	4,382
	Madison Square Garden Sports Corp.	246,633	45,215	*	Gannett Co. Inc.	2,103,349	4,270
*	Liberty Media CorpLiberty SiriusXM Class A	1,092,261	42,937	*	United States Cellular Corp.	204,580	4,265
	World Wrestling Entertainment Inc. Class A	576,082	39,473	*	Liberty Latin America Ltd. Class A	563,800	4,245
	Cogent Communications Holdings Inc.	589,014	33,621		Ooma Inc.	303,058	4,128
1	Sirius XM Holdings Inc.	5,261,901	30,730	*	Entravision Communications Corp. Class A	843,263	4,048
*,1	AMC Entertainment Holdings Inc. Class A	7,111,729	28,945	*	Nextdoor Holdings Inc.	1,931,386	3,979
*	Yelp Inc. Class A	948,237	25,925	*	EverQuote Inc. Class A	263,204	3,880
*	TripAdvisor Inc.	1,433,525	25,775	*	Consolidated Communications Holdings Inc.	1,069,940	3,830
*	Liberty Global plc Class A	1,297,830	24,568	*	DHI Group Inc.	579,021	3,063
	John Wiley & Sons Inc. Class A	590,208	23,644	*	MediaAlpha Inc. Class A	297,075	2,956
*	Bumble Inc. Class A	1,073,247	22,592	*,1	Advantage Solutions Inc.	1,380,488	2,871
*	Cargurus Inc. Class A	1,244,968	17,442	*	AST SpaceMobile Inc. Class A Daily Journal Corp.	586,781 11,129	2,828 2,788
	Shutterstock Inc.	327,003	17,240	*	TrueCar Inc.	1,104,922	2,766
*	Liberty Media CorpLiberty Formula One Class A	321,941	17,201	*	Cardlytics Inc.	473,640	2,773
Ī	Magnite Inc.	1,606,697	17,015	*,1	Reservoir Media Inc.	421,767	2,738
_	TechTarget Inc.	373,258	16,446	*	Angi Inc. Class A	1,033,556	2,429
_	Madison Square Garden Entertainment Corp.	363,273	16,336		Spok Holdings Inc.	280,286	2,296
_	Scholastic Corp.	408,713	16,128	*,1		3,805,210	1,927
	Liberty Media CorpLiberty Braves Class C	447,339	14,418	*,1	Genius Brands International Inc.	4,117,995	1,915
	Telephone & Data Systems Inc.	1,368,301	14,353	*,1	Loop Media Inc.	284,321	1,882
	Gray Television Inc.	1,275,511	14,273	*	Innovid Corp.	1,096,327	1,875
	Altice USA Inc. Class A	2,976,549	13,692	*	Outbrain Inc.	481,483	1,743
	Liberty Latin America Ltd. Class C	1,773,227	13,477	*,1	Arena Group Holdings Inc.	159,311	1,690
*	Liberty Broadband Corp. Class A	175,437	13,307	*,1	Charge Enterprises Inc.	1,314,624	1,630
*	Cinemark Holdings Inc.	1,484,248	12,854		Saga Communications Inc. Class A	62,942	1,485
*	Gogo Inc.	867,902	12,810	*	Cumulus Media Inc. Class A	227,161	1,411
*	Globalstar Inc.	9,420,912	12,530	*	Emerald Holding Inc.	364,547	1,291
*	Radius Global Infrastructure Inc.	1,014,484	11,991	*	Lee Enterprises Inc.	68,489	1,271
	Cars.com Inc.	869,351	11,971	*,1	Vinco Ventures Inc.	2,624,966	1,218
*	Shenandoah Telecommunications Co.	702,924	11,162	*,1	System1 Inc.	241,575	1,133
*	ZipRecruiter Inc. Class A	662,327	10,875	*	comScore Inc.	942,364	1,093
*	EW Scripps Co. Class A	818,856	10,801	*	Urban One Inc. Class A	220,844	1,005
*	Playtika Holding Corp.	1,251,639	10,651	*	Townsquare Media Inc. Class A	136,531	990
	QuinStreet Inc.	715,469	10,267	*,1	AdTheorent Holding Co. Inc.	589,873	979
*	Sinclair Broadcast Group Inc. Class A Stagwell Inc.	599,071 1,433,314	9,292 8,901	*,1	Golden Matrix Group Inc.	349,853	889

			Market Value*				Market Value*
		Shares	(\$000)			Shares	(\$000)
*,1	Cinedigm Corp. Class A	1,885,033	731	*	Planet Fitness Inc. Class A	1,127,206	88,824
*	Harte Hanks Inc.	61,522	719		Gentex Corp.	3,167,855	86,387
*	Fluent Inc.	639,548	697	*	Mattel Inc.	4,800,231	85,636
*	Liberty TripAdvisor Holdings Inc. Class A	1,019,344	683		Wyndham Hotels & Resorts Inc.	1,185,583	84,544
*	FG Group Holdings Inc.	249,852	655		Texas Roadhouse Inc. Class A	907,240	82,513
*,1,2	Loyalty Ventures Inc. <sup>2</sup> NII Holdings Inc.	269,585 1,297,367	650 649		Autoliv Inc. Tempur Sealy International Inc.	1,045,352 2,303,151	80,053 79,067
*,1	FaZe Holdings Inc.	342,307	633		Murphy USA Inc.	280,126	78,306
*	Marchex Inc. Class B	400,779	629		H&R Block Inc.	2,104,509	76,836
*	Reading International Inc. Class A	212,246	588	*	Skechers USA Inc. Class A	1,820,718	76,379
*	KORE Group Holdings Inc.	433,857	547		Macy's Inc.	3,694,872	76,299
*,1	Chicken Soup For The Soul Entertainment Inc.	102,544	525		Harley-Davidson Inc.	1,813,140	75,427
	LiveOne Inc.	771,651	497		Polaris Inc.	743,017	75,045
*	Gaia Inc. Class A	194,494	463	*	Lithia Motors Inc. Class A	366,523	75,042
*	Travelzoo CuriosityStream Inc.	102,473 392,619	456 448		Light & Wonder Inc. Brunswick Corp.	1,256,782 973,613	73,647 70,178
*	IZEA Worldwide Inc.	785,862	427	*	DraftKings Inc. Class A	6,115,599	69,657
*	Audacy Inc. Class A	1,581,121	356		Toll Brothers Inc.	1,394,255	69,601
*,1	SurgePays Inc.	53,822	353		Marriott Vacations Worldwide Corp.	512,515	68,979
*	Zedge Inc. Class B	160,996	283	*	RH	258,051	68,949
*,1	Wejo Group Ltd.	528,551	254	*	TopBuild Corp.	429,510	67,214
*,1	BuzzFeed Inc.	348,417	240	*,1	GameStop Corp. Class A	3,424,236	63,211
1	Leafly Holdings Inc.	365,726	238	*	PVH Corp.	890,995	62,895
'	National CineMedia Inc.	868,959	191	*	Penn Entertainment Inc.	2,113,153	62,761
*,1	DallasNews Corp. Dolphin Entertainment Inc.	41,121	158 157		Hyatt Hotels Corp. Class A	656,635 1,057,183	59,393 57,648
*	SPAR Group Inc.	86,620 108,583	142		Boyd Gaming Corp. Leggett & Platt Inc.	1,781,300	57,648 57,411
*	Super League Gaming Inc.	415,710	141		Academy Sports & Outdoors Inc.	1,080,521	56,771
*	Salem Media Group Inc. Class A	133,364	140		Wingstop Inc.	406,371	55,925
*	Insignia Systems Inc.	17,941	140		Thor Industries Inc.	721,331	54,453
*,1	Stran & Co. Inc.	103,837	133	*	Asbury Automotive Group Inc.	299,544	53,693
*,1	Society Pass Inc.	96,225	95	*	Fox Factory Holding Corp.	574,698	52,430
*	Kubient Inc.	129,112	83		Wendy's Co.	2,287,654	51,770
*	Paltalk Inc.	62,385	82	*	Visteon Corp.	381,408	49,900
*,1	Direct Digital Holdings Inc. Class A Professional Diversity Network Inc.	32,227 73,847	79 76	*	AutoNation Inc. Bright Horizons Family Solutions Inc.	464,988 772,384	49,893 48,737
*	Beasley Broadcast Group Inc. Class A	73,847 72,681	76 67	*	YETI Holdings Inc.	772,384 1,148,445	48,737 47,442
*	NextPlay Technologies Inc.	586,717	67	*	Meritage Homes Corp.	489,732	45,153
*	Creative Realities Inc.	104,127	61	*	Adient plc	1,279,100	44,372
*,1	Digital Media Solutions Inc.	30,868	41	*	Taylor Morrison Home Corp. Class A	1,460,542	44,327
*	Urban One Inc.	10,347	39	*	Grand Canyon Education Inc.	419,114	44,284
*	Moving Image Technologies Inc.	29,025	33	*	Chegg Inc.	1,702,948	43,034
*,1	Troika Media Group Inc.	80,805	9		Signet Jewelers Ltd.	627,910	42,698
*	Cuentas Inc.	41,135	7	*	Choice Hotels International Inc.	372,559	41,965
*	Liberty Global plc Class B Mobiguity Technologies Inc.	301 8,881	6 5	*	Hilton Grand Vacations Inc. National Vision Holdings Inc.	1,085,348 1,073,797	41,829 41,620
*,1	Grom Social Enterprises Inc.	3,532	5	*,1	Lucid Group Inc.	6,072,319	41,474
*	NextPlat Corp.	300	_		Columbia Sportswear Co.	473,185	41,442
	•	-	2,929,760		Foot Locker Inc.	1,083,306	40,938
Cor	nsumer Discretionary (11.1%)		2,323,700		Kohl's Corp.	1,591,841	40,194
*	Lululemon Athletica Inc.	1,580,793	506,454		Penske Automotive Group Inc.	337,553	38,795
*	Airbnb Inc. Class A	5,182,842	443,133	*	Goodyear Tire & Rubber Co.	3,812,031	38,692
*	Burlington Stores Inc.	892,711	181,006	_	Victoria's Secret & Co.	1,080,943	38,676
*	DoorDash Inc. Class A	3,572,040	174,387		Travel + Leisure Co.	1,052,109	38,297
	Service Corp. International	2,085,443	144,188	*	Carter's Inc. Ollie's Bargain Outlet Holdings Inc.	503,646 800,633	37,577 37,502
*	Aramark	3,486,715	144,141	*	Topgolf Callaway Brands Corp.	1,881,431	37,302
*	Deckers Outdoor Corp.	359,948	143,677	*	Skyline Champion Corp.	713,735	36,765
*	Rivian Automotive Inc. Class A Five Below Inc.	7,404,147	136,458		Papa John's International Inc.	436,973	35,967
	Vail Resorts Inc.	748,472 544,662	132,382 129,820	*	Helen of Troy Ltd.	323,602	35,891
	Williams-Sonoma Inc.	894,598	102,807		KB Home	1,124,586	35,818
*	Capri Holdings Ltd.	1,738,429	99,647	* -	Group 1 Automotive Inc.	196,861	35,508
*	Floor & Decor Holdings Inc. Class A	1,424,862	99,213	*,1 *	Chewy Inc. Class A	941,428	34,908
	Lear Corp.	792,624	98,301	*,1	Under Armour Inc. Class C	3,841,971	34,270
	Churchill Downs Inc.	443,263	93,719	,,	Peloton Interactive Inc. Class A LCI Industries	4,289,475 349,853	34,058 32,344
*	Crocs Inc.	836,263	90,676		American Eagle Outfitters Inc.	2,308,295	32,344
	Dick's Sporting Goods Inc.	746,620	89,811		, and but Lugio Odinitors inc.	2,000,200	02,224

		Shares	Market Value* (\$000)			Shares	Market Value* (\$000)
	Graham Holdings Co. Class B	52,163	31,517	*	Revolve Group Inc. Class A	555,394	12,363
	Gap Inc.	2,793,153	31,507		Sturm Ruger & Co. Inc.	242,247	12,263
*	Dorman Products Inc.	383,174	30,987	*	Perdoceo Education Corp.	869,133	12,081
*,1	Steven Madden Ltd.	959,094	30,653	*	Camping World Holdings Inc. Class A	537,145	11,989
,,	Wayfair Inc. Class A Hanesbrands Inc.	930,749	30,612		Overstock.com Inc. Hibbett Inc.	617,928	11,963
*	Gentherm Inc.	4,795,083 447,284	30,497 29,203		Wolverine World Wide Inc.	173,142 1,079,449	11,812 11,798
*	SeaWorld Entertainment Inc.	544,076	29,114	*,1	Warby Parker Inc. Class A	853,859	11,519
*	Sonos Inc.	1,718,498	29,043	*,1		401,396	11,315
	Installed Building Products Inc.	321,676	27,535		Sonic Automotive Inc. Class A	228,342	11,250
	Cracker Barrel Old Country Store Inc.	290,405	27,513		Caleres Inc.	489,564	10,908
	Red Rock Resorts Inc. Class A	671,752	26,877	*	Golden Entertainment Inc.	290,795	10,876
	ADT Inc.	2,960,340	26,850	*	RCI Hospitality Holdings Inc.	114,219	10,644
	Kontoor Brands Inc.	662,224	26,482	*	Poshmark Inc. Class A	590,025	10,550
*	Dana Inc. LGI Homes Inc.	1,732,949 277,350	26,220 25,683	*	Playa Hotels & Resorts NV Petco Health & Wellness Co. Inc. Class A	1,585,575 1,078,069	10,354 10,220
*	Cavco Industries Inc.	112,350	25,419	*,1	Mister Car Wash Inc.	1,100,079	10,220
*	Boot Barn Holdings Inc.	406,009	25,384		Krispy Kreme Inc.	918,616	9,480
*	Tri Pointe Homes Inc.	1,351,442	25,123	*	Udemy Inc.	894,113	9,433
*,1	Leslie's Inc.	2,054,296	25,083	*	Life Time Group Holdings Inc.	787,730	9,421
*	ODP Corp.	545,743	24,853	*	MarineMax Inc.	294,738	9,202
	MDC Holdings Inc.	775,237	24,498	1	Standard Motor Products Inc.	262,846	9,147
*	Bloomin' Brands Inc.	1,206,876	24,282	1	Franchise Group Inc.	378,006	9,004
	Duolingo Inc. Class A Strategic Education Inc.	337,783 301,537	24,027 23,616	*	Guess? Inc. Green Brick Partners Inc.	429,788 365,532	8,892 8,857
*	Six Flags Entertainment Corp.	1,014,534	23,588	*	BJ's Restaurants Inc.	335,350	8,847
1	Nordstrom Inc.	1,427,957	23,047		Winmark Corp.	37,383	8,816
*	Frontdoor Inc.	1,095,644	22,789		Arko Corp.	1,014,363	8,784
*	Mobileye Global Inc. Class A	622,048	21,809	*	Sweetgreen Inc. Class A	1,020,820	8,748
*	Adtalem Global Education Inc.	607,750	21,575	*	GoPro Inc. Class A	1,743,753	8,684
*,1	QuantumScape Corp. Class A	3,759,538	21,317	*	Chico's FAS Inc.	1,732,443	8,524
	Shake Shack Inc. Class A	511,875	21,258	*	Qurate Retail Inc. Class A	5,213,123	8,497
	Winnebago Industries Inc. Cheesecake Factory Inc.	396,573 651,938	20,899 20,673		Stoneridge Inc. Ethan Allen Interiors Inc.	389,108 312,304	8,389 8,251
*	Dave & Buster's Entertainment Inc.	579,117	20,524	*	G-III Apparel Group Ltd.	601,424	8,246
	Levi Strauss & Co. Class A	1,278,922	19,849	*	Portillo's Inc. Class A	499,493	8,152
*	Urban Outfitters Inc.	819,702	19,550	*	OneSpaWorld Holdings Ltd.	842,535	7,861
	Century Communities Inc.	388,962	19,452	*	TravelCenters of America Inc.	170,735	7,646
*	Jack in the Box Inc.	283,543	19,346	*	Sleep Number Corp.	291,176	7,565
	Brinker International Inc.	601,408	19,191		Genesco Inc.	164,307	7,561
	Acushnet Holdings Corp. Oxford Industries Inc.	444,566 201,389	18,876 18,765	*,1	Movado Group Inc. Bally's Corp.	230,071 369,420	7,420 7,159
*	Vista Outdoor Inc.	766,992	18,692		Designer Brands Inc. Class A	730,788	7,139
	Buckle Inc.	401,678	18,216	*	Denny's Corp.	766,760	7,062
	Monro Inc.	401,933	18,167		Ruth's Hospitality Group Inc.	443,810	6,870
*	iRobot Corp.	371,691	17,890	*	2U Inc.	1,092,225	6,848
*	Sally Beauty Holdings Inc.	1,428,501	17,885	*	Vivint Smart Home Inc.	568,812	6,769
	Patrick Industries Inc.	294,819	17,866	*	Chuy's Holdings Inc.	237,293	6,715
*	Laureate Education Inc. Class A	1,849,434	17,792	*,1	Children's Place Inc.	183,540	6,685
*	Under Armour Inc. Class A Stride Inc.	1,734,634 556,014	17,624 17,392	*	Carvana Co. Class A MasterCraft Boat Holdings Inc.	1,399,094 253,125	6,632 6,548
*	Everi Holdings Inc.	1,208,579	17,332	*,1	Bowlero Corp.	464,386	6,260
*	M/I Homes Inc.	370,016	17,087	*	Accel Entertainment Inc. Class A	810,846	6,244
*	XPEL Inc.	267,646	16,075	*,1	Garrett Motion Inc.	811,083	6,180
*,1	Fisker Inc. Class A	2,209,968	16,066	*	Destination XL Group Inc.	914,503	6,173
*	Abercrombie & Fitch Co. Class A	686,673	15,732	*	America's Car-Mart Inc.	85,165	6,154
*,1	Luminar Technologies Inc. Class A	3,112,899	15,409	1	Big Lots Inc.	407,690	5,993
*	Dillard's Inc. Class A	46,727	15,102	*	Haverty Furniture Cos. Inc.	199,850	5,976
	Malibu Boats Inc. Class A Rent-A-Center Inc.	282,140	15,038		Xponential Fitness Inc. Class A Shoe Carnival Inc.	255,926	5,868 5,842
*	Monarch Casino & Resort Inc.	642,945 185,816	14,498 14,287	*	Vizio Holding Corp. Class A	244,337 773,397	5,842 5,731
*	Coursera Inc.	1,183,720	14,207		Smith & Wesson Brands Inc.	637,735	5,536
*	Modine Manufacturing Co.	704,133	13,984		Aaron's Co. Inc.	453,663	5,421
	Dine Brands Global Inc.	215,368	13,913	*,1	Cricut Inc. Class A	581,713	5,393
	La-Z-Boy Inc.	600,861	13,712	*	Liquidity Services Inc.	381,448	5,363
*,1	Xometry Inc. Class A	400,535	12,909		Carriage Services Inc. Class A	192,332	5,297
	American Axle & Manufacturing Holdings Inc.	1,586,274	12,405		Johnson Outdoors Inc. Class A	79,891	5,282

		Shares	Market Value* (\$000)			Shares	Market Value* (\$000)
_	PetMed Express Inc.	296,177	5,242	1	Weber Inc. Class A	248,416	2,000
*	Rover Group Inc. Class A	1,375,791	5,049	*	Porch Group Inc.	1,053,270	1,980
*	Zumiez Inc.	231,810	5,040	*	Container Store Group Inc.	455,850	1,965
*	Target Hospitality Corp.	331,479	5,019	*,1 *,1	Nerdy Inc.	863,470	1,943
*	Funko Inc. Class A Beazer Homes USA Inc.	455,981 383,998	4,975 4,900	*	Rent the Runway Inc. Class A First Watch Restaurant Group Inc.	632,559 141,863	1,929 1,919
*	Inspired Entertainment Inc.	349,777	4,432	*	Tile Shop Holdings Inc.	435,655	1,919
*	OneWater Marine Inc. Class A	154,733	4,425	*	Fiesta Restaurant Group Inc.	256,301	1,884
*	Build-A-Bear Workshop Inc.	184,705	4,403	*	VOXX International Corp. Class A	220,660	1,849
* 1	European Wax Center Inc. Class A	352,401	4,387	*	Weyco Group Inc.	86,636	1,833
*,1 *	EVgo Inc. Class A Lovesac Co.	974,923 193,811	4,358 4,266	*	BARK Inc.  JAKKS Pacific Inc.	1,213,441 102,690	1,808 1,796
*	Quotient Technology Inc.	1,205,013	4,200	*	Potbelly Corp.	317,128	1,796
*	CarParts.com Inc.	648,247	4,058	*,1	Vroom Inc.	1,719,445	1,754
*	Sportsman's Warehouse Holdings Inc.	417,863	3,932	*	Unifi Inc.	198,289	1,707
*,1	Canoo Inc.	3,169,450	3,898	*,1 *	RealReal Inc.	1,357,892	1,697
*	Purple Innovation Inc. Class A	795,940	3,813	*	Latham Group Inc.	521,659	1,680
*	Universal Electronics Inc. Solid Power Inc.	183,198 1,497,363	3,812 3,803		Vera Bradley Inc. Marine Products Corp.	368,074 138,354	1,667 1,628
*	ContextLogic Inc. Class A	7,400,221	3,609	*,1	Mullen Automotive Inc.	5,555,957	1,589
*	Full House Resorts Inc.	461,984	3,474	*	Lakeland Industries Inc.	118,883	1,581
*	1-800-Flowers.com Inc. Class A	356,371	3,407	*	Holley Inc.	739,231	1,567
*,1	Workhorse Group Inc.	2,196,273	3,338	*	1stdibs.com Inc.	291,754	1,482
*	Lindblad Expeditions Holdings Inc.	426,252	3,282	*,1	Lazydays Holdings Inc.	119,840	1,431
*	Allbirds Inc. Class A Motorcar Parts of America Inc.	1,342,425 273,763	3,249 3,247	*	Flexsteel Industries Inc. Snap One Holdings Corp.	91,978 189,889	1,416 1,407
*	American Public Education Inc.	257,575	3,166	*	Superior Industries International Inc.	332.752	1,404
*,1	Vuzix Corp.	867,974	3,159	*	J. Jill Inc.	54,982	1,364
*	Universal Technical Institute Inc.	469,939	3,158	*	Conn's Inc.	197,229	1,357
*	Citi Trends Inc.	117,393	3,109	*,1	Global Business Travel Group I	199,439	1,346
	Clarus Corp.	393,360	3,084	*,1	Superior Group of Cos. Inc.	132,717	1,335
*	Hooker Furnishings Corp. GrowGeneration Corp.	162,574 775,276	3,040 3,039	, .	Spruce Power Holding Corp. Escalade Inc.	1,443,418 128,578	1,327 1,309
*	Arhaus Inc. Class A	306,017	2,984	*,1		1,037,174	1,307
*	Tilly's Inc. Class A	329,138	2,979	*,1	F45 Training Holdings Inc.	453,331	1,292
*	WW International Inc.	739,005	2,853	*	Lands' End Inc.	165,803	1,258
*	Fossil Group Inc.	655,417	2,825		Hamilton Beach Brands Holding Co. Class A	99,879	1,238
*	Noodles & Co. Class A	506,161	2,779		Red Robin Gourmet Burgers Inc.	217,030	1,211
*	Stitch Fix Inc. Class A Rush Street Interactive Inc.	893,255 767,275	2,778 2,755	*	Lifetime Brands Inc. Strattec Security Corp.	159,241 55,293	1,209 1,136
1	Bluegreen Vacations Holding Corp. Class A	109,901	2,743	*,1	PLBY Group Inc.	394,095	1,084
	Nathan's Famous Inc.	40,687	2,735	*	Duluth Holdings Inc. Class B	170,918	1,056
*,1	Lordstown Motors Corp. Class A	2,379,841	2,713	*	ThredUp Inc. Class A	769,245	1,008
*	Hovnanian Enterprises Inc. Class A	64,069	2,696	*	Landsea Homes Corp.	187,062	975
*	El Pollo Loco Holdings Inc. Century Casinos Inc.	268,473 379,410	2,674 2,667	*	Express Inc. Biglari Holdings Inc. Class A	916,418 1,331	935 929
1	Big 5 Sporting Goods Corp.	287,569	2,539	*	Delta Apparel Inc.	85,609	908
*,1	Bed Bath & Beyond Inc.	1,003,012	2,518	*	Biglari Holdings Inc. Class B	6,410	890
*	Legacy Housing Corp.	132,787	2,518	*,1	Polished.com Inc.	1,466,710	847
*	Kura Sushi USA Inc. Class A	52,703	2,513	*	RumbleON Inc. Class B	129,172	836
*,1	Traeger Inc.	872,134	2,459	*	Barnes & Noble Education Inc.	474,097	830
*	Membership Collective Group Inc. Class A LL Flooring Holdings Inc.	654,019 431,445	2,446 2,425	*	GAN Ltd. Solo Brands Inc. Class A	552,394 219,645	829 817
	Cato Corp. Class A	258,740	2,425	*,1	Faraday Future Intelligent Electric Inc.	2,597,753	754
*,1	Groupon Inc. Class A	279,072	2,394	*	Beachbody Co. Inc.	1,378,384	725
*,1	Sonder Holdings Inc.	1,827,128	2,266	*	Carrols Restaurant Group Inc.	520,619	708
*,1	Vivid Seats Inc. Class A	307,910	2,248	*	Culp Inc.	147,833	679
*,1	Dream Finders Homes Inc. Class A	257,443	2,229	*	Nautilus Inc.	434,844	665
	Bassett Furniture Industries Inc. Rocky Brands Inc.	125,165 91,586	2,175 2,163		Brilliant Earth Group Inc. Class A Ark Restaurants Corp.	149,812 38,458	646 637
*	Cooper-Standard Holdings Inc.	236,081	2,163	*,1	Volta Inc.	1,789,334	636
*	Tupperware Brands Corp.	501,750	2,077	*	Live Ventures Inc.	20,027	627
*,1	AMMO Inc.	1,197,242	2,071	*,1	Aterian Inc.	804,796	620
*	PlayAGS Inc.	405,002	2,066	*,1	Kirkland's Inc.	180,002	594
*	ONE Group Hospitality Inc.	327,587	2,064	*,1 *,1	Regis Corp.	456,411	557 542
*	Lincoln Educational Services Corp. American Outdoor Brands Inc.	346,738 200,117	2,008 2,005	*	XWELL Inc. Party City Holdco Inc.	1,493,810 1,426,313	542 521

		Shares	Market Value* (\$000)			Shares	Market Value* (\$000)
*,1	Inspirato Inc.	392,156	467	*	Darling Ingredients Inc.	2,169,117	135,765
*,1	Koss Corp.	392,156 94,470	467	*	Performance Food Group Co.	2,169,117	122,549
1	JOANN Inc.	158,520	452	*	BJ's Wholesale Club Holdings Inc.	1,828,064	120,945
*,1	Torrid Holdings Inc.	149,601	443		Casey's General Stores Inc.	503,445	112,948
	Crown Crafts Inc.	81,972	438	*	US Foods Holding Corp.	2,745,841	93,414
*	Rave Restaurant Group Inc.	246,505	389		Ingredion Inc.	883,842	86,555
	Sypris Solutions Inc.	190,358	385	*	Flowers Foods Inc.	2,582,458	74,220 65.756
*	AMCON Distributing Co. Charles & Colvard Ltd.	2,117 444,108	383 362	*	Post Holdings Inc. Celsius Holdings Inc.	728,514 540,734	56,258
*,1	Hall of Fame Resort & Entertainment Co.	43,733	353		Lancaster Colony Corp.	269,038	53,081
*,1	Vince Holding Corp.	40,186	315	*	BellRing Brands Inc.	1,836,683	47,093
*,1	Envirotech Vehicles Inc.	144,960	309	*	Sprouts Farmers Market Inc.	1,434,097	46,422
	Canterbury Park Holding Corp.	8,743	273		Albertsons Cos. Inc. Class A	2,193,635	45,496
*,1	Shift Technologies Inc. Class A	1,605,873	239	*	Simply Good Foods Co.	1,121,489	42,650
*,1	Lulu's Fashion Lounge Holdings Inc.	92,833	233	*	Coty Inc. Class A	4,969,935	42,543
	Envela Corp.	43,948	231	*	Boston Beer Co. Inc. Class A	127,118	41,888
*,1	Flanigan's Enterprises Inc. BurgerFi International Inc.	8,348 167.859	216 212	*	Hostess Brands Inc. Class A elf Beauty Inc.	1,816,401 673,395	40,760 37,239
*,1	Grove Collaborative Holdings	517,457	206	*	Grocery Outlet Holding Corp.	1,213,029	35,408
	Educational Development Corp.	64,779	205	*	Freshpet Inc.	659,321	34,792
*,1	Toughbuilt Industries Inc.	85,051	199		Spectrum Brands Holdings Inc.	557,871	33,985
*	Dixie Group Inc.	188,725	151	*	TreeHouse Foods Inc.	682,688	33,711
*,1	Volcon Inc.	138,887	140		Coca-Cola Consolidated Inc.	61,927	31,729
*	Kaival Brands Innovations Group Inc.	155,259	139		J & J Snack Foods Corp.	204,813	30,663
*,1 *,1	AYRO Inc.	352,055	135	-	United Natural Foods Inc.	785,906	30,422
*	Remark Holdings Inc.	119,573	132		WD-40 Co.	184,869	29,803
*,1	Boxed Inc. iMedia Brands Inc.	654,658 187,686	128 120		Energizer Holdings Inc. Cal-Maine Foods Inc.	873,576 512,569	29,308 27,909
*	Horizon Global Corp.	297,026	116		Nu Skin Enterprises Inc. Class A	652,538	27,503
*	Forward Industries Inc.	106,523	114		Edgewell Personal Care Co.	702,895	27,090
*	Aspen Group Inc.	332,287	103		Inter Parfums Inc.	247,149	23,855
*	Good Times Restaurants Inc.	41,843	93		Reynolds Consumer Products Inc.	744,431	22,318
*,1	Allied Gaming & Entertainment Inc.	78,107	82		MGP Ingredients Inc.	209,076	22,242
*	Lottery.com Inc.	458,347	80		Vector Group Ltd.	1,754,907	20,813
*,1	Xcel Brands Inc.	113,190	79 79	*	PriceSmart Inc.	340,260	20,681
*	Harbor Custom Development Inc. Twin Vee PowerCats Co.	201,971 39,000	79 71	*	Herbalife Nutrition Ltd. Hain Celestial Group Inc.	1,333,150 1,206,642	19,837 19,523
*,1	Arcimoto Inc.	19,661	65		Universal Corp.	333,085	17,590
*	Nephros Inc.	44,580	50		Weis Markets Inc.	211,647	17,416
*	Yunhong CTI Ltd.	46,510	50		Ingles Markets Inc. Class A	179,039	17,270
*,2	Zagg Inc. CVR	448,712	40		Medifast Inc.	148,649	17,147
*,1	aka Brands Holding Corp.	26,494	34	*	Central Garden & Pet Co. Class A	476,515	17,059
*,1 *,1	Waitr Holdings Inc.	88,910	31		Chefs' Warehouse Inc.	460,564	15,328
*,1	Esports Entertainment Group Inc.	338,557	26	*	Andersons Inc.	434,237	15,194
*	Amesite Inc. Emerson Radio Corp.	145,556 47,382	26 25	*	National Beverage Corp. Pilgrim's Pride Corp.	318,775 622,995	14,833 14,784
*,1	Wag! Group Co.	8,216	25		Utz Brands Inc.	914,209	14,704
*	Greenlane Holdings Inc. Class A	79,967	23		SpartanNash Co.	476,400	14,406
*,1	Nova Lifestyle Inc.	40,180	17		Seaboard Corp.	3,523	13,300
*	Worksport Ltd.	17,028	17	*	Beauty Health Co.	1,313,307	11,951
*,1	EBET Inc.	27,607	17		Fresh Del Monte Produce Inc.	421,055	11,027
*,1	Tuesday Morning Corp.	24,879	17	1	B&G Foods Inc.	980,883	10,937
*	iPower Inc.	42,702	16	*,1	Boyona Moat mo.	842,147	10,367
	TRXADE HEALTH Inc. Jerash Holdings US Inc.	39,629 2,964	15 12	*	John B Sanfilippo & Son Inc. Duckhorn Portfolio Inc.	125,377 597,336	10,196 9,898
*,1	Digital Brands Group Inc.	2,496	11		Tootsie Roll Industries Inc.	216,353	9,210
*	Unique Fabricating Inc.	17,733	10	*	Central Garden & Pet Co.	224,143	8,394
1	FAT Brands Inc. Class A	819	4	*	USANA Health Sciences Inc.	143,506	7,635
*	Amergent Hospitality Group Inc.	19,975	2	*	Sovos Brands Inc.	528,868	7,600
	FAT Brands Inc. Class B	436	2		Calavo Growers Inc.	251,751	7,401
*	PARTS iD Inc.	1,100	1	*	Mission Produce Inc.	544,761	6,330
*,1	Muscle Maker Inc.	252	_	*	Olaplex Holdings Inc.	1,166,699	6,079
*,1	Qurate Retail Inc. Class B	43	_	*	Seneca Foods Corp. Class A	91,746	5,592
, '	PLBY Group Inc. Rights Exp. 1/17/23	394,095			Vital Farms Inc. Turning Point Brands Inc.	335,145 219,021	5,000 4 737
_	0. 1. (0.00()		8,769,750	*	Benson Hill Inc.	219,021 1,802,308	4,737 4,596
Coi	nsumer Staples (3.0%)	0.000.403	200 575	*	Vita Coco Co. Inc.	323,119	4,466
	Bunge Ltd.	2,030,424	202,575			520,110	., 100

		Shares	Market Value* (\$000)			Shares	Market Value* (\$000)
*,1	Veru Inc.	703,888	3,717		Matador Resources Co.	1,520,644	87,042
*,1	22nd Century Group Inc.	3,172,272	2,920		Murphy Oil Corp.	1,981,562	85,227
*,1	BRC Inc. Class A	465,878	2,847		Range Resources Corp.	3,258,454	81,527
*,1	Rite Aid Corp.	794,332	2,653		PDC Energy Inc.	1,260,030	79,987
*	Honest Co. Inc.	809,114	2,435		ChampionX Corp.	2,680,725	77,714
	Lifecore Biomedical Inc.	368,464	2,388		Chord Energy Corp.	562,437	76,947
	Zevia PBC Class A	581,143	2,377	*	TechnipFMC plc	5,998,713	73,124
	Limoneira Co.	193,198	2,359		DT Midstream Inc.	1,303,573	72,035
*	Village Super Market Inc. Class A	100,932	2,351		Helmerich & Payne Inc.	1,428,431	70,807
	Whole Earth Brands Inc.	538,584	2,192	*	PBF Energy Inc. Class A	1,533,741	62,546
*	Oil-Dri Corp. of America HF Foods Group Inc.	64,945	2,178		Denbury Inc.	674,225 1.676.350	58,671
*,1	Westrock Coffee Co.	530,520 134,700	2,154 1,800	*	SM Energy Co. Valaris Ltd.	814,985	58,387 55,109
*	Nature's Sunshine Products Inc.	173,811	1,446		Magnolia Oil & Gas Corp. Class A	2,280,832	53,486
*	Vintage Wine Estates Inc.	431,243	1,446	*	Noble Corp. plc	1,312,984	49,513
	Alico Inc.	57,201	1,400		Patterson-UTI Energy Inc.	2,926,846	49,288
	Natural Grocers by Vitamin Cottage Inc.	147,495	1,348		Antero Midstream Corp.	4,457,083	48,092
*	Farmer Bros Co.	228,647	1,054	*	Weatherford International plc	866,150	44,104
*	Thorne HealthTech Inc.	255,026	926		California Resources Corp.	968,678	42,147
*	Seneca Foods Corp. Class B	13,689	828	*	Peabody Energy Corp.	1,563,572	41,310
*,1	Tattooed Chef Inc.	634,533	780		Cactus Inc. Class A	817,547	41,090
	Lifevantage Corp.	195.411	700	*	Transocean Ltd.	9,009,555	41,084
*	Natural Alternatives International Inc.	75,054	630		Civitas Resources Inc.	701,839	40,658
*,1	Local Bounti Corp.	423,617	589	*	CNX Resources Corp.	2,400,486	40,424
*	Rocky Mountain Chocolate Factory Inc.	95,809	546		Equitrans Midstream Corp.	5,921,091	39,671
	United-Guardian Inc.	52,217	543	*	Kosmos Energy Ltd.	6,164,200	39,204
*	LifeMD Inc.	269,585	523		Arch Resources Inc.	240,719	34,372
*,1	AppHarvest Inc.	883,103	501		Liberty Energy Inc. Class A	2,021,090	32,358
*	Lifeway Foods Inc.	87,072	483	1	Sitio Royalties Corp.	997,355	28,774
*	Willamette Valley Vineyards Inc.	72,862	436		CONSOL Energy Inc.	438,268	28,487
	Natural Health Trends Corp.	109,082	371		Northern Oil & Gas Inc.	913,126	28,143
*,1	Splash Beverage Group Inc.	301,169	290		New Fortress Energy Inc.	659,092	27,959
*	Alkaline Water Co. Inc.	1,235,847	216		Permian Resources Corp. Class A	2,761,881	25,962
*,1	Blue Apron Holdings Inc. Class A	239,966	199	*	Callon Petroleum Co.	689,873	25,587
*	S&W Seed Co.	125,055	186		Delek US Holdings Inc.	945,559	25,530
*,1	Real Good Food Co. Inc. Class A	26,222	174	*	Tidewater Inc.	691,158	25,469
*	Better Choice Co. Inc.	261,756	141	*	Green Plains Inc.	793,881	24,213
	Mannatech Inc.	7,366	132	*	Oceaneering International Inc.	1,368,663	23,938
	Coffee Holding Co. Inc.	55,792	114		World Fuel Services Corp.	831,694	22,730
*	Arcadia Biosciences Inc.	300,540	81		Enviva Inc.	422,720	22,391
*,1	Reed's Inc.	1,115,347	78		International Seaways Inc.	535,505	19,824
Ţ	Cyanotech Corp.	52,089	57		NexTier Oilfield Solutions Inc.	2,142,556	19,797
* .	Barfresh Food Group Inc.	43,001	56	*,1 *	Uranium Energy Corp.	4,990,631	19,364
*,1	RiceBran Technologies	69,739	53		Nabors Industries Ltd.	123,198	19,080
*,1	Jupiter Wellness Inc.	59,489	45	_	Par Pacific Holdings Inc.	751,845	17,480
*	Stryve Foods Inc. Class A	58,942	43		Expro Group Holdings NV	944,375	17,122
*	Guardion Health Sciences Inc.	278,115	40	*	Comstock Resources Inc.	1,236,783	16,956
*	Laird Superfood Inc.	46,278	39	-	Talos Energy Inc.	881,370	16,640
*	Eastside Distilling Inc.	132,920	33	*	Archrock Inc.	1,625,931	14,601
*	Zivo Bioscience Inc.	13,327	33	*	Diamond Offshore Drilling Inc.	1,384,375	14,397
*	Upexi Inc.	10,791	32	*	Helix Energy Solutions Group Inc.	1,949,487	14,387
*	Blue Star Foods Corp.	60,782	24		ProPetro Holding Corp.	1,353,390	14,035
*	MedAvail Holdings Inc.	63,468	19	*	Core Laboratories NV	657,451	13,327
*,1	Nuzee Inc.	1,425	12	*	Dril-Quip Inc.	481,671	13,087
*	Kalera plc Bridgford Foods Corp.	881 36	6	*	US Silica Holdings Inc.	1,036,719 2,368,960	12,959
*					Clean Energy Fuels Corp.		12,319
	MamaMancini's Holdings Inc.	243		*,1	CVR Energy Inc. Tellurian Inc.	392,298 6,987,054	12,295 11 738
			2,368,975	*	Laredo Petroleum Inc.	6,987,054 227,019	11,738 11,673
Ene	ergy (4.9%)			*	Gulfport Energy Corp.	157,318	11,673 11,585
	Cheniere Energy Inc.	3,369,026	505,219		Ranger Oil Corp.	263,643	
	Texas Pacific Land Corp.	83,336	195,359		Select Energy Services Inc. Class A	263,643 1,144,363	10,659 10,574
	Ovintiv Inc.	3,348,540	169,804		Kinetik Holdings Inc. Class A	274,629	9,085
*	Chesapeake Energy Corp.	1,448,010	136,649	*	ProFrac Holding Corp. Class A	359,759	9,066
•	Antero Resources Corp.	3,732,278	115,663		RPC Inc.	1,011,124	8,989
	NOV Inc.	5,294,380	110,600	*	Bristow Group Inc. Class A	326,830	8,867
*	HF Sinclair Corp.	1,836,433	95,293		Dorian LPG Ltd.	450,652	8,540
	Southwestern Energy Co.	14,891,435	87,115			,	-,

		Shares	Market Value* (\$000)		Shares	Market Value* (\$000)
	Berry Corp.	909,474	7,276	* Energy Services of America Corp.	12,295	32
*	Earthstone Energy Inc. Class A	511,160	7,274	* OPAL Fuels Inc. Class A	3,294	24
*	SandRidge Energy Inc.	425,684	7,249			3,837,536
*	W&T Offshore Inc.	1,292,072	7,210	Financials (15.9%)		
	REX American Resources Corp.	219,028	6,978	Blackstone Inc.	9,555,613	708,930
	VAALCO Energy Inc.	1,443,750	6,583	Apollo Global Management Inc.	5,887,439	375,560
*	Crescent Energy Co. Class A Oil States International Inc.	538,367 865,167	6,455 6,454	KKR & Co. Inc.	7,809,602	362,522
*	Gevo Inc.	3,306,138	6,282	Markei Corp.	182,275	240,145
	Excelerate Energy Inc. Class A	246,935	6,186	LPL Financial Holdings Inc.	1,079,737	233,407
*,1	Vertex Energy Inc.	848,742	5,262	First Horizon Corp.	7,242,696	177,446
*,1	Centrus Energy Corp. Class A	158,253	5,140	Ares Management Corp. Class A	2,108,854	144,330
*,1	SilverBow Resources Inc.	180,679	5,110	Fidelity National Financial Inc.	3,676,717	138,318
*	TETRA Technologies Inc.	1,473,771	5,099	Annaly Capital Management Inc. Equitable Holdings Inc.	6,365,981 4,661,077	134,195 133,773
*	Newpark Resources Inc.	1,217,308	5,052	American Financial Group Inc.	4,001,077 951,245	130,587
*	DMC Global Inc.	255,868	4,974	Reinsurance Group of America Inc.	907,123	128,893
*,1	NextDecade Corp.	871,730	4,306	East West Bancorp Inc.	1,909,548	125,839
	Solaris Oilfield Infrastructure Inc. Class A	426,811	4,238	First Citizens BancShares Inc. Class A	161,681	122,612
*	Amplify Energy Corp.	474,841	4,174	Cullen/Frost Bankers Inc.	872,697	116,680
1	HighPeak Energy Inc.	175,816	4,021	Webster Financial Corp.	2,366,580	112,034
	Hallador Energy Co.	333,737	3,334	RenaissanceRe Holdings Ltd.	591,945	109,054
*	Evolution Petroleum Corp.	429,412	3,242	Commerce Bancshares Inc.	1,549,001	105,441
*,1	Overseas Shipholding Group Inc. Class A	1,030,732	2,979	Unum Group	2,534,908	104,007
*	Ring Energy Inc.	1,148,142 298,975	2,824	Interactive Brokers Group Inc. Class A	1,399,191	101,231
*	SEACOR Marine Holdings Inc. Alto Ingredients Inc.	935,941	2,739 2,696	Tradeweb Markets Inc. Class A	1,514,971	98,367
*,1,2	Next Bridge Hydrocarbons Inc.	902,467	2,690	Ally Financial Inc.	3,989,903	97,553
*,1	Nine Energy Service Inc.	172,226	2,502	Old Republic International Corp.	3,836,166	92,643
*	KLX Energy Services Holdings Inc.	131,967	2,284	Prosperity Bancshares Inc.	1,242,819	90,328
	NACCO Industries Inc. Class A	56,552	2,149	Carlyle Group Inc.	2,960,461	88,340
	Epsilon Energy Ltd.	289,329	1,918	Western Alliance Bancorp	1,472,967	87,730 84,872
*	Natural Gas Services Group Inc.	160,037	1,834	Jefferies Financial Group Inc. Erie Indemnity Co. Class A	2,475,854 340,317	84,644
*	Ranger Energy Services Inc. Class A	158,386	1,744	Stifel Financial Corp.	1,439,210	84,007
*	Forum Energy Technologies Inc.	56,345	1,662	SEI Investments Co.	1,390,288	81,054
*,1	Aemetis Inc.	416,757	1,650	Affiliated Managers Group Inc.	509,522	80,724
*,1	Mammoth Energy Services Inc.	186,410	1,612	Voya Financial Inc.	1,312,156	80,684
*	Empire Petroleum Corp.	129,591	1,594	AGNC Investment Corp.	7,767,201	80,391
	Riley Exploration Permian Inc.	52,401	1,542	New York Community Bancorp Inc.	9,174,972	78,905
1	PHX Minerals Inc.	392,299	1,526	SouthState Corp.	1,033,134	78,890
*	Granite Ridge Resources Inc.	167,400	1,512	*,1 Coinbase Global Inc. Class A	2,178,031	77,081
*,1	Gulf Island Fabrication Inc.	205,408	1,054 969	Starwood Property Trust Inc.	4,174,585	76,520
	American Resources Corp. Adams Resources & Energy Inc.	734,307 22,111	969 861	Kinsale Capital Group Inc.	292,275	76,436
*	Geospace Technologies Corp.	179,011	755	Pinnacle Financial Partners Inc.	1,032,937	75,818
*	Smart Sand Inc.	336,056	602	Glacier Bancorp Inc.	1,505,088	74,381
*	Battalion Oil Corp.	53,142	516	United Bankshares Inc.	1,827,505	73,996
*,1	Houston American Energy Corp.	137,786	474	Morningstar Inc.	340,390	73,725
*	Profire Energy Inc.	414,587	435	Synovus Financial Corp. Selective Insurance Group Inc.	1,961,505 822,922	73,655 72,919
*,1	Lightbridge Corp.	107,608	419	First American Financial Corp.	1,388,535	72,676
*	PrimeEnergy Resources Corp.	3,918	340	RLI Corp.	550,502	72,076
*,1	Independence Contract Drilling Inc.	86,260	282	Old National Bancorp	4,000,442	71,928
*	NCS Multistage Holdings Inc.	10,064	252	Primerica Inc.	498,779	70,737
*,1	ENGlobal Corp.	300,740	232	Wintrust Financial Corp.	817,582	69,102
*,1	Camber Energy Inc.	108,772	220	Popular Inc.	988,161	65,535
*,1	Enservco Corp.	132,806	216	Valley National Bancorp	5,751,414	65,048
*	Mexco Energy Corp.	16,537	206	Hanover Insurance Group Inc.	480,893	64,983
*	Barnwell Industries Inc.	68,394	202	FNB Corp.	4,762,200	62,147
*	PEDEVCO Corp.	173,749	191	Cadence Bank	2,488,420	61,364
*	Superior Drilling Products Inc.	198,912	183	First Financial Bankshares Inc.	1,775,547	61,079
*	Comstock Inc.	599,939	165	Bank OZK	1,491,859	59,764
*	Stabilis Solutions Inc.	25,689	133	Home BancShares Inc.	2,595,163	59,144
*	Ecoark Holdings Inc. New Concept Energy Inc.	287,078 56 567	66 62	Houlihan Lokey Inc. Class A	674,803	58,816
	US Energy Corp.	56,567 27,006	62 62	Essent Group Ltd.	1,469,751	57,144
*	MIND Technology Inc.	107,042	49	Axis Capital Holdings Ltd.	1,050,229	56,891
	roomiology mo.	107,042	+5	* Robinhood Markets Inc. Class A	6,964,162	56,688
				Hancock Whitney Corp.	1,159,487	56,108

			Market				Market
_		Shares	Value* (\$000)			Shares	Value* (\$000)
	OneMain Holdings Inc.	1,628,890	54,258		Towne Bank	894,267	27,579
	Lazard Ltd. Class A Evercore Inc. Class A	1,543,494 490,103	53,513 53,460		Jackson Financial Inc. Class A Artisan Partners Asset Management Inc. Class A	788,524 911,413	27,433 27,069
	Umpqua Holdings Corp.	2,966,307	52,949		Stock Yards Bancorp Inc.	404,590	26,290
	MGIC Investment Corp.	4,055,601	52,723		Bread Financial Holdings Inc.	678,955	25,569
	Independent Bank Corp.	621,256	52,453		Piper Sandler Cos.	194,105	25,271
	First Bancorp	2,939,351	52,420		NBT Bancorp Inc.	572,623	24,863
*,1	Rithm Capital Corp. SoFi Technologies Inc.	6,371,633 11,204,676	52,056 51,654		Virtu Financial Inc. Class A Claros Mortgage Trust Inc.	1,213,093 1,660,669	24,759 24,428
	Assured Guaranty Ltd.	822,293	51,196		Heartland Financial USA Inc.	523,546	24,408
	Blue Owl Capital Inc. Class A	4,780,911	50,678		Lakeland Financial Corp.	333,915	24,366
	White Mountains Insurance Group Ltd.	34,944	49,422		Northwest Bancshares Inc.	1,740,938	24,338
	UMB Financial Corp.	591,116	49,370		Enterprise Financial Services Corp.	495,987	24,284
	United Community Banks Inc. Blackstone Mortgage Trust Inc. Class A	1,449,597 2,305,090	48,996 48,799		PJT Partners Inc. Class A Navient Corp.	325,277 1,446,414	23,970 23,794
*	Brighthouse Financial Inc.	939,449	48,166	*	NMI Holdings Inc. Class A	1,135,462	23,734
	Associated Banc-Corp	2,035,321	46,996		TriCo Bancshares	456,779	23,291
*	Ryan Specialty Holdings Inc. Class A	1,123,788	46,648		PennyMac Financial Services Inc.	410,081	23,235
	First Interstate BancSystem Inc. Class A	1,204,243	46,544	*	Trupanion Inc.	476,650	22,655
	ServisFirst Bancshares Inc. CVB Financial Corp.	671,784	46,293	*	Nelnet Inc. Class A StoneX Group Inc.	245,436	22,273
	Community Bank System Inc.	1,776,826 723,654	45,753 45,554	*	Bancorp Inc.	230,246 768,945	21,942 21,823
	First Hawaiian Inc.	1,743,622	45,404		Provident Financial Services Inc.	1,012,399	21,625
	FirstCash Holdings Inc.	515,246	44,780		Cohen & Steers Inc.	332,097	21,440
	Kemper Corp.	874,726	43,037		Corebridge Financial Inc.	1,054,814	21,160
	Janus Henderson Group plc	1,819,934	42,805		Westamerica Bancorp	358,337	21,145
	American Equity Investment Life Holding Co. Bank of Hawaii Corp.	935,168 542,821	42,662 42,101		Sandy Spring Bancorp Inc. Hope Bancorp Inc.	599,333 1,646,227	21,115 21,088
*	Enstar Group Ltd.	180,522	41,708		BancFirst Corp.	238,662	21,000
	Federated Hermes Inc. Class B	1,145,781	41,603		National Bank Holdings Corp. Class A	498,627	20,977
	Ameris Bancorp	880,662	41,514	*	BRP Group Inc. Class A	828,128	20,819
	BOK Financial Corp.	397,041	41,209		Horace Mann Educators Corp.	548,967	20,515
*	Cathay General Bancorp	1,001,258	40,841		Veritex Holdings Inc.	724,869	20,354
	Texas Capital Bancshares Inc. Pacific Premier Bancorp Inc.	670,798 1,279,307	40,456 40,375		TPG Inc. Class A Hilltop Holdings Inc.	704,964 632,303	19,619 18,975
	Radian Group Inc.	2,102,108	40,087	*	Cannae Holdings Inc.	913,164	18,857
	Fulton Financial Corp.	2,282,255	38,410		Apollo Commercial Real Estate Finance Inc.	1,714,800	18,451
*,1	Credit Acceptance Corp.	80,793	38,328		Berkshire Hills Bancorp Inc.	616,076	18,421
*	Eastern Bankshares Inc.	2,196,201	37,884		City Holding Co.	197,662	18,400
	Mr Cooper Group Inc. WSFS Financial Corp.	941,220 824,542	37,771 37,385		Two Harbors Investment Corp. Eagle Bancorp Inc.	1,160,349 412,578	18,299 18,182
	PacWest Bancorp	1,606,300	36,865		Stellar Bancorp Inc.	615,134	18,122
	Simmons First National Corp. Class A	1,662,000	35,866		First Busey Corp.	719,722	17,792
	Atlantic Union Bankshares Corp.	1,015,390	35,681	*	PRA Group Inc.	520,372	17,578
	BankUnited Inc.	1,047,436	35,581		Virtus Investment Partners Inc.	91,539	17,524
*	CNO Financial Group Inc. Genworth Financial Inc. Class A	1,541,874 6,655,168	35,232 35,206		S&T Bancorp Inc. OFG Bancorp	510,248 629,575	17,440
	Hannon Armstrong Sustainable Infrastructure Capital	0,000,100	33,200		Chimera Investment Corp.	3,144,039	17,351 17,292
	Inc.	1,187,254	34,407		First Commonwealth Financial Corp.	1,233,163	17,227
	Moelis & Co. Class A	865,343	33,203		Pathward Financial Inc.	399,856	17,214
	First Merchants Corp.	805,177	33,101	*	Blucora Inc.	663,273	16,933
	Walker & Dunlop Inc. International Bancshares Corp.	417,668	32,779 32,314		BGC Partners Inc. Class A	4,490,982	16,931
	Columbia Banking System Inc.	706,152 1,068,383	32,314		FB Financial Corp. Safety Insurance Group Inc.	468,070 199,946	16,916 16,847
	Hamilton Lane Inc. Class A	490,004	31,301		OceanFirst Financial Corp.	784,331	16,667
	First Financial Bancorp	1,274,198	30,874	*	Enova International Inc.	427,364	16,398
	Arbor Realty Trust Inc.	2,315,092	30,536		StepStone Group Inc. Class A	637,015	16,040
	Washington Federal Inc.	890,554	29,878		Stewart Information Services Corp.	374,181	15,989
	WesBanco Inc. Seacoast Banking Corp. of Florida	799,108 943,242	29,551 29,420		Lakeland Bancorp Inc. Employers Holdings Inc.	906,874	15,970
	Trustmark Corp.	840,688	29,348		CNA Financial Corp.	369,186 371,020	15,923 15,687
	Independent Bank Group Inc.	485,933	29,195		Ladder Capital Corp. Class A	1,550,708	15,569
_	Banner Corp.	459,232	29,023	*	Encore Capital Group Inc.	322,784	15,474
*	Focus Financial Partners Inc. Class A	777,258	28,968	*	Palomar Holdings Inc.	342,014	15,445
	Renasant Corp. Park National Corp.	748,416 197,310	28,133 27,771	1	Nicolet Bankshares Inc.	189,797	15,144
*	Axos Financial Inc.	723,367	27,771	•	Ready Capital Corp. Southside Bancshares Inc.	1,353,404 416,819	15,077 15,001
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		Shares	Market Value* (\$000)			Shares	Market Value* (\$000)
*	Triumph Financial Inc.	306,267	14,967	-	A-Mark Precious Metals Inc.	237,450	8,247
	PennyMac Mortgage Investment Trust	1,202,754	14,902		Cambridge Bancorp	99,176	8,238
	Capitol Federal Financial Inc.	1,720,358	14,881		Ares Commercial Real Estate Corp.	791,184	8,141
	Heritage Financial Corp. Origin Bancorp Inc.	483,735 402,810	14,822 14,783		HarborOne Bancorp Inc. Old Second Bancorp Inc.	579,638 499,407	8,057 8,010
	Dime Community Bancshares Inc.	456,787	14,763		Merchants Bancorp	328,786	7,996
	Franklin BSP Realty Trust Inc.	1,123,713	14,496		Horizon Bancorp Inc.	511,979	7,721
	Brookline Bancorp Inc.	1,007,624	14,258		Midland States Bancorp Inc.	287,098	7,643
	German American Bancorp Inc.	375,327	14,000		Arrow Financial Corp.	224,829	7,622
	Live Oak Bancshares Inc. Cowen Inc. Class A	454,339 353,760	13,721 13,662		B. Riley Financial Inc. First Mid Bancshares Inc.	219,604 233,181	7,510 7,480
	Tompkins Financial Corp.	175,830	13,641	*,1	Silvergate Capital Corp. Class A	428.901	7,463
*	Donnelley Financial Solutions Inc.	344,997	13,334		Dynex Capital Inc.	580,849	7,388
	ProAssurance Corp.	761,031	13,295		Central Pacific Financial Corp.	360,985	7,321
*,1	Federal Agricultural Mortgage Corp. Class C	115,913	13,065		Independent Bank Corp.	300,474	7,187
,.	Upstart Holdings Inc. Argo Group International Holdings Ltd.	968,787 495,180	12,807 12,800		Peapack-Gladstone Financial Corp. First Community Bankshares Inc.	191,096 208,451	7,113 7,066
	Premier Financial Corp.	472,619	12,747	*	CrossFirst Bankshares Inc.	561,742	6,971
	MFA Financial Inc.	1,286,920	12,676		Diamond Hill Investment Group Inc.	37,404	6,920
	Preferred Bank	169,008	12,611		Business First Bancshares Inc.	310,867	6,883
*	AMERISAFE Inc.	241,517	12,552		Mercantile Bank Corp.	205,467	6,879
	LendingClub Corp.  1st Source Corp.	1,419,153 229,788	12,489 12,199		Byline Bancorp Inc. Broadmark Realty Capital Inc.	295,097 1,898,207	6,778 6,758
	Banc of California Inc.	764,401	12,133		Great Southern Bancorp Inc.	113,047	6,725
1	Rocket Cos. Inc. Class A	1,715,820	12,011	*	Coastal Financial Corp.	141,306	6,715
	New York Mortgage Trust Inc.	4,634,951	11,865		CNB Financial Corp.	276,383	6,575
*	Customers Bancorp Inc.	416,092	11,792		Bar Harbor Bankshares	202,996	6,504
	PROG Holdings Inc.  QCR Holdings Inc.	687,589 232,625	11,613 11,548		Bank of Marin Bancorp HomeStreet Inc.	195,551 228,577	6,430 6,304
	Mercury General Corp.	336,871	11,546	*	EZCORP Inc. Class A	768,675	6,265
	James River Group Holdings Ltd.	531,241	11,108		First Financial Corp.	135,345	6,237
	KKR Real Estate Finance Trust Inc.	785,946	10,972		Farmers National Banc Corp.	438,390	6,190
*	Hanmi Financial Corp.	438,230	10,846	*	AssetMark Financial Holdings Inc.	268,104	6,166
	Ambac Financial Group Inc. Peoples Bancorp Inc.	611,299 373,154	10,661 10,542	*	Equity Bancshares Inc. Class A SiriusPoint Ltd.	186,764 1,028,558	6,102 6,068
1	ARMOUR Residential REIT Inc.	1,864,235	10,542		Invesco Mortgage Capital Inc.	476,167	6,062
	Univest Financial Corp.	400,741	10,471		Capital City Bank Group Inc.	183,249	5,956
*	Green Dot Corp. Class A	660,573	10,450		Hingham Institution For Savings	21,422	5,912
	ConnectOne Bancorp Inc.	430,205	10,415	*	TPG RE Finance Trust Inc.	870,325	5,910
	Redwood Trust Inc. Victory Capital Holdings Inc. Class A	1,517,026 379,851	10,255 10,191		Carter Bankshares Inc. Metrocity Bankshares Inc.	353,385 269,765	5,863 5,835
	First Foundation Inc.	709,598	10,191		SmartFinancial Inc.	205,583	5,654
	Washington Trust Bancorp Inc.	214,533	10,122		Mid Penn Bancorp Inc.	181,290	5,433
	Heritage Commerce Corp.	766,156	9,960	*	Southern First Bancshares Inc.	118,164	5,406
	First Bancshares Inc.	307,771	9,852	*	First of Long Island Corp.	298,568	5,374
*	Ellington Financial Inc. Goosehead Insurance Inc. Class A	789,558 283,077	9,767		Bridgewater Bancshares Inc.	300,308	5,327
	TrustCo Bank Corp.	258,582	9,721 9,720		Amalgamated Financial Corp.  MidWestOne Financial Group Inc.	229,543 165,440	5,289 5,253
*	Open Lending Corp. Class A	1,435,954	9,693		Financial Institutions Inc.	214,866	5,234
	Enact Holdings Inc.	396,928	9,574	*	F&G Annuities & Life Inc.	258,207	5,167
4	National Western Life Group Inc. Class A	33,766	9,488		American National Bankshares Inc.	139,690	5,159
1	Bank First Corp.	101,245	9,398		South Plains Financial Inc.	186,896	5,145
	Kearny Financial Corp. Brightsphere Investment Group Inc.	922,013 453,597	9,358 9,335		Republic Bancorp Inc. Class A West Bancorp Inc.	125,588 199,470	5,139 5,096
	Amerant Bancorp Inc. Class A	342,127	9,183	*	Professional Holding Corp. Class A	183,118	5,080
	TFS Financial Corp.	624,542	9,000		Perella Weinberg Partners Class A	517,515	5,072
*	Columbia Financial Inc.	414,555	8,963		Southern Missouri Bancorp Inc.	107,711	4,936
	Community Trust Bancorp Inc.	193,298	8,878		Alerus Financial Corp.	210,749	4,921
*	Flushing Financial Corp. MBIA Inc.	453,908 679,118	8,797 8,727		Peoples Financial Services Corp. ACNB Corp.	93,416 120,404	4,843 4,793
	Northfield Bancorp Inc.	552,795	8,695		Citizens & Northern Corp.	208,665	4,793
*	Metropolitan Bank Holding Corp.	147,216	8,637		Northrim Bancorp Inc.	86,883	4,741
	WisdomTree Inc.	1,561,812	8,512		P10 Inc. Class A	440,978	4,705
	BrightSpire Capital Inc. Class A	1,353,768	8,434	*	GCM Grosvenor Inc. Class A	609,000	4,634
*,1	United Fire Group Inc. Lemonade Inc.	303,500 605,641	8,304 8,285		Blue Foundry Bancorp Home Bancorp Inc.	353,289 111,812	4,540 4,476
	Camden National Corp.	198,478	8,275	1	John Marshall Bancorp Inc.	155,367	4,470
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		Shares	Market Value* (\$000)			Shares	Market Value* (\$000)
_	Capstar Financial Holdings Inc.	252,878	4,466	_	Parke Bancorp Inc.	129,361	2,683
	Civista Bancshares Inc.	199,121	4,383		Blue Ridge Bankshares Inc.	213,253	2,664
	Farmers & Merchants Bancorp Inc.	159,619	4,338		Investar Holding Corp.	122,919	2,646
	Esquire Financial Holdings Inc.	99,480	4,304		C&F Financial Corp.	45,158	2,631
	Northeast Bank	102,097	4,298	*	Velocity Financial Inc.	272,614	2,631
*,1	Bridge Investment Group Holdings Inc. Class A NerdWallet Inc. Class A	351,485 437,123	4,235 4,196		California Bancorp Penns Woods Bancorp Inc.	109,348 96,487	2,600 2,568
1	UWM Holdings Corp. Class A	1,267,178	4,194		Fidelity D&D Bancorp Inc.	54,354	2,562
	Universal Insurance Holdings Inc.	394,582	4,179		Bank of Princeton	79,386	2,518
	Five Star Bancorp	152,793	4,162		Middlefield Banc Corp.	91,545	2,508
	Shore Bancshares Inc.	237,903	4,147		ChoiceOne Financial Services Inc.	86,340	2,504
	Sierra Bancorp Waterstone Financial Inc.	191,721 234,051	4,072 4,035		Bankwell Financial Group Inc. Meridian Corp.	83,551 80,260	2,459 2,431
	Regional Management Corp.	139,885	3,928	*,1		1,403,479	2,428
1	Orchid Island Capital Inc.	368,377	3,868		Southern States Bancshares Inc.	83,063	2,405
*	Oscar Health Inc. Class A	1,556,750	3,830		Great Ajax Corp.	329,065	2,386
	Tiptree Inc. Class A	276,432	3,826	*	Virginia National Bankshares Corp.	64,865	2,378
	PCSB Financial Corp. HomeTrust Bancshares Inc.	199,187 156,558	3,793 3,784	1	First Western Financial Inc. Sculptor Capital Management Inc. Class A	83,616 270,850	2,354 2,346
	FS Bancorp Inc.	112,779	3,771		Unity Bancorp Inc.	85,478	2,340
	BCB Bancorp Inc.	207,854	3,739		MainStreet Bancshares Inc.	84,926	2,335
	Guaranty Bancshares Inc.	106,456	3,688	*	Acacia Research Corp.	550,375	2,317
	Granite Point Mortgage Trust Inc.	685,825	3,676	*	Bright Health Group Inc.	3,550,558	2,308
1	Enterprise Bancorp Inc.	103,782	3,664		Orange County Bancorp Inc.	49,509	2,306
	HCI Group Inc. Orrstown Financial Services Inc.	92,165 154,763	3,649 3,584	*	Riverview Bancorp Inc. Guild Holdings Co. Class A	300,013 222,563	2,304 2,246
	RBB Bancorp	170,125	3,547		First Northwest Bancorp	145,411	2,240
	Oppenheimer Holdings Inc. Class A	83,440	3,532		Peoples Bancorp of North Carolina Inc.	66,698	2,172
1	Northeast Community Bancorp Inc.	233,986	3,491		Associated Capital Group Inc. Class A	51,666	2,169
	National Bankshares Inc.	86,429	3,483	1	First Guaranty Bancshares Inc.	92,445	2,168
	Macatawa Bank Corp.	312,658	3,449		ECB Bancorp Inc.	133,688	2,146
	First Business Financial Services Inc. Timberland Bancorp Inc.	93,899 100,269	3,432 3,422		LCNB Corp. Salisbury Bancorp Inc.	118,786 67,477	2,138 2,119
*	World Acceptance Corp.	51,658	3,406	*	Maiden Holdings Ltd.	1,001,054	2,113
	BayCom Corp.	178,988	3,397		Chemung Financial Corp.	45,442	2,084
	First Bancorp Inc.	113,459	3,397		Silvercrest Asset Management Group Inc. Class A	111,044	2,084
*,1	Hagerty Inc. Class A	401,845	3,380		OP Bancorp	185,515	2,070
*	Norwood Financial Corp. Third Coast Bancshares Inc.	100,822 182,734	3,371 3,368		Ocwen Financial Corp. Richmond Mutual Bancorp Inc.	67,688 156,067	2,070 2,030
	Red River Bancshares Inc.	65,727	3,356		Greenhill & Co. Inc.	196,676	2,030
*	LendingTree Inc.	156,943	3,348		Nexpoint Real Estate Finance Inc.	126,305	2,007
	MVB Financial Corp.	147,927	3,257		Franklin Financial Services Corp.	55,567	2,006
	AFC Gamma Inc.	203,149	3,196		William Penn Bancorp	163,745	1,985
	First Internet Bancorp	129,262	3,138		First Community Corp.	90,552	1,982
	Territorial Bancorp Inc. PCB Bancorp	129,961 175,667	3,120 3,108	1	First United Corp. Oak Valley Bancorp	99,721 85,955	1,960 1,947
	Investors Title Co.	20,997	3,098		FNCB Bancorp Inc.	235,806	1,936
	First Bank	223,492	3,075	*	Atlanticus Holdings Corp.	73,729	1,932
	Central Valley Community Bancorp	143,916	3,048		BankFinancial Corp.	183,272	1,930
	Evans Bancorp Inc.	80,996	3,028		Luther Burbank Corp.	170,450	1,894
*	Community Financial Corp.  Ponce Financial Group Inc.	75,196 321,611	3,000 2,997		Western New England Bancorp Inc. Hawthorn Bancshares Inc.	198,996 85,168	1,883 1,854
	Summit Financial Group Inc.	118,595	2,952		Medallion Financial Corp.	254,067	1,814
*	Greenlight Capital Re Ltd. Class A	361,930	2,950	*	Malvern Bancorp Inc.	100,564	1,785
	HBT Financial Inc.	149,068	2,917	*	Oportun Financial Corp.	318,190	1,753
	Plumas Bancorp	78,182	2,897		Citizens Community Bancorp Inc.	145,425	1,749
	Capital Bancorp Inc.	122,684	2,888		Provident Bancorp Inc.	238,312	1,735
*,1	Donegal Group Inc. Class A Hippo Holdings Inc.	202,504	2,876 2,856		AG Mortgage Investment Trust Inc.	318,718 99,576	1,692 1,669
	Colony Bankcorp Inc.	210,004 223,813	2,856	*	SB Financial Group Inc. eHealth Inc.	99,576 342,372	1,669 1,657
	Federal Agricultural Mortgage Corp. Class A	29,518	2,829	*	Sterling Bancorp Inc.	271,568	1,654
	Codorus Valley Bancorp Inc.	117,463	2,796	1	Cherry Hill Mortgage Investment Corp.	279,357	1,620
,	Ames National Corp.	118,265	2,792	_	Seven Hills Realty Trust	178,001	1,618
-	FVCBankcorp Inc.	146,132	2,787	1	Sachem Capital Corp.	471,970	1,558
1	Primis Financial Corp. Greene County Bancorp Inc.	232,385 47,701	2,754 2,739	1	NI Holdings Inc. LINKBANCORP Inc.	117,077 165,700	1,554 1,549
	ESSA Bancorp Inc.	128,816	2,739	*	Security National Financial Corp. Class A	209,591	1,549
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		Shares	Market Value* (\$000)			Shares	Market Value* (\$000)
	First Savings Financial Group Inc.	75,763	1,515	*	Elevate Credit Inc.	313,747	549
*	Republic First Bancorp Inc.	701,949	1,509	1	Hennessy Advisors Inc.	56,949	478
	Finward Bancorp	41,182	1,491		Emclaire Financial Corp.	14,724	465
	First Financial Northwest Inc.	98,953	1,482		Auburn National Bancorp Inc.	19,579	454
1	Ellington Residential Mortgage REIT	209,381	1,436	*	Heritage Global Inc.	179,487	422
*	Arlington Asset Investment Corp. Class A	483,688	1,417		Cullman Bancorp Inc.	36,264	417
	Crawford & Co. Class B	266,125	1,413		Manhattan Bridge Capital Inc.	76,601	413
	Eagle Bancorp Montana Inc.	85,268	1,378	*	Value Line Inc.	8,106	412
	Trean Insurance Group Inc.	229,134	1,375	*,1	Finance of America Cos. Inc. Class A	322,722	410
1	Finwise Bancorp	147,010	1,361	*,1	Root Inc. Class A	89,895	404
'	Angel Oak Mortgage Inc.	287,495	1,360	*	оррг тис.	192,600	395
*,1	Ohio Valley Banc Corp.	51,180	1,352	*	Bogota Financial Corp.	30,109	337
, '	Citizens Inc. Class A	633,769	1,350		Midwest Holding Inc.	25,859	329
	United Security Bancshares	184,035	1,345	*	Oconee Federal Financial Corp.	13,259	314
	CF Bankshares Inc.	62,612	1,326	*	Ashford Inc.	20,123	279
	Summit State Bank	83,829 102,140	1,325		Broadway Financial Corp.	236,246 88,448	239 204
*	Magyar Bancorp Inc. USCB Financial Holdings Inc.	102,140	1,309 1,277	*	Atlantic American Corp. Rhinebeck Bancorp Inc.	21,436	204 195
	Westwood Holdings Group Inc.	114,554	1,277	*	Vericity Inc.	26,127	183
1	Provident Financial Holdings Inc.	92,272	1,275	*	FlexShopper Inc.	192,597	180
*	Pioneer Bancorp Inc.	108,652	1,271	*,1		129.803	175
*	Catalyst Bancorp Inc.	95,977	1,239		Kingstone Cos. Inc.	123,172	166
*	Consumer Portfolio Services Inc.	138,786	1,228	*	Hallmark Financial Services Inc.	269,391	157
	Old Point Financial Corp.	44,767	1,220		Mid-Southern Bancorp Inc.	10,175	134
*	Kingsway Financial Services Inc.	151,394	1,207		Crawford & Co. Class A	23,156	129
	Bank of South Carolina Corp.	72.460	1,188	*	Income Opportunity Realty Investors Inc.	8,889	107
1	Chicago Atlantic Real Estate Finance Inc.	76,048	1,146	*	Oxbridge Re Holdings Ltd.	85,031	99
*	Selectquote Inc.	1,696,293	1,140	*	Carver Bancorp Inc.	21,716	89
*	1895 Bancorp of Wisconsin Inc.	112,611	1,131		Home Federal Bancorp Inc. of Louisiana	4,434	79
	First National Corp.	64,493	1,105	*	Reliance Global Group Inc.	139,366	79
*	SWK Holdings Corp.	60,677	1,070		Glen Burnie Bancorp	9,312	74
	Lument Finance Trust Inc.	559,140	1,062		Village Bank & Trust Financial Corp.	1,363	74
	First Capital Inc.	42,269	1,053		Cohen & Co. Inc.	7,503	63
	Curo Group Holdings Corp.	286,087	1,016	*	LM Funding America Inc.	99,032	55
1	Landmark Bancorp Inc.	44,350	1,004	*,1		71,834	52
*	FFBW Inc.	85,237	993	*	Patriot National Bancorp Inc.	3,753	40
	United Bancorp Inc.	67,080	991	*	Conifer Holdings Inc.	24,973	39
*,1	Bakkt Holdings Inc.	817,330	973	*	ICC Holdings Inc.	1,500	23
	AmeriServ Financial Inc.	245,813	966		Kentucky First Federal Bancorp	2,147	15
	Bank of the James Financial Group Inc.	75,807	934	*	Impac Mortgage Holdings Inc.	67,510	12
	HMN Financial Inc.	43,298	922	*	PB Bankshares Inc.	55	1
	Bayfirst Financial Corp.	55,168	922	1	Hanover Bancorp Inc.	29	1
	Sound Financial Bancorp Inc.	22,638	916	*	HV Bancorp Inc.	9	_
	Bank7 Corp.	35,560	910		Lake Shore Bancorp Inc.	38	_
	Union Bankshares Inc.	38,383	899	*,2	Cogent Biosciences Inc. CVR	101,693	_
	CB Financial Services Inc.	41,771	895	*	OptimumBank Holdings Inc.	24	_
1	Western Asset Mortgage Capital Corp.	98,287	895	*	NSTS Bancorp Inc.	36	
	Limestone Bancorp Inc.	35,414	865				12,602,373
	Community West Bancshares	55,349	829	He	alth Care (13.7%)		
*,1	Moneylion Inc.	1,324,096	821	*	Alnylam Pharmaceuticals Inc.	1,672,784	397,537
	loanDepot Inc. Class A	491,141	810	*	Horizon Therapeutics plc	3,087,022	351,303
*	Partners Bancorp	88,078	780	*	Veeva Systems Inc. Class A	1,908,726	308,030
	ACRES Commercial Realty Corp.	94,017	777	*	Insulet Corp.	943,604	277,788
*,1	Katapult Holdings Inc.	789,518	755	*	BioMarin Pharmaceutical Inc.	2,514,583	260,234
*	Citizens Holding Co.	54,082	741	*	Seagen Inc.	1,785,686	229,478
*	Safeguard Scientifics Inc.	237,965	738		Royalty Pharma plc Class A	5,006,756	197,867
*	Affinity Bancshares Inc.	46,511	702	*	Avantor Inc.	9,197,241	193,970
*,1	Nicholas Financial Inc.	107,044	675	*	United Therapeutics Corp.	617,460	171,709
*	GoHealth Inc. Class A	64,616	675	*	Neurocrine Biosciences Inc.	1,303,716	155,716
	Sunlight Financial Holdings Inc.	518,421	669	*	Sarepta Therapeutics Inc.	1,188,489	154,004
	Heritage Insurance Holdings Inc.	371,200	668	*	Jazz Pharmaceuticals plc	853,090	135,906
	First US Bancshares Inc.	76,705	667	*	Exact Sciences Corp.	2,408,750	119,257
	TC Bancshares Inc.	44,260 25,001	658 630	*	Repligen Corp.	700,089	118,532
	IF Bancorp Inc. Pathfinder Bancorp Inc.	35,981 31,207	620 597	*	Penumbra Inc.	514,729	114,507
	COMMUNICATION OF THE PROPERTY	31,207	J9/	*	Halozyme Therapeutics Inc.	1,819,952	103,555
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*	US Global Investors Inc. Class A MarketWise Inc.	200,865 339,965	581 571	*	Chemed Corp. Acadia Healthcare Co. Inc.	200,744 1,241,009	102,466 102,160

			Market Value*				Market Value*
		Shares	(\$000)			Shares	(\$000)
*	Shockwave Medical Inc.	486,807	100,092	*	Patterson Cos. Inc.	1,160,207	32,521
*	Inspire Medical Systems Inc.	390,163 655,845	98,274 97,032	*	Prothena Corp. plc	538,028 651,992	32,416 31,648
	Masimo Corp. Bruker Corp.	1,359,101	92,895	*	STAAR Surgical Co. Progyny Inc.	1,015,087	31,620
*	Novocure Ltd.	1,219,124	89,423	*	Beam Therapeutics Inc.	808,277	31,612
	Encompass Health Corp.	1,360,312	81,360	*	Mirati Therapeutics Inc.	697,464	31,602
*	Globus Medical Inc. Class A	1,045,275	77,633	*	Omnicell Inc.	606,393	30,574
*	Envista Holdings Corp.	2,205,754	74,268	*	Integer Holdings Corp.	446,566	30,572
*	Elanco Animal Health Inc.	5,996,187	73,273	*	NuVasive Inc.	702,334	28,964
*	Karuna Therapeutics Inc.	372,823	73,260	*	BioCryst Pharmaceuticals Inc.	2,518,903	28,917
*	Ionis Pharmaceuticals Inc.	1,917,263	72,415	*	Celldex Therapeutics Inc.	647,691 644.876	28,868
	Medpace Holdings Inc. Ensign Group Inc.	339,514 755,791	72,116 71,505	*	Glaukos Corp. AtriCure Inc.	625,860	28,168 27,776
*	Tenet Healthcare Corp.	1,449,574	70,725	*	Cerevel Therapeutics Holdings Inc.	876,347	27,770
*	HealthEquity Inc.	1,144,476	70,545	*	Silk Road Medical Inc.	513,554	27,141
*	Exelixis Inc.	4,336,686	69,560	*	Signify Health Inc. Class A	945,720	27,104
*	LHC Group Inc.	415,403	67,167	*	Sage Therapeutics Inc.	704,595	26,873
*	Apellis Pharmaceuticals Inc.	1,275,176	65,939	*	TransMedics Group Inc.	429,447	26,505
*	Intra-Cellular Therapies Inc.	1,196,197	63,303	*	Allscripts Healthcare Solutions Inc.	1,494,283	26,359
*	Option Care Health Inc.	2,098,725	63,151	*,1	ACADIA Pharmaceuticals Inc.	1,651,061	26,285
	QuidelOrtho Corp.	723,842	62,012	*	Corcept Therapeutics Inc.	1,293,840	26,278
*	Perrigo Co. plc AMN Healthcare Services Inc.	1,811,665 585.904	61,760 60,243	*	Vir Biotechnology Inc. Supernus Pharmaceuticals Inc.	1,027,591 716,776	26,008 25,567
*	Natera Inc.	1,493,679	60,001	*	REVOLUTION Medicines Inc.	1,038,662	24,741
*	Cytokinetics Inc.	1,288,175	59,024	*	Pacira BioSciences Inc.	622,477	24,034
*	Azenta Inc.	1,008,219	58,699	*	Surgery Partners Inc.	851,784	23,731
*	Arrowhead Pharmaceuticals Inc.	1,444,041	58,570	*	Catalyst Pharmaceuticals Inc.	1,265,330	23,535
*	Alkermes plc	2,230,345	58,279	*	Krystal Biotech Inc.	295,468	23,407
*	Premier Inc. Class A	1,586,550	55,498	*	Phreesia Inc.	722,095	23,367
*	Integra LifeSciences Holdings Corp.	974,584	54,645	*	Veracyte Inc.	977,316	23,192
*	Merit Medical Systems Inc. Haemonetics Corp.	771,426 689,286	54,478 54,212	*	Certara Inc. Pacific Biosciences of California Inc.	1,441,360 2,813,600	23,163 23,015
*	Teladoc Health Inc.	2,230,208	52,744	*	Arvinas Inc.	666,274	22,793
*	Syneos Health Inc.	1,413,640	51,852	*	Ironwood Pharmaceuticals Inc. Class A	1,810,983	22,438
*	Doximity Inc. Class A	1,530,131	51,351	*	Akero Therapeutics Inc.	409,033	22,415
*	Prometheus Biosciences Inc.	464,323	51,076	*	TG Therapeutics Inc.	1,892,135	22,384
*	Madrigal Pharmaceuticals Inc.	164,526	47,754	*	Harmony Biosciences Holdings Inc.	405,340	22,334
*	10X Genomics Inc. Class A	1,309,900	47,733	*	Syndax Pharmaceuticals Inc.	862,196	21,943
*	Lantheus Holdings Inc.	929,458	47,365	*	Addus HomeCare Corp.	220,491	21,937
*	Neogen Corp. Ultragenyx Pharmaceutical Inc.	2,955,433 966,643	45,011	*	Xencor Inc. Maravai LifeSciences Holdings Inc. Class A	833,631 1,505,209	21,708 21,540
*	ICU Medical Inc.	276,628	44,785 43,563	*	Agios Pharmaceuticals Inc.	736,563	20,683
*	CRISPR Therapeutics AG	1,050,227	42,692	*	R1 RCM Inc.	1,876,983	20,553
*	agilon health Inc.	2,638,449	42,585	*	Revance Therapeutics Inc.	1,109,283	20,477
*	Prestige Consumer Healthcare Inc.	679,071	42,510	*	AdaptHealth Corp. Class A	1,045,062	20,086
*	Axonics Inc.	667,332	41,728	*	Owens & Minor Inc.	1,027,535	20,068
*	Amicus Therapeutics Inc.	3,404,345	41,567	*	Avidity Biosciences Inc.	899,791	19,966
	Inari Medical Inc.	653,755	41,553	*	Embecta Corp.	782,406	19,787
*	Denali Therapeutics Inc.	1,490,351	41,447	*	Amylyx Pharmaceuticals Inc.	534,982	19,768
*	Intellia Therapeutics Inc. Vaxcyte Inc.	1,170,347 850,435	40,833 40,778	*	FibroGen Inc. Meridian Bioscience Inc.	1,215,684 579,269	19,475 19,238
*	LivaNova plc	724,086	40,776	*	Nevro Corp.	484,637	19,236
*	Tandem Diabetes Care Inc.	886,365	39,842	*	MannKind Corp.	3,570,076	18,814
*	iRhythm Technologies Inc.	408,163	38,233	*	PROCEPT BioRobotics Corp.	446,136	18,532
*	1Life Healthcare Inc.	2,256,127	37,700	*	Twist Bioscience Corp.	767,428	18,272
*	Guardant Health Inc.	1,379,624	37,526	*	Relay Therapeutics Inc.	1,216,475	18,174
*	PTC Therapeutics Inc.	976,772	37,283	*	Rhythm Pharmaceuticals Inc.	612,573	17,838
*	Amedisys Inc.	446,049	37,263	*	CorVel Corp.	122,218	17,762
	Insmed Inc.	1,840,597	36,775	*	Vericel Corp.	650,389	17,131
*	CONMED Corp.  IVERIC bio Inc.	414,505 1,714,855	36,742 36,715	*	Outset Medical Inc.  Dynavax Technologies Corp.	661,986 1,598,893	17,092 17,012
*	Blueprint Medicines Corp.	818,299	35,850	*	Avanos Medical Inc.	625,876	16,936
*,1	Axsome Therapeutics Inc.	463,037	35,714	*	Pediatrix Medical Group Inc.	1,120,257	16,647
*	Evolent Health Inc. Class A	1,237,803	34,757	*	Myriad Genetics Inc.	1,111,204	16,124
	Select Medical Holdings Corp.	1,398,555	34,726	*	Viridian Therapeutics Inc.	548,155	16,012
*	Enovis Corp.	647,003	34,628	*	Myovant Sciences Ltd.	592,201	15,966
*	Oak Street Health Inc.	1,595,431	34,318	*	Apollo Medical Holdings Inc.	537,216	15,896

		Shares	Market Value* (\$000)			Shares	Market Value* (\$000)
*	NeoGenomics Inc.	1,714,312	15,840	*	Treace Medical Concepts Inc.	439,183	10,097
*	Chinook Therapeutics Inc.	602,215	15,778	*,1	Anavex Life Sciences Corp.	1,085,866	10,055
*	Travere Therapeutics Inc.	748,529	15,742	*	Collegium Pharmaceutical Inc.	422,377	9,799
*	ModivCare Inc. Rocket Pharmaceuticals Inc.	173,008	15,524	*	ADMA Biologics Inc.	2,511,074	9,743
*	Privia Health Group Inc.	781,946 669,294	15,303 15,200	*	American Well Corp. Class A Cerus Corp.	3,402,912 2,534,641	9,630 9,251
*,1	Cassava Sciences Inc.	514,350	15,194	*	Pliant Therapeutics Inc.	473,006	9,143
*	SpringWorks Therapeutics Inc.	583,422	15,175	*	Enhabit Inc.	693,881	9,131
*	Ligand Pharmaceuticals Inc.	221,216	14,777	*	Viking Therapeutics Inc.	953,278	8,961
*	Arcus Biosciences Inc.	712,855	14,742	*,1	AnaptysBio Inc.	287,536	8,911
	Amphastar Pharmaceuticals Inc. US Physical Therapy Inc.	523,306 180,202	14,663 14,602	*,1	23andMe Holding Co. Theravance Biopharma Inc.	4,063,703 781,197	8,778 8,765
*	Reata Pharmaceuticals Inc. Class A	382,489	14,531	*	Editas Medicine Inc. Class A	981,419	8,705
*	DICE Therapeutics Inc.	452,252	14,110	*	ViewRay Inc.	1,915,577	8,582
*	Replimune Group Inc.	518,601	14,106	*	BioLife Solutions Inc.	468,339	8,524
*	Recursion Pharmaceuticals Inc. Class A	1,804,568	13,913	*	CareDx Inc.	747,032	8,524
*	Schrodinger Inc. ImmunoGen Inc.	739,235 2,776,483	13,816 13,771	*	Heska Corp. Agenus Inc.	136,679 3,517,436	8,496 8,442
*	NextGen Healthcare Inc.	729,503	13,771		Simulations Plus Inc.	226,201	8,272
*	Alignment Healthcare Inc.	1,130,946	13,300	*	Health Catalyst Inc.	772,328	8,210
*	uniQure NV	582,587	13,207	*	Allakos Inc.	972,869	8,192
*	Immunovant Inc.	737,376	13,088	*	Day One Biopharmaceuticals Inc.	379,627	8,170
*	Cross Country Healthcare Inc.	476,316	12,656	*	CTI BioPharma Corp.	1,346,944	8,095
*	Kymera Therapeutics Inc. RadNet Inc.	505,525 654,233	12,618 12,319	*	4D Molecular Therapeutics Inc. Fulgent Genetics Inc.	364,332 271,560	8,092 8,087
*	Zentalis Pharmaceuticals Inc.	607,654	12,319	*	Castle Biosciences Inc.	342,026	8,087
*	Alphatec Holdings Inc.	989,308	12,218	*	OrthoPediatrics Corp.	202,654	8,051
*	Ventyx Biosciences Inc.	369,847	12,127	*	Cardiovascular Systems Inc.	587,746	8,005
*	Biohaven Ltd.	873,538	12,125	*	Allogene Therapeutics Inc.	1,267,523	7,973
*	Enanta Pharmaceuticals Inc.	259,365	12,066	* 1	Alector Inc.	851,135	7,856
*	Imago Biosciences Inc. Avid Bioservices Inc.	332,678	11,960	*,1 *	Point Biopharma Global Inc. EQRx Inc.	1,067,736	7,784 7,772
*	REGENXBIO Inc.	861,042 519,535	11,857 11,783	*	Arcutis Biotherapeutics Inc.	3,159,294 522,701	7,772
*	Iovance Biotherapeutics Inc.	1,834,181	11,700	*	Ardelyx Inc.	2,703,765	7,706
*	Figs Inc. Class A	1,737,066	11,690	*	HealthStream Inc.	309,485	7,688
	LeMaitre Vascular Inc.	252,995	11,643	*	DocGo Inc.	1,085,029	7,671
*	Adaptive Biotechnologies Corp.	1,522,958	11,635	* * 1	AngioDynamics Inc.	556,713	7,666
*	Arcellx Inc.	371,201	11,500	*,1	Agiliti Inc.	465,135	7,586
*	Varex Imaging Corp. Innoviva Inc.	565,375 865,017	11,477 11,461	*	National Research Corp. Community Health Systems Inc.	202,480 1,740,344	7,552 7,518
	National HealthCare Corp.	192,068	11,428	*,1	ImmunityBio Inc.	1,473,170	7,469
*	Sotera Health Co.	1,370,801	11,419	*	Coherus Biosciences Inc.	932,328	7,384
*	CryoPort Inc.	656,951	11,398	*	Emergent BioSolutions Inc.	619,312	7,314
*,1	Roivant Sciences Ltd.	1,420,197	11,347	*	Brookdale Senior Living Inc.	2,643,357	7,216
*	Aclaris Therapeutics Inc.	717,242	11,297 11,278	*	Seres Therapeutics Inc. OPKO Health Inc.	1,286,235	7,203 7,164
*	UFP Technologies Inc. Fate Therapeutics Inc.	95,669 1,105,732	11,278	*	Protagonist Therapeutics Inc.	5,731,590 653,981	7, 164 7, 135
*	Geron Corp.	4,599,719	11,131	*	Bluebird Bio Inc.	1,028,020	7,114
*	Provention Bio Inc.	1,052,768	11,128	*	Surmodics Inc.	208,303	7,107
*,1	Novavax Inc.	1,074,451	11,045	*	Cymabay Therapeutics Inc.	1,121,963	7,035
*	Cytek Biosciences Inc.	1,079,228	11,019	*	Artivion Inc.	578,425	7,011
*	Mesa Laboratories Inc.	66,187	11,001	*,1	Mersana Therapeutics Inc.	1,187,364	6,958
*	Keros Therapeutics Inc. Bridgebio Pharma Inc.	228,857 1,436,101	10,990 10,943	*,1	Lyell Immunopharma Inc. Sharecare Inc.	2,004,990 4,273,284	6,957 6,837
*	Deciphera Pharmaceuticals Inc.	663,511	10,875	*	MaxCyte Inc.	1,244,454	6,795
*	Verve Therapeutics Inc.	560,250	10,841	*	Cara Therapeutics Inc.	632,487	6,793
	Atrion Corp.	19,033	10,648	*,1	Paragon 28 Inc.	352,712	6,740
*	Crinetics Pharmaceuticals Inc.	578,127	10,580	*	iTeos Therapeutics Inc.	343,666	6,712
*	Cutera Inc.	238,966	10,567	*	Mirum Pharmaceuticals Inc.	336,408	6,560
*	Kura Oncology Inc. Cogent Biosciences Inc.	848,398 901,832	10,529 10,425	*	Accolade Inc. Quanterix Corp.	838,231 469,706	6,530 6,505
*	Morphic Holding Inc.	389,287	10,425	*	LifeStance Health Group Inc.	1,300,434	6,424
*,1	Nuvalent Inc. Class A	349,228	10,410	*,1	Senseonics Holdings Inc.	6,196,872	6,383
*	Inhibrx Inc.	419,159	10,328	*	Nurix Therapeutics Inc.	580,325	6,372
*,1	Altimmune Inc.	627,463	10,322	*	Compass Therapeutics Inc.	1,266,874	6,372
*	Hims & Hers Health Inc.	1,587,419	10,175	*	Anika Therapeutics Inc.	213,140	6,309
	Ideaya Biosciences Inc.	559,961	10,174		ANI Pharmaceuticals Inc.	155,504	6,256

		Shares	Market Value* (\$000)			Shares	Market Value* (\$000)
*	Sorrento Therapeutics Inc.	7,008,150	6,209	*	SeaSpine Holdings Corp.	457,572	3,821
*	Orthofix Medical Inc.	297,757	6,113	*	Cullinan Oncology Inc.	360,618	3,805
*	Nektar Therapeutics Class A	2,687,669	6,074	*	Multiplan Corp.	3,282,555	3,775
*	Inogen Inc. Axogen Inc.	304,349 600,828	5,999 5,996	*,1	Heron Therapeutics Inc. Tango Therapeutics Inc.	1,499,093 515,719	3,748 3,739
*	Vanda Pharmaceuticals Inc.	810,047	5,986	*,1	Aerovate Therapeutics Inc.	126,478	3,706
*	AVEO Pharmaceuticals Inc.	395,349	5,910	*	Fulcrum Therapeutics Inc.	505,603	3,681
*,1	Bionano Genomics Inc.	4,033,356	5,889	*,1 *	Erasca Inc.	853,079	3,677
*	Sangamo Therapeutics Inc.	1,844,692	5,792	*	PMV Pharmaceuticals Inc.	417,461	3,632
*,1	WaVe Life Sciences Ltd. Bioxcel Therapeutics Inc.	823,599 268,317	5,765 5,763	*	Rigel Pharmaceuticals Inc. Concert Pharmaceuticals Inc.	2,383,151 605,393	3,575 3,535
*	Intercept Pharmaceuticals Inc.	465,145	5,754	*	Karyopharm Therapeutics Inc.	1,022,796	3,477
*	Kiniksa Pharmaceuticals Ltd. Class A	380,539	5,700	*	Janux Therapeutics Inc.	261,422	3,443
*	RAPT Therapeutics Inc.	284,800	5,639	*	CareMax Inc.	936,502	3,418
*,1 *	Invitae Corp.	2,975,217	5,534	*	PetIQ Inc. Class A	363,235	3,349
*	Definitive Healthcare Corp. Class A SI-BONE Inc.	503,183 404,049	5,530 5,495	*	Allovir Inc. Kodiak Sciences Inc.	652,253 463,976	3,346 3,322
*	Arcturus Therapeutics Holdings Inc.	319,530	5,419	*	Actinium Pharmaceuticals Inc.	310,022	3,302
*	Esperion Therapeutics Inc.	869,080	5,414	*,1	Entrada Therapeutics Inc.	243,189	3,288
*	Kezar Life Sciences Inc.	760,897	5,357	*	Cano Health Inc.	2,367,552	3,244
*	89bio Inc.	410,950	5,231	*	ALX Oncology Holdings Inc.	287,458	3,240
*	Atea Pharmaceuticals Inc. 2seventy bio Inc.	1,087,281 553,419	5,230 5,186	*	C4Therapeutics Inc. OcularTherapeutix Inc.	549,165 1,151,625	3,240 3,236
*	SomaLogic Inc.	2,058,009	5,166	*	Nuvation Bio Inc.	1,678,606	3,223
*	Harrow Health Inc.	347,278	5,126	*,1	Arbutus Biopharma Corp.	1,361,084	3,171
*	Inovio Pharmaceuticals Inc.	3,282,406	5,121	*	Monte Rosa Therapeutics Inc.	413,062	3,143
*,1	Edgewise Therapeutics Inc.	566,256	5,062	*	CinCor Pharma Inc.	251,839	3,095
*	Sutro Biopharma Inc. MacroGenics Inc.	626,246 743,901	5,060 4,992	*	Gritstone bio Inc. Stoke Therapeutics Inc.	873,606 323,400	3,014 2,985
*	Aldeyra Therapeutics Inc.	712,996	4,962	*	Annexon Inc.	574,722	2,983
*	GoodRx Holdings Inc. Class A	1,046,902	4,879	*	Seer Inc. Class A	506,939	2,940
*	OmniAb Inc.	1,340,564	4,826	*	G1 Therapeutics Inc.	526,116	2,857
	Utah Medical Products Inc.	47,798	4,805	*	Terns Pharmaceuticals Inc.	279,093	2,841
*	OraSure Technologies Inc.	996,408	4,803	*	Lexicon Pharmaceuticals Inc. Phathom Pharmaceuticals Inc.	1,464,903	2,798 2,747
*	Caribou Biosciences Inc. PDS Biotechnology Corp.	762,009 361,426	4,785 4,771	*	HilleVax Inc.	244,807 164,186	2,747
*	Scholar Rock Holding Corp.	524,138	4,743	*	Joint Corp.	196,308	2,744
*,1	Butterfly Network Inc.	1,924,724	4,735	*	Amneal Pharmaceuticals Inc.	1,376,868	2,740
*,1	Sana Biotechnology Inc.	1,197,596	4,730	*	Accuray Inc.	1,309,650	2,737
*,1	Albireo Pharma Inc.	218,451	4,721	*	Zimvie Inc.	291,347	2,721
*	BioAtla Inc. Computer Programs & Systems Inc.	560,208 169,020	4,622 4,601	*,1	NGM Biopharmaceuticals Inc. Assertio Holdings Inc.	541,140 629,897	2,717 2,709
*	Apollo Endosurgery Inc.	461,363	4,600	*,1	Cabaletta Bio Inc.	280,645	2,596
*	MiMedx Group Inc.	1,654,295	4,599	*	Neuronetics Inc.	377,933	2,596
*	NanoString Technologies Inc.	572,249	4,561	*	Astria Therapeutics Inc.	173,780	2,588
*	Sight Sciences Inc.	369,784	4,515	*	Alpine Immune Sciences Inc.	350,072	2,573
*	Eagle Pharmaceuticals Inc. Atara Biotherapeutics Inc.	150,943 1,327,590	4,412 4,354	*	iRadimed Corp. ORIC Pharmaceuticals Inc.	90,245 432,035	2,553 2,545
*,1	Liquidia Corp.	683,232	4,352	*,1	Cue Health Inc.	1,223,161	2,532
*	Tactile Systems Technology Inc.	377,201	4,330	*	RxSight Inc.	196,669	2,492
	Phibro Animal Health Corp. Class A	322,308	4,322	*	Nkarta Inc.	413,006	2,474
*,1	Clover Health Investments Corp. Class A	4,582,929	4,260	* 1	Y-mAbs Therapeutics Inc.	483,357	2,359
*,1	Zynex Inc. ARS Pharmaceuticals Inc.	305,955 496,792	4,256 4,238	*,1 *	Aadi Bioscience Inc. Generation Bio Co.	183,226 591,805	2,351
*	Pennant Group Inc.	385,879	4,236	*	Organogenesis Holdings Inc. Class A	863,899	2,326 2,324
*	Pulmonx Corp.	500,068	4,216	*,1	Gossamer Bio Inc.	1,064,383	2,310
*,1	Design Therapeutics Inc.	404,935	4,155	*	Merrimack Pharmaceuticals Inc.	200,656	2,300
*	OptimizeRx Corp.	246,272	4,137	*,1 *	CorMedix Inc.	538,329	2,272
*	Tarsus Pharmaceuticals Inc.	279,975	4,104	*	Akoya Biosciences Inc. Semler Scientific Inc.	237,203	2,270
*	Dyne Therapeutics Inc. Codexis Inc.	344,550 856,141	3,993 3,990	*	Avita Medical Inc.	68,412 339,975	2,258 2,244
*,1	Ocugen Inc.	3,048,371	3,963	*	Voyager Therapeutics Inc.	367,267	2,244
*	Poseida Therapeutics Inc. Class A	746,109	3,954	*	Puma Biotechnology Inc.	529,033	2,238
*	Vera Therapeutics Inc. Class A	201,209	3,893	*	Berkeley Lights Inc.	833,539	2,234
*	SIGA Technologies Inc.	525,773	3,870	*,2 *,1	PDL BioPharma Inc.	1,757,467	2,214
*	Adicet Bio Inc. Evolus Inc.	430,228 509,710	3,846 3,828	*,1	Beyond Air Inc. Zomedica Corp.	340,359 13,497,669	2,209 2,200
	LVOIDS IIIG.	503,710	3,020		Zomedica Corp.	13,437,003	2,200

			Market Value*				Market Value*
		Shares	(\$000)	_		Shares	(\$000)
*	Xeris Biopharma Holdings Inc.	1,642,268	2,184	*,1	Nautilus Biotechnology Inc. Class A VolitionRX Ltd.	663,291 490,275	1,194 1,191
*	InfuSystem Holdings Inc. ClearPoint Neuro Inc.	251,318 257,344	2,181 2,180	*	Matinas BioPharma Holdings Inc.	2,361,667	1,191
*	Vigil Neuroscience Inc.	172,520	2,156	*	Praxis Precision Medicines Inc.	491,769	1,170
*	Aura Biosciences Inc.	203,422	2,136	*,1	Ovid therapeutics Inc.	623,099	1,159
*	Savara Inc.	1,365,619	2,117	*	Inotiv Inc.	230,336	1,138
*,1 *,1	IGM Biosciences Inc.	122,673	2,087	*,1	Cue Biopharma Inc.	398,742	1,136
*,1	Quantum-Si Inc. Prime Medicine Inc.	1,131,983 111,084	2,072 2,064	*	Asensus Surgical Inc. Class A Standard BioTools Inc.	3,248,502 962,596	1,128 1,126
*	Biomea Fusion Inc.	239,984	2,064	*,1	Co-Diagnostics Inc.	962,596 444,776	1,120
*,1	Omeros Corp.	885,631	2,002	*,1	Invivyd Inc.	747,479	1,121
*	Lineage Cell Therapeutics Inc.	1,707,356	1,998	*	Durect Corp.	319,553	1,106
*	Selecta Biosciences Inc.	1,745,062	1,972	*,1	Tyra Biosciences Inc.	144,249	1,096
*,1	Alaunos Therapeutics Inc.	3,031,717	1,968	*,1	Acumen Pharmaceuticals Inc.	202,857	1,095
*,1	KemPharm Inc.	427,732	1,963	*,1 *,1	Celularity Inc. Class A	843,244	1,088
*	Celcuity Inc. Precigen Inc.	138,979 1,279,711	1,947 1,945	*	Inmune Bio Inc. Rezolute Inc.	168,011 512,314	1,065 1,060
*	Chimerix Inc.	1,045,094	1,944	*,1	Vicarious Surgical Inc. Class A	522,154	1,055
*	Icosavax Inc.	238,487	1,894	*,1	ProKidney Corp. Class A	152,313	1,045
*,1	Summit Therapeutics Inc.	444,791	1,890	*,1	GreenLight Biosciences Holdings PBC	883,942	1,043
*	CVRx Inc.	102,172	1,875	*	Electromed Inc.	98,146	1,030
*	PepGen Inc.	138,827	1,856	*,1	Prelude Therapeutics Inc.	169,409	1,023
*,1	KalVista Pharmaceuticals Inc. Omega Therapeutics Inc.	274,204 322,195	1,854 1,840	*	Verastem Inc. Personalis Inc.	2,509,284 509,185	1,010 1,008
*,1	Marinus Pharmaceuticals Inc.	461,990	1,839	*	Sanara Medtech Inc.	22,082	1,005
*	F-star Therapeutics Inc.	285,564	1,805	*,1	Seelos Therapeutics Inc.	1,478,231	1,003
*,1	Innovage Holding Corp.	247,177	1,775	*	Olema Pharmaceuticals Inc.	409,315	1,003
*	GlycoMimetics Inc.	583,568	1,768	*	Precision BioSciences Inc.	832,086	990
*	Frequency Therapeutics Inc.	444,105	1,710	*	Apyx Medical Corp.	419,208	981
1	Foghorn Therapeutics Inc.	267,245	1,705	*,1	Sema4 Holdings Corp.	3,699,996	976
*,1	ProPhase Labs Inc. Vaxart Inc.	176,300 1,762,495	1,698 1,694	*,1	Vor BioPharma Inc. Annovis Bio Inc.	144,673 71,015	962 954
*	Sesen Bio Inc.	2,671,362	1,628	*,1	Lyra Therapeutics Inc.	301,686	947
*,1	Humacyte Inc.	770,077	1,625	*	Streamline Health Solutions Inc.	583,466	922
*	Tabula Rasa HealthCare Inc.	322,952	1,599	*,1	Sonendo Inc.	325,129	920
*	KORU Medical Systems Inc.	441,655	1,577	*,1	Immuneering Corp. Class A	187,576	910
*,1	Evelo Biosciences Inc.	971,999	1,565	*	Pieris Pharmaceuticals Inc.	872,701	908
*	Century Therapeutics Inc.	299,597	1,537	*	Kronos Bio Inc.	553,029	896
*	FONAR Corp. Athira Pharma Inc.	90,773 457,702	1,520 1,451	*	Enzo Biochem Inc. CytoSorbents Corp.	625,128 575,510	894 892
*,1	Citius Pharmaceuticals Inc.	1,818,366	1,436	*	Atossa Therapeutics Inc.	1,686,157	891
*,1	Outlook Therapeutics Inc.	1,321,422	1,427	*,1	Eton Pharmaceuticals Inc.	311,427	872
*	Anixa Biosciences Inc.	334,894	1,423	*	scPharmaceuticals Inc.	121,592	872
*,1	Harvard Bioscience Inc.	512,450	1,419	*	Genprex Inc.	598,971	868
*,1	CEL - SCI Corp.	599,637	1,409	*,1	Shattuck Labs Inc.	376,968	867 861
*	Absci Corp. Akebia Therapeutics Inc.	667,634 2,412,371	1,402 1,392	*	Vapotherm Inc. Spectrum Pharmaceuticals Inc.	318,785 2,285,849	842
*	Rallybio Corp.	211,872	1,392	*,1	Greenwich Lifesciences Inc.	54,752	832
*	Sensus Healthcare Inc.	184,456	1,369	*,1	Vaxxinity Inc. Class A	591,400	828
*	Tela Bio Inc.	118,519	1,363	*	Cardiff Oncology Inc.	590,707	827
*	CytomX Therapeutics Inc.	845,126	1,352	*	Rain Oncology Inc.	102,983	824
*	Opiant Pharmaceuticals Inc.	65,865	1,336	*	Dare Bioscience Inc.	957,694	795
*	Stereotaxis Inc.	639,523 215,647	1,324 1,315	*,1	Taysha Gene Therapies Inc.	350,960	793 793
*	Kinnate Biopharma Inc. Capricor Therapeutics Inc.	340,382	1,313	*	Ocuphire Pharma Inc. Clearside Biomedical Inc.	224,507 697,789	793 782
*	Singular Genomics Systems Inc.	649,099	1,305	*,1	Ikena Oncology Inc.	293,165	780
*,1	Mind Medicine MindMed Inc.	578,200	1,272	*	aTyr Pharma Inc.	353,286	774
*,1	Paratek Pharmaceuticals Inc.	676,071	1,264	*,1	Talkspace Inc.	1,259,130	768
*,1	Bioventus Inc. Class A	483,525	1,262	*,1	Galectin Therapeutics Inc.	670,160	757
*,1	XOMA Corp.	68,353	1,258	*,1 *	Theseus Pharmaceuticals Inc.	151,357	754 731
*	MediciNova Inc. ChromaDex Corp.	610,232 743,337	1,251 1,249	*	Graphite Bio Inc. Larimar Therapeutics Inc.	220,289 174,782	731 722
*,1	Optinose Inc.	743,337 666,264	1,249	*,1	Miromatrix Medical Inc.	241,350	722
*	Relmada Therapeutics Inc.	352,855	1,231	*	Adverum Biotechnologies Inc.	1,242,292	720
*,1	DarioHealth Corp.	280,481	1,200	*	XBiotech Inc.	204,329	717
*,1	Mallinckrodt plc	154,800	1,200	* * 1	Societal CDMO Inc.	475,520	709
-	EyePoint Pharmaceuticals Inc.	342,542	1,199	*,1	VBI Vaccines Inc.	1,791,245	701

		Shares	Market Value* (\$000)			Shares	Market Value* (\$000)
*	Infinity Pharmaceuticals Inc.	1,260,434	700	*	ImmuCell Corp.	65,129	399
*,1	Oncology Institute Inc.	416,082	687	*,2 *	Tobira Therapeutics Inc. CVR Exp. 12/31/28	87,894	398
*	Assembly Biosciences Inc.	520,411	677	*,1	Xilio Therapeutics Inc.	147,846	398
*,1	Homology Medicines Inc. Spero Therapeutics Inc.	535,943 387,768	675 671	*	BioCardia Inc. LENSAR Inc.	189,240 133,235	396 394
*,1	Therapeutics MD Inc.	119,900	670	*	Viracta Therapeutics Inc.	269,120	394
*,1	BrainStorm Cell Therapeutics Inc.	406,237	666	*	Tracon Pharmaceuticals Inc.	262,772	392
*,1	Alzamend Neuro Inc.	1,178,178	666	*	IMARA Inc.	95,490	391
*,1	Rani Therapeutics Holdings Inc. Class A	110,975	655	*,1	Kala Pharmaceuticals Inc.	10,196	389
*	Fortress Biotech Inc.	985,656	646		Psychemedics Corp.	78,306	387
*	Trevi Therapeutics Inc.	331,266	639	*,1 *	Leap Therapeutics Inc.	851,630	383
*,1	Eiger BioPharmaceuticals Inc.	540,723	638	*,1	Protara Therapeutics Inc.	140,668	377
*,1	Forian Inc. DermTech Inc.	229,226 353,129	626 625	*	Accelerate Diagnostics Inc. Aquestive Therapeutics Inc.	532,865 406,694	376 367
*	Oncternal Therapeutics Inc.	621,232	621	*	Avrobio Inc.	514,604	367
*,1	Third Harmonic Bio Inc.	143,047	615	*	Avalo Therapeutics Inc.	72,041	367
*,1	Sonida Senior Living Inc.	48,661	608	*	DiaMedica Therapeutics Inc.	228,620	361
*	Passage Bio Inc.	439,575	607	*,1	Impel Pharmaceuticals Inc.	96,137	361
*	Lantern Pharma Inc.	99,265	600	*,1	MEI Pharma Inc.	1,465,882	357
*	Augmedix Inc.	383,326	598	*,1 *	Adamis Pharmaceuticals Corp.	2,106,353	357
	Pardes Biosciences Inc. Class A	349,795	591		Oncocyte Corp.	1,101,689	354
*	Orgenesis Inc.	300,650	586	*,1 *,1	Conformis Inc.	104,898	348
*,1	iCAD Inc. P3 Health Partners Inc.	319,228 316,194	584 582	*,1	Exagen Inc. Microbot Medical Inc.	141,951 113,404	341 341
*,1	Curis Inc.	1,054,023	580	*	Tenaya Therapeutics Inc.	168,816	339
*	AN2 Therapeutics Inc.	60,179	573	*	CareCloud Inc.	119,857	337
*,1	Reviva Pharmaceuticals Holdings Inc.	134,091	570	*	Kewaunee Scientific Corp.	21,503	334
*	Biomerica Inc.	168,196	563	*,1	Delcath Systems Inc.	92,570	333
*	Great Elm Group Inc.	274,947	555	*	IRIDEX Corp.	164,113	330
*	IsoRay Inc.	2,235,035	552	*,1 *	Senti Biosciences Inc. Class A	232,999	329
*	Pear Therapeutics Inc.	468,131	552	*	Hepion Pharmaceuticals Inc.	1,090,743	327
*,1	Instil Bio Inc. SELLAS Life Sciences Group Inc.	874,673 227,617	551 537	*,1	ARCA biopharma Inc. Zynerba Pharmaceuticals Inc.	138,329 604,155	326 320
*,1	SmileDirectClub Inc. Class A	1,523,499	537	*	Acutus Medical Inc.	278,220	320
*	enVVeno Medical Corp.	104,365	532	*	BioVie Inc. Class A	41,228	320
*,1	Pulse Biosciences Inc.	191,051	529	*	Solid Biosciences Inc.	58,895	317
*,1	Owlet Inc.	923,752	516	*,1	Atreca Inc. Class A	393,228	315
*,1	PAVmed Inc.	1,071,449	514	*	Milestone Scientific Inc.	644,153	309
*	X4 Pharmaceuticals Inc.	516,003	512	*	Cyclerion Therapeutics Inc.	469,816	308
*,1	Jounce Therapeutics Inc.	454,255	504	*,1 *	Novan Inc.	210,175	307
*,1	Syros Pharmaceuticals Inc.	140,119	503	*	Corvus Pharmaceuticals Inc.	356,806	303
*	Akumin Inc. Lipocine Inc.	695,610 1,262,810	500 485	*,1	Satsuma Pharmaceuticals Inc. Aspira Women's Health Inc.	337,139 903,574	303 301
*	Verrica Pharmaceuticals Inc.	176,422	485	*	Champions Oncology Inc.	65,914	297
*,1	Moleculin Biotech Inc.	454,705	482	*	Palatin Technologies Inc.	115,668	296
*,1	Hyperfine Inc. Class A	566,997	476	*,1	Science 37 Holdings Inc.	710,569	295
*	Synlogic Inc.	624,203	474	*	Eliem Therapeutics Inc.	80,918	290
*	Inozyme Pharma Inc.	451,660	474	*,1	Clene Inc.	288,568	289
*,1	Disc Medicine Inc. Class A	23,840	474	*	NextCure Inc.	201,781	285
*	MyMD Pharmaceuticals Inc.	410,666	472	*,1	Aeglea BioTherapeutics Inc.	632,341	284
*,1	Eledon Pharmaceuticals Inc. SCYNEXIS Inc.	201,259 298,545	467 466	*	NightHawk Biosciences Inc. TFF Pharmaceuticals Inc.	352,600 268,770	284 282
*,1	NRX Pharmaceuticals Inc.	413,681	459	*,1	Immunome Inc.	125,570	276
*,1	Immunic Inc.	327,341	458	*	Achieve Life Sciences Inc.	109,676	270
*,1	Black Diamond Therapeutics Inc.	252,352	454	*	Equillium Inc.	242,412	267
*	Eyenovia Inc.	277,888	453	*	CASI Pharmaceuticals Inc.	150,870	264
*	AquaBounty Technologies Inc.	580,668	444	*,1	Applied DNA Sciences Inc.	156,293	259
*,1	Checkpoint Therapeutics Inc.	86,229	441	*	Sio Gene Therapies Inc.	594,154	258
*	Surface Oncology Inc.	536,790	440	*,1	Lannett Co. Inc.	492,690	257
-	TCR2 Therapeutics Inc.	439,478	439	*	Hookipa Pharma Inc.	315,524	256
*	AirSculpt Technologies Inc.	115,114	426	*,1	Werewolf Therapeutics Inc.	123,549	253
*	Mustang Bio Inc. Bright Green Corp.	1,071,517	423 422	*	RVL Pharmaceuticals plc	224,896 77,687	252
*	Aveanna Healthcare Holdings Inc.	899,476 538,008	422 420		Dominari Holdings Inc. Catalyst Biosciences Inc.	77,687 475,977	252 251
*	Cidara Therapeutics Inc.	553,136	418	*,1	VistaGen Therapeutics Inc.	2,422,862	250
*	Alpha Teknova Inc.	73,641	415	*	Biotricity Inc.	551,341	248
*	Retractable Technologies Inc.	246,784	405	*	GT Biopharma Inc.	276,175	247

		Shares	Market Value* (\$000)			Shares	Market Value* (\$000)
*	Pro-Dex Inc.	15,739	246	*	Alimera Sciences Inc.	53,735	146
*,1	Biora Therapeutics Inc.	1,858,081	245	*	Sensei Biotherapeutics Inc.	97,704	146
*,1	Neoleukin Therapeutics Inc.	478,838	244	* 1	Aptinyx Inc. Class A	491,707	144
*	Candel Therapeutics Inc.	134,169	240	*,1 *	Quince Therapeutics Inc.	225,638	144 144
*	ATI Physical Therapy Inc. Aligos Therapeutics Inc.	783,081 247,246	239 236	*,1	Bio-Path Holdings Inc. Oragenics Inc.	95,129 1,366,133	144
*	Decibel Therapeutics Inc.	114,519	235	*	AgeXTherapeutics Inc.	259,263	143
*,1	AcelRx Pharmaceuticals Inc.	103,830	235	*,1	Lisata Therapeutics Inc.	56,770	141
*	Reneo Pharmaceuticals Inc.	99,626	232	*	NeuroMetrix Inc.	95,051	140
*	Marker Therapeutics Inc.	871,377	230	*,1 *	Clever Leaves Holdings Inc.	441,494	136
*,1 *,1	Edesa Biotech Inc.	106,260	230	*	Cocrystal Pharma Inc.	70,301	136
	Enochian Biosciences Inc. Palisade Bio Inc. CVR	222,701 238,902	229 229	*	Dyadic International Inc. Cyteir Therapeutics Inc.	109,245 81,271	134 134
*	Idera Pharmaceuticals Inc.	645,880	229	*	Trevena Inc.	92,520	134
*	Harpoon Therapeutics Inc.	308,935	224	*,1	IsoPlexis Corp.	84,250	131
*	Aravive Inc.	167,133	221	*	Aileron Therapeutics Inc.	55,413	131
*	Predictive Oncology Inc.	713,603	219	*	Rapid Micro Biosystems Inc. Class A	113,865	129
* * 1	Nemaura Medical Inc.	126,682	215	*	Bellerophon Therapeutics Inc.	142,168	128
*,1 *,1	Ekso Bionics Holdings Inc.	179,455	214	*	Nutriband Inc.	35,226	128
*	Longeveron Inc. UNITY Biotechnology Inc.	65,090 75,651	210 207	*	NeuroPace Inc. Cognition Therapeutics Inc.	85,532 59,706	127 125
*,1	Invacare Corp.	491,296	207	*,2	Strongbridge Biopharma plc CVR	687,671	125
*	Bolt Biotherapeutics Inc.	157,452	205	*	Vaccinex Inc.	188,819	124
*,1	Pyxis Oncology Inc.	151,557	203	*	Surgalign Holdings Inc.	63,170	124
*	9 Meters Biopharma Inc.	161,178	203	*	Better Therapeutics Inc.	108,736	122
	Galera Therapeutics Inc.	135,764	202	*,1 *,1	Rockwell Medical Inc.	120,130	122
*	SAB Biotherapeutics Inc. American Shared Hospital Services	340,547 68,206	201 200	*	Acorda Therapeutics Inc. cbdMD Inc.	158,319 530,063	121 120
*,1	HeartBeam Inc.	40,926	200	*,1	Immix Biopharma Inc.	52,378	120
*	vTv Therapeutics Inc. Class A	305,107	199	*,1	Codex DNA Inc.	93,832	117
*	Precipio Inc.	352,910	196	*	Biocept Inc.	218,129	116
*	Applied Therapeutics Inc.	253,865	193	*,1	Spruce Biosciences Inc.	104,176	115
*,1	AIM ImmunoTech Inc.	620,229	193	*	Gelesis Holdings Inc.	394,032	114
*,1 *	Corbus Pharmaceuticals Holdings Inc.	1,699,791	188	*,1	Cellectar Biosciences Inc.	65,482	112
*	Cumberland Pharmaceuticals Inc. Molecular Templates Inc.	83,119 566,562	187 186	*,1	VYNE Therapeutics Inc. Biofrontera Inc.	739,347 120,938	111 111
*	Strata Skin Sciences Inc.	235,454	186	*	Vivos Therapeutics Inc.	274,607	110
*	ElectroCore Inc.	720,128	185	*	Imunon Inc.	79,721	108
*,1	Eargo Inc.	321,997	185	*	MonoparTherapeutics Inc.	45,167	107
*,1	Aptevo Therapeutics Inc.	78,792	183	*	PetVivo Holdings Inc.	53,055	106
*,1	Magenta Therapeutics Inc.	460,025	182	*	Pulmatrix Inc.	26,977	105
*,1	GeoVax Labs Inc. Soligenix Inc.	288,573 401,456	182 181	*	ENDRA Life Sciences Inc. Vivani Medical Inc.	25,738 122,616	105 104
*	SQZ Biotechnologies Co.	241,040	178	*,1	Cyclo Therapeutics Inc.	71,160	101
*	Vincerx Pharma Inc.	173,353	177	*,1	Chembio Diagnostics Inc.	457,104	100
*,1	Apexigen Inc.	253,880	175	*,1	Minerva Neurosciences Inc.	63,041	100
*,1	Sientra Inc.	850,986	173	*,1	Athersys Inc.	118,213	99
*,1	Five Star Senior Living Inc.	313,246	172	*,1 *	Soleno Therapeutics Inc.	49,939	99
*,1	NanoViricides Inc. Abeona Therapeutics Inc.	154,515 55,430	172 171	*,1	Tempest Therapeutics Inc. Nuvectis Pharma Inc.	84,814 12,933	98 97
*,1	BioSig Technologies Inc.	404,305	170	*,1	Jasper Therapeutics Inc.	201,831	96
*,1	Regulus Therapeutics Inc.	120,151	165	*	Rubius Therapeutics Inc.	554,320	95
*,1	UpHealth Inc.	98,562	161	*	Applied Molecular Transport Inc.	222,651	94
*,1	Biodesix Inc.	69,381	160	*	Codiak Biosciences Inc.	236,847	94
*,1	Surrozen Inc.	271,911	158	*,1	Jaguar Health Inc.	1,078,648	94
*	Athenex Inc. Talaris Therapeutics Inc.	1,065,158	157	*,1 *,1	Talis Biomedical Corp.	209,508	93 92
*	Aridis Pharmaceuticals Inc.	150,349 129,177	153 152	*	Tenon Medical Inc. Longboard Pharmaceuticals Inc.	58,003 28,242	92 89
*,1	Lumos Pharma Inc.	42,183	152	*	Theriva Biologics Inc.	194,494	88
*	Onconova Therapeutics Inc.	236,656	152	*	Axcella Health Inc.	261,417	86
*	PharmaCyte Biotech Inc.	52,078	152	*,1	IN8bio Inc.	36,579	84
*,1 * 1	Tonix Pharmaceuticals Holding Corp.	390,650	152	*,1 *,1	Humanigen Inc.	683,489	82
*,1 *,1	Acer Therapeutics Inc. Calithera Biosciences Inc.	59,740	150 150	*	Lexaria Bioscience Corp.	33,329	82 70
*,1	Forte Biosciences Inc.	46,118 149,084	150 149	*	Pasithea Therapeutics Corp. MiNK Therapeutics Inc.	121,007 30,617	79 79
*,1	Organovo Holdings Inc.	104,510	148	*	Evoke Pharma Inc.	29,851	79 79
*	Diffusion Pharmaceuticals Inc.	28,978	148	*	MSP Recovery Inc.	49,098	79

		Shares	Market Value* (\$000)			Shares	Market Value* (\$000)
*,1	Avinger Inc.	70,689	76	*	Indaptus Therapeutics Inc.	21,151	30
*	NanoVibronix Inc.	290,282	73	*	Enveric Biosciences Inc.	14,425	30
*	TScan Therapeutics Inc.	44,185	72	*,1	Vyant Bio Inc.	42,140	30
*	NeuBase Therapeutics Inc. Angion Biomedica Corp.	362,828 85,551	69 69	*,1	villation increpeation inc.	168,233 192,274	29 28
*,1	Venus Concept Inc.	211,571	68	*	Xenetic Biosciences Inc.	96,982	28 28
*,1	Bellicum Pharmaceuticals Inc.	92,861	67	*,2		150,581	28
*,1	Titan Pharmaceuticals Inc.	82,051	64	*	Allied Healthcare Products Inc.	28,946	27
*	Processa Pharmaceuticals Inc.	58,161	64	1	Kineta Inc.	4,184	27
*,1	Aytu BioPharma Inc.	338,897	64	*,1	morad mo.	170,677	26
*,1	Artelo Biosciences Inc.	22,022	64	*,1	Til Cividalda Gyatarria irio.	4,346	26
*,2 *,1	Adamas Pharmaceuticals Inc. CVR	1,055,708	64	*,1 *	vivovo ividaldai irio.	60,344	25
*	OpGen Inc.	444,949 195,469	63 62	*	Lixte Biotechnology Holdings Inc. NexImmune Inc.	48,388 97,320	25 24
*,1	Plus Therapeutics Inc. Yield10 Bioscience Inc.	37,036	61	*,1		5,909	24 24
*,1	T2 Biosystems Inc.	43,087	61	*	Salarius Pharmaceuticals Inc.	15,113	23
*	Aprea Therapeutics Inc.	187,502	60	*	Creative Medical Technology Holdings Inc.	61,050	22
*,1	Biolase Inc.	92,558	60	*,2		631,947	21
*,1	Eterna Therapeutics Inc.	18,551	60	*,1	1 Glarity 12 mo.	31,876	21
*	Navidea Biopharmaceuticals Inc.	276,491	58	*,1	Commot Bio morapoundo moramigo mo.	18,057	21
*,1 *,1	Cyclacel Pharmaceuticals Inc.	86,949	58	*,1		10,673	21
*	Finch Therapeutics Group Inc.	120,966	58	*	Oncternal Therapeutics Inc. CVR	19,268	20
*,1	Phio Pharmaceuticals Corp. Oncorus Inc.	154,536 225,260	57 57	*	Tenax Therapeutics Inc. Imac Holdings Inc.	173,801 86,602	19 17
*,1	Synaptogenix Inc.	49,295	57	*	Inhibikase Therapeutics Inc.	34,539	17
*	HCW Biologics Inc.	28,400	55	*,1		76,860	17
*,1	PLx Pharma Inc.	329,924	54	*,1		9,376	16
*,1	iBio Inc.	122,069	54	*	Lucira Health Inc.	130,090	14
*,1	Comera Life Sciences Holdings Inc.	43,998	54	*,2	Ocora morapodatos mo. ovit	48,417	13
*	Protagenic Therapeutics Inc.	127,121	53	*	Benitec Biopharma Inc.	74,773	13
*	Aethlon Medical Inc.	190,657	52	*,1	Histogen Inc.	13,638	12
*	Landos Biopharma Inc. LogicMark Inc.	103,089 114,340	52 52	*,1	noonapo Enocolonoco mo.	1,768 8,689	12 10
*,1	Kintara Therapeutics Inc.	7,563	52	*,1	reare one medical recimologics corp.	11,481	10
*,1	180 Life Sciences Corp.	15,378	52	*	Avenue Therapeutics Inc.	8,335	10
*	SunLink Health Systems Inc.	83,942	51	*	ThermoGenesis Holdings Inc.	2,709	9
*	iSpecimen Inc.	36,786	51	*	Femasys Inc.	8,823	8
*	eFFECTOR Therapeutics Inc.	117,573	50	*,1	i diloddo Dio Irio.	1,551	8
*,1	Blue Water Vaccines Inc.	45,090	50	*,1	<sup>,2</sup> Miragen Therapeutics Inc. CVR	330,960	7
*,1	Armata Pharmaceuticals Inc.	39,831	49	*,2	Assure Holdings Corp.	28,036	7
*	Qualigen Therapeutics Inc.	37,070	49	*	addingen merapeaties me. evit	91,096	6
*	Graybug Vision Inc. Aziyo Biologics Inc. Class A	96,878 11,215	48 48	*,1	First Wave BioPharma Inc. Ensysce Biosciences Inc.	6,847 7,520	6 6
*	INVO BioScience Inc.	105,539	46	*	Bluejay Diagnostics Inc.	15,899	5
*	Virpax Pharmaceuticals Inc.	74,559	46	*,1		1,499	5
*,1	Petros Pharmaceuticals Inc.	19,791	46	*	Gain Therapeutics Inc.	1,694	5
*,1	Ontrak Inc.	121,862	45	*,1	Baddax Bio iiio.	1,458	5
*	Lucid Diagnostics Inc.	33,167	45	*,2	Alexa i Harridocationio IIIo. O VII	128,704	4
*	Context Therapeutics Inc.	67,463	45	* 1	Virios Therapeutics Inc.	18,685	4
*	Adial Pharmaceuticals Inc.	203,358	43	*,1 *	Time to cargical me.	19,180	4
*	Dynatronics Corp. ContraFect Corp.	106,438 423,968	42 41	*,1	Aditxt Inc. <sup>2</sup> Seelos Therapeutics Inc. CVR	3,385 5,736	4 3
*	SCWorx Corp.	103,826	41	*,2	occide interapolation into ovii	40,838	3
*,1	Fresh Tracks Therapeutics Inc.	27,779	41	*	Star Equity Holdings Inc.	3,908	3
*,1	InVivo Therapeutics Holdings Corp.	16,946	40	*	Ligand Pharmaceuticals Inc. Glucagon CVR Rights	395,811	2
*,1	Exicure Inc.	34,822	40	*,2	Ligand Pharmaceuticals Inc. General CVR Rights	395,811	2
*	Elevation Oncology Inc.	41,265	39	*,2	Eigene i narmacoutiono mo. nocino o virinignio	395,811	2
*,1	Biorestorative Therapies Inc.	14,000	38	*,2	Coaprillo i Harria IIIc. CVII	13,673	2
*	Eloxx Pharmaceuticals Inc.	20,636	37	*	Intelligent Bio Solutions Inc.	11,850	2
*	Galecto Inc.	31,064	36	*,1	Journey Medical Corp.	1,226	2
*	Regional Health Properties Inc.	10,499	35	*	Acurx Pharmaceuticals Inc.	412	2
*,1	Sera Prognostics Inc. Class A SiNtx Technologies Inc.	28,789 3,626	35 35	*,1	Allarity Therapeutics Inc. Panbela Therapeutics Inc.	6,925 20,608	2 1
*	Metacrine Inc.	74,962	34	*	Healthcare Triangle Inc.	4,362	1
*	Cohbar Inc.	20,231	34	*,1		1,984	1
*	Sigilon Therapeutics Inc.	95,157	33	*,1		5,940	1
*,1	Statera Biopharma Inc.		31	*,2	Ambit Biosciences Corp. CVR	22,388	

		Shares	Market Value* (\$000)			Shares	Market Value* (\$000)
*,2	Biosante Pharmaceuticals Inc. CVR	44,795		*	GXO Logistics Inc.	1,598,106	68,223
*,2	NeuroBo Pharmaceuticals Inc. CVR	5,194	_	*	MasTec Inc.	795,254	67,859
*	Advaxis Inc. Warrants Exp. 9/11/24	47,130	_		Exponent Inc.	681,644	67,544
*,2	Lantheus Holdings Inc. CVR	1,316,898	_	*	Fluor Corp.	1,926,614	66,776
*,2	Achillion Pharmaceuticals Inc. CVR	374	_		UFP Industries Inc.	840,466	66,607
*,2	Salarius Pharmaceuticals Inc. Warrants Exp. 1/20/25	119,407	_		Applied Industrial Technologies Inc.	523,519	65,979
	ABVC BioPharma Inc.	371 77	_		Hexcel Corp. U-Haul Holding Co.	1,120,126	65,919 65,664
*	Cryo-Cell International Inc. RenovoRx Inc.	126	_	*	U-паш поідіпу Со. Evoqua Water Technologies Corp.	1,194,322 1,657,044	65,619
*,2	OmniAb Inc. (Earnout Shares)	166,008	_	*	Chart Industries Inc.	564,566	65,055
*,1	NantHealth Inc.	64	_		Crane Holdings Co.	637,588	64,046
*,1	Nuwellis Inc.	29	_	*	Atkore Inc.	555,676	63,025
*	Disc Medicine Inc. CVR	238,398	_	*	Trex Co. Inc.	1,474,870	62,431
			10,861,716	*	Timken Co.	881,687	62,309
Ind	ustrials (15.7%)				Stericycle Inc.	1,240,783	61,903
*	Uber Technologies Inc.	27,213,675	672,994		ManpowerGroup Inc. Ryder System Inc.	689,327 684,747	57,359 57,224
	Ferguson plc	2,827,962	359,066	*	Aerojet Rocketdyne Holdings Inc.	1,019,189	57,003
	Booz Allen Hamilton Holding Corp. Class A Hubbell Inc. Class B	1,795,607	187,677		Comfort Systems USA Inc.	487,753	56,131
	Carlisle Cos. Inc.	727,638 701,614	170,762 165,335	*	ASGN Inc.	682,473	55,608
	AECOM	1,892,585	160,737		Vertiv Holdings Co. Class A	4,059,981	55,459
	Toro Co.	1,409,985	159,610	*	Avis Budget Group Inc.	337,378	55,306
	Graco Inc.	2,274,805	153,003	*	Flowserve Corp.	1,792,363	54,990
*	Axon Enterprise Inc.	913,812	151,629		Casella Waste Systems Inc. Class A	692,528	54,924
	TransUnion	2,606,039	147,893		Insperity Inc. Watts Water Technologies Inc. Class A	482,276 373,097	54,787 54,558
*	Builders FirstSource Inc.	1,986,647	128,894		Air Lease Corp. Class A	1,416,106	54,556
	WillScot Mobile Mini Holdings Corp.	2,824,034	127,562		Triton International Ltd.	790,594	54,377
	AGCO Corp. Knight-Swift Transportation Holdings Inc. Class A	835,040 2,181,597	115,812 114,337		MSC Industrial Direct Co. Inc. Class A	645,076	52,703
	Lincoln Electric Holdings Inc.	779,340	112,607		Altra Industrial Motion Corp.	875,388	52,304
	Watsco Inc.	448,552	111,869		Maxar Technologies Inc.	1,010,653	52,291
	HEICO Corp. Class A	919,932	110,254	*	Allison Transmission Holdings Inc.	1,255,993	52,249
	Owens Corning	1,260,223	107,497	*	API Group Corp.	2,754,781	51,817
	Regal Rexnord Corp.	892,873	107,127	*	Kirby Corp. XPO Inc.	801,563 1,543,188	51,581 51,373
	Tetra Tech Inc.	723,033	104,977		GATX Corp.	478,597	50,894
	Lennox International Inc. Fortune Brands Innovations Inc.	435,652 1,739,558	104,221 99,346		Simpson Manufacturing Co. Inc.	559,768	49,629
	KBR Inc.	1,739,336	97,489	*	Clarivate plc	5,817,594	48,519
*	Middleby Corp.	724,704	97,038	*	Lyft Inc. Class A	4,242,863	46,756
	Donaldson Co. Inc.	1,646,793	96,947		Bloom Energy Corp. Class A	2,402,642	45,938
*	CACI International Inc. Class A	318,184	95,643		Shoals Technologies Group Inc. Class A Mueller Industries Inc.	1,834,609	45,260 44,907
	EMCOR Group Inc.	641,949	95,079		Herc Holdings Inc.	761,140 338,085	44,482
	Valmont Industries Inc.	287,374	95,026		AAON Inc.	570,290	42,954
	ITT Inc. HEICO Corp.	1,100,997 572,231	89,291 87,918		Spirit AeroSystems Holdings Inc. Class A	1,447,656	42,851
	nVent Electric plc	2,272,203	87,412		Franklin Electric Co. Inc.	529,706	42,244
*,1	Plug Power Inc.	7,065,876	87,405		Zurn Elkay Water Solutions Corp.	1,995,111	42,197
	Curtiss-Wright Corp.	513,953	85,825		Albany International Corp. Class A	422,026	41,608
	Science Applications International Corp.	750,739	83,279		Armstrong World Industries Inc.	603,875	41,420
	Sensata Technologies Holding plc	2,060,248	83,193	*	EnerSys SPX Technologies Inc.	555,370 615,455	41,008 40,405
*	MDU Resources Group Inc.	2,734,306	82,959		Hillenbrand Inc.	942,790	40,403
	RBC Bearings Inc.	393,830	82,448		ABM Industries Inc.	899,743	39,967
	Landstar System Inc. Woodward Inc.	491,066 804,589	79,995 77,731		UniFirst Corp.	205,255	39,612
*	Clean Harbors Inc.	678,568	77,438		John Bean Technologies Corp.	431,988	39,453
	Oshkosh Corp.	871,027	76,816		Terex Corp.	911,838	38,954
*	Saia Inc.	358,731	75,219		Federal Signal Corp.	821,721	38,185
*	WESCO International Inc.	597,882	74,855	*	Forward Air Corp.  Dycom Industries Inc.	361,222	37,889
*	FTI Consulting Inc.	468,123	74,338		Dycom Industries Inc.  Dun & Bradstreet Holdings Inc.	397,179 2,996,101	37,176 36,732
*	BWX Technologies Inc.	1,243,834	72,242	*	Array Technologies Inc.	1,889,776	36,732
	IAA Inc.	1,804,090	72,164		Boise Cascade Co.	529,256	36,344
	Acuity Brands Inc. MSA Safety Inc.	433,361 494,755	71,769 71,339	*	Beacon Roofing Supply Inc.	687,937	36,316
*	Univar Solutions Inc.	2,226,852	71,339		Korn Ferry	704,404	35,657
*	SiteOne Landscape Supply Inc.	602,586	70,695	*	Hub Group Inc. Class A	448,164	35,625
	Advanced Drainage Systems Inc.	860,693	70,551	*	Arcosa Inc.	653,752	35,525
*	Sunrun Inc.	2,875,338	69,066		Mercury Systems Inc.	792,892	35,474

		Shares	Market Value* (\$000)			Shares	Market Value* (\$000)
*	Atlas Air Worldwide Holdings Inc.	345,983	34,875	*	Gates Industrial Corp. plc	1,371,144	15,645
*	Hertz Global Holdings Inc.	2,247,356	34,587	*	Energy Recovery Inc.	759,317	15,558
*,1	ChargePoint Holdings Inc.	3,590,393	34,216		Marten Transport Ltd.	776,645	15,362
	Brink's Co.	633,794	34,041		Primoris Services Corp.	697,823	15,310
	Moog Inc. Class A Encore Wire Corp.	386,089 245,995	33,883 33,839		Greenbrier Cos. Inc. Tennant Co.	455,358 245,690	15,268 15,127
	Esab Corp.	710,008	33,314	*	Construction Partners Inc. Class A	566,326	15,127
	Trinity Industries Inc.	1,117,609	33,048		Wabash National Corp.	668,519	15,108
*,1	TriNet Group Inc.	484,991	32,882	*	PGT Innovations Inc.	838,059	15,051
*	Resideo Technologies Inc.	1,983,020	32,621	*	Kforce Inc.	269,555	14,780
	CBIZ Inc. McGrath RentCorp	690,605 326,596	32,355 32,248		Allegiant Travel Co. AZZ Inc.	213,529 351,990	14,518 14,150
	Werner Enterprises Inc.	793,424	31,943	*	Sterling Infrastructure Inc.	423,384	13,887
	Matson Inc.	503,769	31,491		Apogee Enterprises Inc.	305,319	13,574
*	AZEK Co. Inc. Class A	1,506,042	30,603	*	3D Systems Corp.	1,808,631	13,384
*	ESCO Technologies Inc.	347,598	30,429	*	MRC Global Inc.	1,146,614	13,278
	Alight Inc. Class A EnPro Industries Inc.	3,620,209	30,265	*	Masterbrand Inc.	1,746,995	13,190
	Brady Corp. Class A	277,797 632,025	30,194 29,768		Hayward Holdings Inc. Columbus McKinnon Corp.	1,402,460 404,840	13,183 13,145
*	JetBlue Airways Corp.	4,587,218	29,725		Astec Industries Inc.	321,139	13,057
*	AeroVironment Inc.	341,038	29,213	*	ACV Auctions Inc. Class A	1,588,328	13,040
	Spirit Airlines Inc.	1,468,305	28,603	*,1	Joby Aviation Inc.	3,856,481	12,919
*	Rush Enterprises Inc. Class A	546,285	28,560		Healthcare Services Group Inc.	1,035,064	12,421
	GMS Inc.	573,460	28,558		GrafTech International Ltd.	2,577,673	12,270
	Kadant Inc. Barnes Group Inc.	160,569 698,136	28,522 28,519	*	Matthews International Corp. Class A Hillman Solutions Corp.	402,266 1,680,528	12,245 12,117
*	RXO Inc.	1,585,848	27,277		Schneider National Inc. Class B	500,942	11,722
*	Ameresco Inc. Class A	461,943	26,395		Douglas Dynamics Inc.	324,028	11,717
	Kennametal Inc.	1,094,288	26,329	*	SkyWest Inc.	703,185	11,610
	CSW Industrials Inc.	211,884	24,564	*	American Woodmark Corp.	233,563	11,412
*	Helios Technologies Inc.	447,693	24,372		Planet Labs PBC	2,617,728	11,387
	Masonite International Corp. Lindsay Corp.	300,647 146,720	24,235 23,893		CRA International Inc. Shyft Group Inc.	92,419 453,230	11,315 11,267
	ArcBest Corp.	330,090	23,119	*	Rocket Lab USA Inc.	2,981,176	11,239
	ICF International Inc.	231,651	22,945	*	Titan Machinery Inc.	275,836	10,959
	Griffon Corp.	639,452	22,886	*,1	Virgin Galactic Holdings Inc.	3,144,158	10,942
	FTAI Aviation Ltd.	1,306,374	22,365	*	JELD-WEN Holding Inc.	1,125,306	10,859
*	Mueller Water Products Inc. Class A NV5 Global Inc.	2,071,343	22,288 22,223		Titan International Inc. Deluxe Corp.	693,434 610,768	10,623 10,371
	Veritiv Corp.	167,946 182,235	22,223	*	Janus International Group Inc.	1,088,650	10,371
	MillerKnoll Inc.	1,021,725	21,466		Quanex Building Products Corp.	435,749	10,318
*	SunPower Corp.	1,162,065	20,952	*	First Advantage Corp.	792,058	10,297
	Granite Construction Inc.	597,031	20,938	*	Legalzoom.com Inc.	1,329,443	10,290
*	Driven Brands Holdings Inc.	763,267	20,845	*,1	Proterra Inc.	2,658,667	10,023
*	Parsons Corp. MYR Group Inc.	449,700 223,796	20,799 20,605	*,1	Proto Labs Inc. Nikola Corp.	384,589 4,442,091	9,819 9,595
	H&E Equipment Services Inc.	452,859	20,560	*	SP Plus Corp.	275,762	9,533
*	Huron Consulting Group Inc.	272,864	19,810	*	Triumph Group Inc.	897,729	9,444
	Enerpac Tool Group Corp. Class A	778,018	19,801	*	TrueBlue Inc.	458,660	8,981
	Alamo Group Inc.	139,596	19,767		Heartland Express Inc.	583,757	8,955
*	Gibraltar Industries Inc.	428,602	19,664		Kaman Corp.	400,832	8,939
*	Core & Main Inc. Class A Air Transport Services Group Inc.	1,002,202 743,845	19,352 19,325	*	Steelcase Inc. Class A Thermon Group Holdings Inc.	1,254,315 440,072	8,868 8,837
*	NOW Inc.	1,510,881	19,188		Tecnoglass Inc.	281,681	8,667
*	Enovix Corp.	1,490,862	18,546		Pitney Bowes Inc.	2,275,753	8,648
*	GEO Group Inc.	1,689,900	18,504	*	BlueLinx Holdings Inc.	121,224	8,620
*	AAR Corp.	411,151	18,461		Gorman-Rupp Co.	333,168	8,536
*	Kratos Defense & Security Solutions Inc.	1,769,551	18,262	*,1	· ····································	492,403	8,445
*	KAR Auction Services Inc. CoreCivic Inc.	1,385,439 1,538,753	18,080 17,788		Barrett Business Services Inc. Interface Inc. Class A	90,508 835,858	8,443 8,250
*	Stem Inc.	1,975,375	17,788		Kelly Services Inc. Class A	486,874	8,250
*	Upwork Inc.	1,632,599	17,044		Ennis Inc.	369,785	8,194
*	Montrose Environmental Group Inc.	374,665	16,631		Resources Connection Inc.	442,287	8,129
*	Vicor Corp.	305,487	16,420	*	Franklin Covey Co.	168,656	7,888
	Standex International Corp.	158,888	16,272		Genco Shipping & Trading Ltd.	499,536	7,673
*	HNI Corp. FuelCell Energy Inc.	563,975 5,634,961	16,034 15,665		Heidrick & Struggles International Inc. ACCO Brands Corp.	273,974 1,367,181	7,663 7,643
	i dolooli Elielgy Ilio.	3,034,301	13,000		Acco bialius corp.	1,307,101	7,043

		Shares	Market Value* (\$000)			Shares	Market Value* (\$000)
*	Cimpress plc	276,401	7,631	*	Bowman Consulting Group Ltd. Class A	126,269	2,759
	U-Haul Holding Co.	124,993	7,523	*	Commercial Vehicle Group Inc.	403,524	2,748
	Insteel Industries Inc.	266,110	7,323	*	Distribution Solutions Group Inc.	71,008	2,617
*	Transcat Inc.	101,346	7,182	*	Wheels Up Experience Inc.	2,519,676	2,595
*	Sun Country Airlines Holdings Inc. Harsco Corp.	449,841 1,133,821	7,134 7,132	*	Performant Financial Corp. PAM Transportation Services Inc.	688,359 94,705	2,485 2,453
*	Heritage-Crystal Clean Inc.	219,358	7,132 7,125	*	Matrix Service Co.	391,306	2,433
*	Viad Corp.	290,954	7,096	*,1	NuScale Power Corp.	235,292	2,414
	Rush Enterprises Inc. Class B	124,329	6,996	*	Blade Air Mobility Inc.	639,832	2,291
*	Ducommun Inc.	139,329	6,961	*,1	Atlas Technical Consultants Inc. Class A	439,338	2,263
	CIRCOR International Inc. Eagle Bulk Shipping Inc.	288,341 138,199	6,909 6,902	*	Beam Global Radiant Logistics Inc.	123,456 422,386	2,157 2,150
	VSE Corp.	146,366	6,862		BGSF Inc.	136,724	2,130
	Allied Motion Technologies Inc.	184,319	6,416	*	Innovative Solutions & Support Inc.	248,896	2,046
*,1	Blink Charging Co.	577,497	6,335		Hurco Cos. Inc.	73,808	1,929
*,1	SES Al Corp.	1,987,168	6,260	*	Quad/Graphics Inc.	469,442	1,915
*,1	Aurora Innovation Inc. FiscalNote Holdings Inc.	5,064,397 945,896	6,128 5,987	*,1	Pangaea Logistics Solutions Ltd. Hyzon Motors Inc.	368,856 1,217,719	1,900 1,887
*	Forrester Research Inc.	166,452	5,952	*,1	ESS Tech Inc.	776,012	1,886
*	V2X Inc.	142,084	5,867	*	EVI Industries Inc.	74,850	1,787
*	Babcock & Wilcox Enterprises Inc.	1,014,141	5,852	*	Byrna Technologies Inc.	227,449	1,783
*	Hawaiian Holdings Inc.	566,917	5,817	*	Willis Lease Finance Corp.	29,287	1,728
	REV Group Inc.	459,403 157,164	5,798	*	Eastern Co.	88,913	1,714
*	Argan Inc. Great Lakes Dredge & Dock Corp.	973,326	5,796 5,791	*	Concrete Pumping Holdings Inc. Mayville Engineering Co. Inc.	282,397 125,197	1,652 1,585
*	Custom Truck One Source Inc.	901,235	5,696	*,1	Symbotic Inc. Class A	132,599	1,583
	Global Industrial Co.	241,025	5,671	*,1	Amprius Technologies Inc.	197,432	1,566
*	DXP Enterprises Inc.	197,662	5,446		ARC Document Solutions Inc.	534,145	1,565
*	Frontier Group Holdings Inc.	525,742	5,399	*	Park-Ohio Holdings Corp.	125,237	1,532
	TPI Composites Inc. Aris Water Solution Inc. Class A	531,414 361,061	5,388 5,203	*	Skillsoft Corp. DLH Holdings Corp.	1,166,079 125,845	1,516 1,493
	Luxfer Holdings plc	378,854	5,198	*,1	Velo3D Inc.	819,075	1,466
*	Sterling Check Corp.	322,666	4,992	*	Graham Corp.	147,279	1,417
*	Daseke Inc.	869,983	4,950	*	Gencor Industries Inc.	137,404	1,388
*	Hudson Technologies Inc.	480,200	4,860	*,1	L B Foster Co. Class A	142,436	1,379
	Manitowoc Co. Inc. LSI Industries Inc.	526,297 391,264	4,821 4,789	*	Spire Global Inc. American Superconductor Corp.	1,427,770 364,323	1,371 1,341
*	CECO Environmental Corp.	409,326	4,781	*	Mistras Group Inc.	261,075	1,287
	National Presto Industries Inc.	69,314	4,745	*	SKYX Platforms Corp.	509,538	1,284
	Alta Equipment Group Inc.	346,915	4,576	*	Twin Disc Inc.	129,648	1,260
*,1	Powell Industries Inc.	128,500	4,521	*,1	Quest Resource Holding Corp.	205,544	1,256
*	Desktop Metal Inc. Class A Tutor Perini Corp.	3,297,051 591,148	4,484 4,463	*,1	Aqua Metals Inc. Terran Orbital Corp.	991,526 780,931	1,239 1,234
*	IES Holdings Inc.	122,128	4,344	*,1	BlackSky Technology Inc. Class A	791,718	1,234
*	Northwest Pipe Co.	128,098	4,317	*,1	Eos Energy Enterprises Inc.	791,920	1,172
	Cadre Holdings Inc.	208,617	4,202	*,1	Dragonfly Energy Holdings Corp.	98,475	1,172
*	Miller Industries Inc.	156,999	4,186	* 1	Yellow Corp.	466,015	1,170
*	Microvast Holdings Inc. Hyliion Holdings Corp.	2,640,668 1,722,690	4,040 4,031	*,1 *	INNOVATE Corp. RCM Technologies Inc.	623,568 92,320	1,166
	FTAI Infrastructure Inc.	1,349,321	3,980	*	Limbach Holdings Inc.	109,382	1,139 1,139
	Omega Flex Inc.	40,791	3,807	*	Orion Group Holdings Inc.	457,108	1,088
	Covenant Logistics Group Inc. Class A	109,690	3,792	*,1	Markforged Holding Corp.	926,431	1,075
*	Astronics Corp.	347,756	3,582	*,1	NeoVolta Inc.	365,718	1,020
*	AerSale Corp.	214,874	3,485	*	Karat Packaging Inc.	70,799	1,017
*	Archer Aviation Inc. Class A BrightView Holdings Inc.	1,858,645 497,837	3,476 3,430	*	FTC Solar Inc. NN Inc.	357,470 613,095	958 920
	Preformed Line Products Co.	41,075	3,421	*,1	KULR Technology Group Inc.	766,021	919
	Kimball International Inc. Class B	520,826	3,385	*,1	Advent Technologies Holdings Inc.	506,225	916
	Hyster-Yale Materials Handling Inc.	133,337	3,375	* *	NL Industries Inc.	134,129	913
*,1	Universal Logistics Holdings Inc.	100,635	3,365	*,1 *	Knightscope Inc. Class A	479,866	907
*	Red Violet Inc. HireRight Holdings Corp.	141,227 267,013	3,251 3,167	*,1	Heliogen Inc. Ideal Power Inc.	1,269,609 78,007	886 828
*	TuSimple Holdings Inc. Class A	1,892,045	3,107	*	Orion Energy Systems Inc.	453,956	826
	Park Aerospace Corp.	223,846	3,002	*	Hydrofarm Holdings Group Inc.	519,717	806
*	Willdan Group Inc.	167,299	2,986	*	GEE Group Inc.	1,612,349	790
*,1	Blue Bird Corp.	265,665	2,845	*	Manitex International Inc.	195,901	784
, '	Energy Vault Holdings Inc.	884,755	2,760		Energous Corp.	928,548	776

		Shares	Market Value* (\$000)			Shares	Market Value* (\$000)
*,1	View Inc.	769,206	742	*	Sigma Additive Solutions Inc.	108,527	43
*,1	Astra Space Inc.	1,702,284	738	*	Staffing 360 Solutions Inc.	15,190	43
*,1	Sunworks Inc.	455,623	720	*	TOMI Environmental Solutions Inc.	65,117	32
*	Alpha Pro Tech Ltd.	176,764	711	*,1	Energy Focus Inc.	81,557	26
	Acme United Corp.	31,913	699	*	CEA Industries Inc.	24,147	20
	Mesa Air Group Inc.	447,703	685	*,1	Where Food Comes From Inc.	1,296	18
*	Perma-Pipe International Holdings Inc.	72,457	685	*,1 *	Helbiz Inc.	106,121	14
*	Virco Manufacturing Corp.	150,864	682	*,1	Gaucho Group Holdings Inc.	8,998	10
*	Sarcos Technology & Robotics Corp.	1,198,490	673	*,1	Agrify Corp.	27,782	9
	VirTra Inc. HireQuest Inc.	140,011 40,082	655 634	*	QualTek Services Inc.	15,120 752	7 5
*	US Xpress Enterprises Inc. Class A	348,062	630	*	Patriot Transportation Holding Inc. Greenwave Technology Solutions Inc.	4,824	4
*,1	BitNile Holdings Inc.	5,075,133	622		CompX International Inc.	4,824	1
*	FreightCar America Inc.	183,976	589	*	Art's-Way Manufacturing Co. Inc.	130	
*	Hudson Global Inc.	24,719	559	*	Avalon Holdings Corp. Class A	42	_
*,1	Momentus Inc. Class A	709,095	553	*	Fathom Digital Manufacturing C	48	_
*	Mastech Digital Inc.	46,224	509	*,2	Pineapple Energy Inc. CVR	30,377	_
*	Air T Inc.	19,387	486		37		10 205 001
*,1	Redwire Corp.	232,235	460	14	aumantian Tankanalanu (19.00/)		12,385,081
*	Fuel Tech Inc.	347,637	441	*	ormationTechnology (18.0%) Palo Alto Networks Inc.	4,098,526	571.908
*	Westwater Resources Inc.	555,995	439	*	Snowflake Inc. Class A	3,725,788	. ,
*	Broadwind Inc.	242,529	434	*	Block Inc. Class A	7,323,794	534,800 460,227
*,1	Flux Power Holdings Inc.	108,046	429	*	Workday Inc. Class A	2,732,971	457,308
*	Ultralife Corp.	109,982	424		Marvell Technology Inc.	11,527,362	426,974
*,1	AgEagle Aerial Systems Inc.	1,081,707	379	*	VMware Inc. Class A	2,818,625	346,014
*,1	Odyssey Marine Exploration Inc. Class B	95,139	369	*	Crowdstrike Holdings Inc. Class A	2,922,334	307,693
*	Perma-Fix Environmental Services Inc.	100,082	353	*	Atlassian Corp. Class A	2,019,828	259,911
*,1	Bird Global Inc. Class A	1,957,362	353	*	Datadog Inc. Class A	3,246,447	238,614
*	Ocean Power Technologies Inc.	753,871	339	*	Fair Isaac Corp.	340,184	203,627
*	LS Starrett Co. Class A	45,916	338	*	Zoom Video Communications Inc. Class A	2,990,524	202,578
*,1	Xos Inc.	745,878	330	*	HubSpot Inc.	661,153	191,159
*,1	Berkshire Grey Inc.	544,182	329	*	MongoDB Inc. Class A	937,406	184,519
*,1	Urban-Gro Inc.	111,102	302	*	Cloudflare Inc. Class A	3,886,169	175,694
*	Aeroclean Technologies Inc.	94,796	297	*	Splunk Inc.	2,038,071	175,458
*	Capstone Green Energy Corp.	193,080	280	*	GoDaddy Inc. Class A	2,106,419	157,602
*	Jewett-Cameron Trading Co. Ltd.	44,541	257		SS&C Technologies Holdings Inc.	2,980,211	155,150
*	Williams Industrial Services Group Inc. Team Inc.	251,338	256	*	Palantir Technologies Inc. Class A	23,961,865	153,835
*,1	Safe & Green Holdings Corp.	48,157 183,382	253 251	*	DocuSign Inc. Class A	2,565,239	142,166
*,1	Orbital Infrastructure Group Inc.	1,149,227	226		Dell Technologies Inc. Class C	3,507,711	141,080
*	Servotronics Inc.	19,002	201	*	Okta Inc. Class A	2,064,506	141,068
*	India Globalization Capital Inc.	630,222	200		Bill.com Holdings Inc.	1,215,762	132,469
*	Mega Matrix Corp.	106,742	188	*	Entegris Inc.	2,013,993	132,098
*	Air Industries Group	41,109	175	*	Black Knight Inc.	2,126,149	131,290
*	Pioneer Power Solutions Inc.	58,233	156		Zscaler Inc.	1,145,273	128,156
*,1	ShiftPixy Inc.	6,699	140	*	Jabil Inc.	1,833,795	125,065
*,1	Lightning eMotors Inc.	371,854	136	*	Lattice Semiconductor Corp. Wolfspeed Inc.	1,848,580	119,936
*	Taylor Devices Inc.	9,162	130	*	Twilio Inc. Class A	1,681,212 2,363,868	116,071 115,735
*	iSun Inc.	97,573	130		Cognex Corp.	2,336,560	110,075
*	SIFCO Industries Inc.	59,634	129	*	Paylocity Holding Corp.	555,754	107,961
*,1,2	FTE Networks Inc.	82,837	124		Genpact Ltd.	2,289,651	106,057
*,1	Nuvve Holding Corp.	177,956	119	*	Dynatrace Inc.	2,725,310	104,379
*	Astrotech Corp.	11,725	117	*	Manhattan Associates Inc.	845,676	102,665
*,1	HyreCar Inc.	251,749	107	*	Ciena Corp.	1,990,704	101,486
*	Pineapple Energy Inc.	44,970	105	*	Pure Storage Inc. Class A	3,786,956	101,339
*,1	Polar Power Inc.	80,105	103		Bentley Systems Inc. Class B	2,663,501	98,443
*	LiqTech International Inc.	246,699	94	*	WEX Inc.	591,532	96,804
*	Charah Solutions Inc.	15,623	84	*,1	Unity Software Inc.	3,344,523	95,620
*	Wilhelmina International Inc.	22,891	79	*	Arrow Electronics Inc.	830,558	86,851
	DSS Inc.	434,597	71	*	Coupa Software Inc.	1,036,378	82,050
* *	Espey Manufacturing & Electronics Corp.	4,448	63	*	Dropbox Inc. Class A	3,659,924	81,909
*,1	Applied UV Inc.	68,188	62	*	Nutanix Inc. Class A	3,114,002	81,120
* 1	FGI Industries Ltd.	26,156	59	*	Aspen Technology Inc.	391,489	80,412
*,1	Sidus Space Inc. Class A	51,039	56		Concentrix Corp.	574,417	76,489
*,1	JanOne Inc.	39,454	54	*	Toast Inc. Class A	4,226,960	76,212
, 1	Shapeways Holdings Inc.	95,850	52	*	ExlService Holdings Inc.	447,757	75,863
	P&F Industries Inc. Class A	9,701	48		Littelfuse Inc.	334,008	73,549

		Shares	Market Value* (\$000)			Shares	Market Value* (\$000)
	Western Union Co.			*	Extreme Networks Inc.		
*	Guidewire Software Inc.	5,177,950 1,109,749	71,300 69,426		Amkor Technology Inc.	1,785,635 1,350,631	32,695 32,388
*	Smartsheet Inc. Class A	1,757,686	69,183	*	Viavi Solutions Inc.	3,064,531	32,208
*	Novanta Inc.	486,278	66,071	*	Altair Engineering Inc. Class A	707,365	32,164
*	Coherent Corp.	1,865,987	65,496	*,1 *	Freshworks Inc. Class A	2,160,220	31,777
	Five9 Inc. MKS Instruments Inc.	964,950 768,727	65,482 65,134	*	Verint Systems Inc. Kyndryl Holdings Inc.	868,355 2,817,758	31,504 31,333
	National Instruments Corp.	1,762,044	65,019	*	Impinj Inc.	285,988	31,224
*	Fabrinet	499,352	64,027	*	Itron Inc.	609,482	30,870
	Universal Display Corp.	585,306	63,236	*	Rogers Corp.	254,983	30,430
*	SPS Commerce Inc.	490,197	62,956	*	NetScout Systems Inc.	919,643	29,898
*	UiPath Inc. Class A Silicon Laboratories Inc.	4,798,929 448,035	60,994 60,785	*	Progress Software Corp. PagerDuty Inc.	579,965 1,098,198	29,259 29,168
	Maximus Inc.	820,526	60,765		EVERTEC Inc.	892,249	28,891
*	Euronet Worldwide Inc.	634,538	59,888	*	KnowBe4 Inc. Class A	1,163,331	28,827
*	Box Inc. Class A	1,907,223	59,372	*,1	Affirm Holdings Inc. Class A	2,899,473	28,038
*	Dolby Laboratories Inc. Class A	827,728	58,388	*	Clear Secure Inc. Class A	1,020,698	27,998
	Tenable Holdings Inc.	1,521,423	58,042	*	nCino Inc.	1,048,711	27,728
*	Power Integrations Inc. Cirrus Logic Inc.	774,174 742,350	55,524 55,290	*	HashiCorp Inc. Class A Sabre Corp.	1,006,872 4,450,925	27,528 27,507
*	Elastic NV	1,038,064	53,460	*	Rapid7 Inc.	800,629	27,205
	TD SYNNEX Corp.	563,926	53,409	*	Appfolio Inc. Class A	254,206	26,788
*	Qualys Inc.	470,240	52,775	*	Verra Mobility Corp. Class A	1,919,572	26,548
*	Calix Inc.	770,787	52,745	*	Allegro MicroSystems Inc.	881,810	26,472
*	Workiva Inc. Class A	621,717	52,206	*	Semtech Corp.	865,675	24,836
	Rambus Inc. Avnet Inc.	1,451,389 1,245,556	51,989 51,790		FormFactor Inc. CSG Systems International Inc.	1,046,201 402,917	23,257 23,047
*	Synaptics Inc.	538,126	51,208		Xerox Holdings Corp.	1,555,732	22,714
*	Super Micro Computer Inc.	619,712	50,878	*	DoubleVerify Holdings Inc.	1,015,655	22,304
*	Blackline Inc.	738,371	49,670	*	SiTime Corp.	216,761	22,027
*	Lumentum Holdings Inc.	910,416	47,496		Methode Electronics Inc.	492,171	21,838
*	Confluent Inc. Class A	2,122,314	47,200	*	Evo Payments Inc. Class A	637,735	21,581
*	Teradata Corp. Diodes Inc.	1,384,858	46,614 46,600	*	Agilysys Inc. CommScope Holding Co. Inc.	271,276 2,882,721	21,469
*	Envestnet Inc.	612,026 743,767	45,890	*	Cohu Inc.	659,321	21,188 21,131
*	Onto Innovation Inc.	670,389	45,647	*,1	DigitalOcean Holdings Inc.	829,252	21,121
*	Procore Technologies Inc.	948,910	44,770	*	LiveRamp Holdings Inc.	899,642	21,088
*	Sanmina Corp.	778,531	44,602	*	TTM Technologies Inc.	1,394,093	21,023
*	New Relic Inc.	788,740	44,524	*	Q2 Holdings Inc.	776,268	20,858
*	NCR Corp. MACOM Technology Solutions Holdings Inc.	1,883,418 694,005	44,091 43,708	*	Ultra Clean Holdings Inc. Flywire Corp.	624,954 840,625	20,717 20,570
	Advanced Energy Industries Inc.	507,348	43,706		InterDigital Inc.	398,801	19,733
	Badger Meter Inc.	395,586	43,131		Pegasystems Inc.	559,200	19,147
*	Alteryx Inc. Class A	837,166	42,419	*	Harmonic Inc.	1,448,703	18,978
*	IPG Photonics Corp.	441,538	41,800	*	Knowles Corp.	1,154,802	18,962
*	SentinelOne Inc. Class A	2,861,053	41,743	*	Model N Inc.	458,607	18,601
*	Vontier Corp. Insight Enterprises Inc.	2,158,400 410,832	41,722 41,194	*	Digital Turbine Inc. Appian Corp. Class A	1,215,262 562,004	18,521 18,299
	Belden Inc.	564,718	40,603		ADTRAN Holdings Inc.	961,921	18,075
*	Ambarella Inc.	492,438	40,493	*	AvidXchange Holdings Inc.	1,817,275	18,064
*	Shift4 Payments Inc. Class A	706,751	39,529	*,1	MicroStrategy Inc. Class A	126,849	17,958
*	Plexus Corp.	375,830	38,684	*,1	AppLovin Corp. Class A	1,700,804	17,909
*	CommVault Systems Inc.	603,021	37,894	*	Infinera Corp.	2,620,476	17,662
*	Vishay Intertechnology Inc.	1,756,637	37,891	*	Digi International Inc.	479,703	17,533
*,1	RingCentral Inc. Class A Gitlab Inc. Class A	1,059,186 820,704	37,495 37,293		OSI Systems Inc. CTS Corp.	219,219 423,458	17,432 16,693
*	Margeta Inc. Class A	5,903,878	36,073	*	Samsara Inc. Class A	1,340,411	16,661
*	Sprout Social Inc. Class A	635,516	35,881	*	ePlus Inc.	374,962	16,603
*	Varonis Systems Inc. Class B	1,495,213	35,795	*,1 *	Credo Technology Group Holding Ltd.	1,228,781	16,355
*	Blackbaud Inc.	600,735	35,359	*	Everbridge Inc.	543,863	16,087
	Axcelis Technologies Inc.	442,180	35,091	*	Paycor HCM Inc.	652,434	15,965
*	Kulicke & Soffa Industries Inc. ACI Worldwide Inc.	779,162 1,466,286	34,486 33,725		Qualtrics International Inc. Class A Ubiquiti Inc.	1,501,647 56,328	15,587 15,407
*	Alarm.com Holdings Inc.	676,587	33,478	*	Remitly Global Inc.	1,317,223	15,407
*	MaxLinear Inc. Class A	980,961	33,304	*	Payoneer Global Inc.	2,704,978	14,796
*	Viasat Inc.	1,037,451	32,835	*	Clearfield Inc.	154,855	14,578
*	Perficient Inc.	469,234	32,767		Adeia Inc.	1,522,836	14,436

			Market				Market
		Shares	Value* (\$000)			Shares	Value* (\$000)
	A10 Networks Inc.	867,960	14,434	*,1	Lightwave Logic Inc.	1,495,335	6,445
*	Photronics Inc.	845,300	14,226		Hackett Group Inc.	312,174	6,359
	MoneyGram International Inc.	1,306,195	14,224	*	SolarWinds Corp.	665,574	6,230
*	Asana Inc. Class A	1,032,389	14,216	*	TaskUS Inc. Class A	368,178	6,222
*	Zeta Global Holdings Corp. Class A	1,704,682	13,927	*	Mitek Systems Inc.	635,025	6,153
*	PROS Holdings Inc.	565,197	13,712	*	Domo Inc. Class B	428,738	6,105
*	E2open Parent Holdings Inc. Clearwater Analytics Holdings Inc. Class A	2,311,379 711,377	13,568 13,338	*	8x8 Inc. OneSpan Inc.	1,359,348 501,303	5,872 5,610
*	Veeco Instruments Inc.	711,233	13,215		Bel Fuse Inc. Class B	168,385	5,543
*	Jamf Holding Corp.	617,254	13,213	*,1	MicroVision Inc.	2,347,677	5,543
*,1	C3.ai Inc. Class A	1,134,904	12,700	*	Expensify Inc. Class A	612,421	5,408
*	Squarespace Inc. Class A	571,629	12,673	*	Instructure Holdings Inc.	229,242	5,373
*	Fastly Inc. Class A	1,541,065	12,621	*,1	Meta Materials Inc.	4,490,753	5,344
*	CCC Intelligent Solutions Holdings Inc.	1,450,438	12,619	*	Intapp Inc.	213,897	5,335
*	Duck Creek Technologies Inc.	1,045,700	12,601	*,1	Marathon Digital Holdings Inc.	1,539,750	5,266
*	Consensus Cloud Solutions Inc.	234,072	12,584	*	ON24 Inc.	598,198	5,162
*	Momentive Global Inc.	1,757,023	12,299	*	indie Semiconductor Inc. Class A	864,806	5,042
*	Avid Technology Inc.	451,711	12,011	*,1	AvePoint Inc.	1,221,092	5,019
*	Sumo Logic Inc.	1,482,578	12,009	*	Unisys Corp.	976,419	4,990
*	PDF Solutions Inc.	409,884	11,690	*,1	Cvent Holding Corp. Class A	883,280	4,770
	TTEC Holdings Inc.	261,469	11,539	*	Tucows Inc. Class A	140,159	4,754
*	Braze Inc. Class A	422,274	11,520	*	Comtech Telecommunications Corp.	369,250	4,483
	Benchmark Electronics Inc.	424,614	11,333		Benefitfocus Inc.	427,873	4,476
	International Money Express Inc.	460,562	11,224	*,1 *	UserTesting Inc.	595,529	4,472
*,1	ForgeRock Inc. Class A	491,785	11,198	*	Arlo Technologies Inc.	1,264,009	4,437
*	Mirion Technologies Inc.	1,688,041	11,158		Couchbase Inc.	334,505	4,436
*	Napco Security Technologies Inc.	405,946	11,155	*,1	NVE Corp.	66,611 526,434	4,313
*	Zuora Inc. Class A Ichor Holdings Ltd.	1,725,765 400,974	10,976 10,754	*	SEMrush Holdings Inc. Class A ACM Research Inc. Class A	526,434 544,313	4,285
*	ScanSource Inc.	352,562	10,754	*,1	SmartRent Inc. Class A	1,726,661	4,197 4,196
*	Cerence Inc.	546,734	10,302	*	Aviat Networks Inc.	131,203	4,190
*	PowerSchool Holdings Inc. Class A	435,836	10,151	*	ShotSpotter Inc.	119,744	4,052
*	SMART Global Holdings Inc.	663,385	9,871	*	Xperi Inc.	454,424	3,913
*	LivePerson Inc.	966,221	9,797	*,1	Navitas Semiconductor Corp.	1,094,782	3,843
*	PAR Technology Corp.	365,654	9,533	*	Luna Innovations Inc.	433,185	3,808
*	Paya Holdings Inc.	1,205,361	9,486	*	Telos Corp.	744,699	3,791
*	N-able Inc.	916,116	9,418	*,1	MeridianLink Inc.	272,353	3,739
*	Conduent Inc.	2,321,111	9,401	*,1	Digimarc Corp.	198,344	3,667
*	Thoughtworks Holding Inc.	908,108	9,254	*	Cantaloupe Inc.	832,842	3,623
*	Yext Inc.	1,384,155	9,039	*	Blend Labs Inc. Class A	2,327,582	3,352
*	Olo Inc. Class A	1,428,425	8,928	*	Cambium Networks Corp.	152,545	3,306
	Amplitude Inc. Class A	712,315	8,605		Richardson Electronics Ltd.	146,752	3,130
	Matterport Inc.	3,061,467	8,572	*	Immersion Corp.	426,627	2,999
	Informatica Inc. Class A	522,879	8,518	*	Eastman Kodak Co.	976,165	2,977
*	CEVA Inc.	332,850	8,514	*	EverCommerce Inc.	398,154	2,962
*	Alpha & Omega Semiconductor Ltd.	294,922	8,426	*	Ribbon Communications Inc.	1,058,367	2,953
*	Repay Holdings Corp. Class A	1,044,484	8,408 7,944	*	DZS Inc.	232,320	2,946
*	FARO Technologies Inc. Kimball Electronics Inc.	270,111 349,918	7,944 7,905	*	Brightcove Inc. eGain Corp.	551,415 310,954	2,884 2,808
*	I3 Verticals Inc. Class A	349,918	7,688	*,1	SoundHound Al Inc.	1,572,114	2,783
*,1	Riot Blockchain Inc.	2,264,142	7,675	*	Rimini Street Inc.	714,652	2,703
*	NETGEAR Inc.	416,365	7,675	*	Upland Software Inc.	381,788	2,723
	Cass Information Systems Inc.	163,613	7,497	*	CoreCard Corp.	89,343	2,722
*	BigCommerce Holdings Inc.	854,409	7,468	*	Rackspace Technology Inc.	819,574	2,418
*	Alkami Technology Inc.	509,558	7,434	*	AXT Inc.	542,983	2,378
*	Vertex Inc. Class A	505,788	7,339	*,1	908 Devices Inc.	305,508	2,328
*	Grid Dynamics Holdings Inc.	652,404	7,320	*	KVH Industries Inc.	220,804	2,257
*	Corsair Gaming Inc.	537,376	7,292	*	CalAmp Corp.	502,346	2,251
	PC Connection Inc.	152,488	7,152	*,1	Veritone Inc.	419,635	2,224
*,1	lonQ Inc.	2,072,698	7,151		Information Services Group Inc.	482,484	2,219
*	EngageSmart Inc.	404,791	7,124	*	Identiv Inc.	306,249	2,217
*	Vishay Precision Group Inc.	179,890	6,953	*	Intevac Inc.	336,156	2,175
*,1	Aehr Test Systems	341,739	6,869	*	Edgio Inc.	1,892,566	2,139
*	Sprinklr Inc. Class A	839,601	6,860	*,1	Evolv Technologies Holdings Inc.	819,067	2,121
	American Software Inc. Class A	461,430	6,774	*,1	ZeroFox Holdings Inc.	413,025	2,057
-	nLight Inc.	645,180	6,542	*	Akoustis Technologies Inc.	727,680	2,052
	Ebix Inc.	324,748	6,482	-	Asure Software Inc.	219,328	2,049

		Shares	Market Value* (\$000)			Shares	Market Value* (\$000)
*	Transphorm Inc.	367,869	2,001	*	Movano Inc.	512,874	667
*	Genasys Inc.	540,301	1,999	*,1	Applied Optoelectronics Inc.	349,064	660
* * 1	Velodyne Lidar Inc.	2,673,894	1,975	* * 1	Key Tronic Corp.	151,277	655
*,1	Atomera Inc.	298,601	1,857	*,1 *	Dave Inc.	2,253,557	654
*	Iteris Inc. CPI Card Group Inc.	595,754 49,062	1,853 1,770	*	Franklin Wireless Corp. Frequency Electronics Inc.	144,894 89,508	646 631
*	Aeva Technologies Inc.	1,288,897	1,770	*,1	StarTek Inc.	161,027	604
*	Weave Communications Inc.	380,803	1,744	*,1	Wrap Technologies Inc.	338,065	571
*	Quantum Corp.	1,555,073	1,695	*	Rekor Systems Inc.	471,712	566
*	Paymentus Holdings Inc. Class A	205,449	1,646		CSP Inc.	58,064	548
* * 1	Daktronics Inc.	569,976	1,607	* * 1	NetSol Technologies Inc.	188,484	537
*,1	Focus Universal Inc.	249,996	1,602	*,1 *	Embark Technology Inc.	160,415	528
*	Turtle Beach Corp. inTEST Corp.	219,646 148,346	1,575 1,528	*,1	Data I/O Corp. Airspan Networks Holdings Inc.	131,493 394,024	522 516
*	Lantronix Inc.	349,477	1,520	*,1	One Stop Systems Inc.	168,131	506
*,1	Cyxtera Technologies Inc.	768,415	1,475	*,1	Intrusion Inc.	157,729	498
*	Casa Systems Inc.	538,466	1,470	*	Intellicheck Inc.	242,394	485
*	Enfusion Inc. Class A	150,684	1,457	*,1 *	Neonode Inc.	86,223	474
*	PFSweb Inc.	236,404	1,454	*	EMCORE Corp.	485,072	467
*	Priority Technology Holdings Inc. Powerfleet Inc.	276,406 536,428	1,454 1,443	*,1	RF Industries Ltd. Quantum Computing Inc.	89,996 302,053	459 456
*	Computer Task Group Inc.	186,517	1,443	*	LightPath Technologies Inc. Class A	369,843	450
*,1	Cerberus Cyber Sentinel Corp.	543,537	1,386	*	Wireless Telecom Group Inc.	249,302	446
*	Diebold Nixdorf Inc.	974,094	1,383	*	SRAX Inc. Class A	286,519	438
*	Smith Micro Software Inc.	658,346	1,383	*	Optical Cable Corp.	101,263	421
*,1	Cleanspark Inc.	667,517	1,362	*	TESSCO Technologies Inc.	84,101	405
*	Amtech Systems Inc.	176,457	1,341	*	GSI Technology Inc.	219,552	380
*,1	Kopin Corp. AgileThought Inc. Class A	1,070,756 314,783	1,328 1,322	*	CVD Equipment Corp. CPS Technologies Corp.	68,555 140,086	378 377
*	CS Disco Inc.	203,830	1,288	*	Usio Inc.	234,439	375
*	Paysign Inc.	496,392	1,281	*,1	Vislink Technologies Inc.	668,746	375
*,1	MICT Inc.	1,532,276	1,272	*	Red Cat Holdings Inc.	382,360	359
*,1	Kaltura Inc.	705,152	1,213	*	Cepton Inc.	266,193	338
*	Everspin Technologies Inc.	217,481	1,209	*	Cipher Mining Inc.	571,371	320
*	Pixelworks Inc. PCTEL Inc.	671,576 275,356	1,189 1,184	*	Inuvo Inc. Aware Inc.	1,411,029 182,324	313 312
*,1	VirnetX Holding Corp.	905,638	1,104	*	Coda Octopus Group Inc.	45,333	312
*	Arteris Inc.	266,060	1,144	*	AudioEye Inc.	77,975	296
*	LiveVox Holdings Inc.	364,217	1,082	*,1	American Virtual Cloud Technologies Inc.	250,337	288
*,1	Alpine 4 Holdings Inc.	2,016,081	1,066	*	M-Tron Industries Inc.	31,573	276
*	AstroNova Inc.	81,388	1,043	*,1 *	SeaChange International Inc.	563,891	266
*	Airgain Inc. WM Technology Inc.	152,243 959,235	991 969	*	LGL Group Inc. ClearSign Technologies Corp.	63,145 449,128	256 241
	Park City Group Inc.	193,418	957	*	Electro-Sensors Inc.	51,199	233
*	Inseego Corp.	1,118,929	943	*	Qumu Corp.	258,741	231
*,1	Phunware Inc.	1,211,441	937	*,1	Avaya Holdings Corp.	1,161,052	228
* 4	Climb Global Solutions Inc.	29,489	930	*	Research Solutions Inc.	116,293	224
*,1	Ouster Inc.	1,023,085	883	*	Boxlight Corp. Class A	702,399	218
*	Innodata Inc. SecureWorks Corp. Class A	296,229 137,379	878 878	*	BSQUARE Corp. SigmaTron International Inc.	189,580 54,299	214 209
*	Sono-Tek Corp.	136,487	876	*	WidePoint Corp.	112,521	205
*,1	Latch Inc.	1,231,706	874	*,1	Marin Software Inc.	202,224	202
*	Issuer Direct Corp.	34,289	859	*,1	Rockley Photonics Holdings Ltd.	1,249,033	175
*	QuickLogic Corp.	157,856	811	*	ClearOne Inc.	114,742	174
*,1	NextNav Inc.	274,760	805	*	GSE Systems Inc.	255,595	174
*,1	Backblaze Inc. Class A	128,835	792 770	*	Trio-Tech International	37,853	170
*	eMagin Corp. Viant Technology Inc. Class A	906,375 187,801	770 755	*	authID Inc. AppTech Payments Corp.	282,129 67,900	166 161
*,1	BM Technologies Inc.	144,374	753 752	*	TSR Inc.	23,512	160
*	TransAct Technologies Inc.	118,370	736	*,1	Digital Ally Inc.	648,099	151
*	Synchronoss Technologies Inc.	1,184,703	732	*,1	Glimpse Group Inc.	48,382	147
*,1	Rigetti Computing Inc.	1,002,753	731	*,1 *	IronNet Inc.	622,931	143
*	AEye Inc.	1,519,255	730	*	AmpliTech Group Inc.	66,524	141
*,1	SkyWater Technology Inc. D-Wave Quantum Inc.	100,074 493,000	712 710	*,1	ADDvantage Technologies Group Inc. Verb Technology Co. Inc.	96,423 830,962	140 136
*	Research Frontiers Inc.	361,375	694	*	SilverSun Technologies Inc.	44,899	133
*,1	Ondas Holdings Inc.	423,162	673	*,1	Socket Mobile Inc.	67,030	130

		Shares	Market Value* (\$000)			Shares	Market Value* (\$000)
*	VerifyMe Inc.	105,037	122		Westlake Corp.	461,373	47,309
*	Bridgeline Digital Inc.	106,655	112	*	Summit Materials Inc. Class A	1,625,291	46,142
*,1	Ryvyl Inc.	242,066	111		Hecla Mining Co.	7,575,027	42,117
*	OMNIQ Corp.	24,443	111		Sensient Technologies Corp.	567,440	41,378
*,1	DecisionPoint Systems Inc.	12,972	105		Avient Corp.	1,161,553	39,214
*,1	Stronghold Digital Mining Inc. Class A	199,068	95	*	O-I Glass Inc.	2,090,063	34,632
*,1	OLB Group Inc.	112,818	94		Innospec Inc.	332,621	34,213
*	Universal Security Instruments Inc.	45,959	93	*	Ingevity Corp.	481,729	33,933
*	Bel Fuse Inc. Class A	2,346	78	*	Quaker Chemical Corp.	185,825	31,014
	Peraso Inc.	96,947	71		MP Materials Corp.	1,272,541	30,897
*,1	Autoscope Technologies Corp.	19,399	70 69	*	Stepan Co. Arconic Corp.	284,731	30,312
*,1	Auddia Inc. Bio-key International Inc.	71,594 109,444	64		Greif Inc. Class A	1,385,557 432,509	29,318 29,004
	Crexendo Inc.	32,741	62		Alpha Metallurgical Resources Inc.	192,197	28,136
*	Data Storage Corp.	39,604	58		NewMarket Corp.	90,003	28,001
*	BTCS Inc.	87,854	55		Scotts Miracle-Gro Co.	558,186	27,122
*,1	Exela Technologies Inc.	674,600	55		Minerals Technologies Inc.	439,865	26,709
*	Inpixon	25,746	44		Materion Corp.	280,641	24,559
*,1	Greenidge Generation Holdings Inc. Class A	148,619	43		Warrior Met Coal Inc.	697,465	24,160
*,1	ComSovereign Holding Corp.	557,523	40		Carpenter Technology Corp.	647,338	23,913
*,1	CYNGN Inc.	52,406	35		Sylvamo Corp.	444,655	21,606
*	Cemtrex Inc.	244,785	32		Tronox Holdings plc	1,532,216	21,007
*	Soluna Holdings Inc.	118,915	32	*,1	Ginkgo Bioworks Holdings Inc. Class A	12,192,430	20,605
	BK Technologies Corp.	7,994	27		Worthington Industries Inc.	411,365	20,449
*,1	Sobr Safe Inc.	25,261	24		Compass Minerals International Inc.	469,935	19,267
*	DatChat Inc.	86,875	21	*	Perimeter Solutions SA	2,051,308	18,749
2	SRAX Inc.	284,252	20		Kaiser Aluminum Corp.	218,347	16,586
*	Duos Technologies Group Inc.	8,650	18		Mativ Holdings Inc.	759,251	15,868
*	Sonim Technologies Inc.	40,817	17		TriMas Corp.	559,577	15,523
*,1	Terawulf Inc.	20,849	14		AdvanSix Inc.	386,477	14,694
*,1	CompoSecure Inc.	2,080	10	*	Resolute Forest Products Inc.	632,455	13,655
*,1 *,1	Akerna Corp.	15,169	10	*	Orion Engineered Carbons SA	766,001	13,643
*	Oblong Inc.	75,152	9	*,1	Coeur Mining Inc.	3,890,132	13,071
*	WaveDancer Inc.	19,522	9	, '	PureCycle Technologies Inc.	1,819,596	12,301
*,1	Blackboxstocks Inc.	26,607	8		Myers Industries Inc.	503,744	11,198
,.	Kaspien Holdings Inc.	12,336 183	7		Schnitzer Steel Industries Inc. Class A	349,320 458,715	10,707
*	Network-1 Technologies Inc. T Stamp Inc. Class A	700	_		Trinseo plc Hawkins Inc.	458,715 268,005	10,417 10,345
	1 Starrip IIIc. Class A	700		*	Piedmont Lithium Inc.	224,380	9,877
			14,196,082	*	TimkenSteel Corp.	529,689	9,624
Ma	terials (4.3%)	4 747054	470.050		SunCoke Energy Inc.	1,104,789	9,534
	RPM International Inc.	1,747,051	170,250		Chase Corp.	109,595	9,454
	Reliance Steel & Aluminum Co.	792,293	160,392	*	LSB Industries Inc.	679,282	9,034
*	Crown Holdings Inc. Cleveland-Cliffs Inc.	1,630,722 6,950,463	134,062 111,972	*	Aspen Aerogels Inc.	760,274	8,964
	Alcoa Corp.	2,385,532	108,470	*	Clearwater Paper Corp.	234,401	8,863
	Berry Global Group Inc.	1,686,581	100,470		American Vanguard Corp.	391,756	8,505
	Royal Gold Inc.	885,832	99,851	*	Ecovyst Inc.	950,579	8,422
	AptarGroup Inc.	886,008	97,443	*	Rayonier Advanced Materials Inc.	876,519	8,415
	Graphic Packaging Holding Co.	4,161,682	92,597		Ryerson Holding Corp.	276,355	8,363
	Olin Corp.	1,717,974	90,950		Haynes International Inc.	175,880	8,036
	Sonoco Products Co.	1,316,615	79,932	*	Origin Materials Inc.	1,690,984	7,795
	United States Steel Corp.	3,138,769	78,626		Koppers Holdings Inc.	264,624	7,462
	Valvoline Inc.	2,387,559	77,954		Mercer International Inc.	560,764	6,527
	Commercial Metals Co.	1,585,104	76,561	*	Century Aluminum Co.	708,163	5,793
*	Axalta Coating Systems Ltd.	2,969,929	75,644		Pactiv Evergreen Inc.	496,076	5,635
	Ashland Inc.	679,649	73,083	*,1 *	Amyris Inc.	3,149,973	4,819
	Huntsman Corp.	2,427,587	66,710	*	Diversey Holdings Ltd.	1,081,628	4,608
	Eagle Materials Inc.	499,394	66,345	*	Olympic Steel Inc.	132,532	4,450
	Chemours Co.	2,025,837	62,031		Intrepid Potash Inc.	130,841	3,777
	Silgan Holdings Inc.	1,141,685	59,185		Tredegar Corp.	358,882	3,668
	Louisiana-Pacific Corp.	970,003	57,424	*	United States Lime & Minerals Inc.	22,679	3,192
	Element Solutions Inc.	3,005,717	54,674	*,1	Ranpak Holdings Corp. Class A	544,773	3,143
	Balchem Corp.	439,762	53,699	,,,	5E Advanced Materials Inc.	397,416	3,132
*	ATI Inc.	1,735,230	51,814	*	FutureFuel Corp.	371,146	3,017
	HB Fuller Co.	718,944	51,491		McEwen Mining Inc. Ramaco Resources Inc.	494,234 324,733	2,896 2,854
	Cabot Corp.	758,681	50,710		Kronos Worldwide Inc.	290,174	2,854
^	Livent Corp.	2,436,237	48,408		Nones vvolidavide inc.	200,174	2,720

		Shares	Market Value* (\$000)			Shares	Market Value* (\$000)
*	Gatos Silver Inc.	641,322	2,623		Highwoods Properties Inc.	1,426,153	39,904
*,1	Dakota Gold Corp.	722,266	2,203		Corporate Office Properties Trust	1,523,898	39,530
*,1	Danimer Scientific Inc. Class A	1,177,172	2,107		Sabra Health Care REIT Inc.	3,109,393	38,650
	Gold Resource Corp.	1,211,904	1,854		EPR Properties	1,022,637	38,574
	Glatfelter Corp.	605,278	1,683		Broadstone Net Lease Inc.	2,376,328	38,520
*	Core Molding Technologies Inc.	97,568	1,267		Innovative Industrial Properties Inc.	378,508	38,362
* 1	Northern Technologies International Corp.	89,667	1,194		Douglas Emmett Inc.	2,418,206	37,917
*,1	Smith-Midland Corp.	58,250	1,194		LXP Industrial Trust	3,628,873	36,361
*,1	AgroFresh Solutions Inc.	394,567	1,168	*	Park Hotels & Resorts Inc.	3,082,987	36,348
*	Flotek Industries Inc.	942,212	1,055		Howard Hughes Corp.	473,221	36,164
*	Hycroft Mining Holding Corp. Class A	1,904,791	1,014		Equity Commonwealth	1,428,000	35,657
*	Idaho Strategic Resources Inc. Ascent Industries Co.	169,046 108,641	964 942		SITE Centers Corp. Outfront Media Inc.	2,530,579	34,568 32,625
	Friedman Industries Inc.	85,811	942 840		Macerich Co.	1,967,759 2,887,958	32,625
*	Universal Stainless & Alloy Products Inc.	113,672	815		National Health Investors Inc.	574,252	29,987
*,1	Loop Industries Inc.	332,490	795		SL Green Realty Corp.	877,065	29,575
*	Advanced Emissions Solutions Inc.	280,591	682		Four Corners Property Trust Inc.	1,114,485	28,899
*	Contango ORE Inc.	29,429	666		Sunstone Hotel Investors Inc.	2,868,813	27,713
*	United States Antimony Corp.	1,198,945	584	*	Cushman & Wakefield plc	2,189,910	27,286
*	Solitario Zinc Corp.	785,656	487		Retail Opportunity Investments Corp.	1,725,816	25,939
*	Ampco-Pittsburgh Corp.	158,887	399		Kennedy-Wilson Holdings Inc.	1,625,270	25,566
*	Golden Minerals Co.	1,364,249	374		Tanger Factory Outlet Centers Inc.	1,395,936	25,043
*	US Gold Corp.	48,677	234		CareTrust REIT Inc.	1,306,288	24,271
*	Paramount Gold Nevada Corp.	339.615	117		Pebblebrook Hotel Trust	1,767,398	23,665
*,1	Cryptyde Inc.	252,524	48		RLJ Lodging Trust	2,224,598	23,558
	Greif Inc. Class B	555	43		JBG SMITH Properties	1,231,449	23,373
*,2	F-star Therapeutics Inc. CVR	40,838	3		DiamondRock Hospitality Co.	2,828,554	23,166
*,2	Ikonics Corp. CVR	12,227	_	*	Zillow Group Inc. Class A	715,799	22,340
		-	3,391,914		Urban Edge Properties	1,557,473	21,945
Re:	al Estate (6.5%)		3,331,314		InvenTrust Properties Corp.	907,665	21,484
110	Sun Communities Inc.	1,676,542	239,746		DigitalBridge Group Inc.	1,903,867	20,828
	WP Carey Inc.	2,839,109	221,876		Xenia Hotels & Resorts Inc.	1,543,458	20,343
	Gaming & Leisure Properties Inc.	3,492,532	181,926		Elme Communities	1,103,641	19,645
	Equity LifeStyle Properties Inc.	2,386,345	154,158	1	Getty Realty Corp.	575,502	19,481
	Rexford Industrial Realty Inc.	2,495,441	136,351		LTC Properties Inc.	540,647	19,209
	American Homes 4 Rent Class A	4,175,144	125,839		American Assets Trust Inc.	698,984	18,523
	CubeSmart	3,051,215	122,811		St. Joe Co.	471,230	18,213
	STORE Capital Corp.	3,649,870	117,015		Acadia Realty Trust	1,258,432	18,059
	Life Storage Inc.	1,150,701	113,344		Alexander & Baldwin Inc.	961,750	18,014
	Lamar Advertising Co. Class A	1,181,178	111,503	*	Global Net Lease Inc.	1,424,250	17,903
	National Retail Properties Inc.	2,408,776	110,226		Veris Residential Inc.	1,110,022	17,683
	Americold Realty Trust Inc.	3,657,824	103,553		Uniti Group Inc.	3,189,983	17,641
*	Jones Lang LaSalle Inc.	643,632	102,576		Hudson Pacific Properties Inc. Easterly Government Properties Inc. Class A	1,802,877 1,215,491	17,542 17,345
	Healthcare Realty Trust Inc. Class A	5,154,319	99,324		Service Properties Trust	2,277,685	16,604
	Brixmor Property Group Inc.	4,051,546	91,849		Piedmont Office Realty Trust Inc. Class A	1,663,067	15,250
1	Medical Properties Trust Inc.	8,083,249	90,047		Brandywine Realty Trust	2,425,101	14,914
	Omega Healthcare Investors Inc.	3,178,539	88,840		Apartment Investment & Management Co. Class A	2,050,590	14,600
	EastGroup Properties Inc.	591,517	87,580		NETSTREIT Corp.	751,728	13,779
	First Industrial Realty Trust Inc.	1,789,397	86,356		Paramount Group Inc.	2,319,475	13,778
	Agree Realty Corp.	1,217,152	86,333		NexPoint Residential Trust Inc.	303,934	13,227
	STAG Industrial Inc.	2,443,272	78,942		Newmark Group Inc. Class A	1,592,251	12,690
*	Spirit Realty Capital Inc. Zillow Group Inc. Class C	1,880,151 2,298,145	75,074		Empire State Realty Trust Inc. Class A	1,806,971	12,179
	•	, ,	74,023		Marcus & Millichap Inc.	346,523	11,938
	Apartment Income REIT Corp. Class A Rayonier Inc.	2,045,510 1,981,277	70,181 65,303		Armada Hoffler Properties Inc.	976,908	11,234
	Kite Realty Group Trust	2,942,429	61,938		Community Healthcare Trust Inc.	310,441	11,114
	Ryman Hospitality Properties Inc.	752,908	61,573		Summit Hotel Properties Inc.	1,523,041	10,996
	Kilroy Realty Corp.	1,413,627	54,665		UMH Properties Inc.	678,708	10,927
	Cousins Properties Inc.	2,079,741	52,597		Centerspace	183,519	10,767
	Terreno Realty Corp.	907,466	52,597	1	eXp World Holdings Inc.	970,892	10,757
	Independence Realty Trust Inc.	3,044,120	51,324	1	Plymouth Industrial REIT Inc.	528,431	10,135
	Phillips Edison & Co. Inc.	1,580,016	50,308		RPT Realty	1,004,041	10,081
	PotlatchDeltic Corp.	1,090,735	47,981	_	Gladstone Commercial Corp.	540,660	10,002
	Apple Hospitality REIT Inc.	2,931,987	46,267	*	Anywhere Real Estate Inc.	1,533,827	9,801
	Essential Properties Realty Trust Inc.	1,928,022	45,251		Safehold Inc.	333,880	9,556
	Physicians Realty Trust	3,060,707	44,288		Necessity Retail REIT Inc. Class A	1,579,991	9,369
	National Storage Affiliates Trust	1,121,869	40,522		iStar Inc.	1,198,768	9,147

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ource Portfolio Solutions SA a Holdings Inc. rock Homes Trust Inc. scontinental Realty Investors Inc. iv Inc. Class C	126,438 2,393,326 45,540 21,812 77,053	1,084 970 964 925	Consolidated Water Co. Ltd. Genie Energy Ltd. Class B * Altus Power Inc. Class A * Pure Cycle Corp. RGC Resources Inc.	207,015 293,443 458,001 264,338 102,016	3,03 2,98 2,77 2,24
ource Portfolio Solutions SA a Holdings Inc. rock Homes Trust Inc. scontinental Realty Investors Inc.	126,438 2,393,326 45,540 21,812	1,084 970 964	Consolidated Water Co. Ltd. Genie Energy Ltd. Class B * Altus Power Inc. Class A * Pure Cycle Corp.	207,015 293,443 458,001 264,338	3,03 2,98 2,77
ource Portfolio Solutions SA a Holdings Inc. rock Homes Trust Inc.	126,438 2,393,326 45,540	1,084 970	Consolidated Water Co. Ltd. Genie Energy Ltd. Class B * Altus Power Inc. Class A	207,015 293,443 458,001	3,03 2,98
ource Portfolio Solutions SA a Holdings Inc.	126,438 2,393,326	1,084	Consolidated Water Co. Ltd. Genie Energy Ltd. Class B	207,015 293,443	3,03
ource Portfolio Solutions SA	126,438		Consolidated Water Co. Ltd.	207,015	
		1 100			0.00
		1,390		91 286	5,34
·			Clearway Energy Inc. Class A	264,300	7,90
			York Water Co.	202,900	9,12
			* Montauk Renewables Inc.	871,258	9,61
			Unitil Corp.	223,987	11,50
			Middlesex Water Co.	244,963	19,27
·			Northwest Natural Holding Co.	466,976	22,22
•			* Sunnova Energy International Inc.	1,338,394	24,10
			Chesapeake Utilities Corp.	240,014	28,36
•			SJW Group	363,970	29,55
·			Otter Tail Corp.	561,741	32,98
,			MGE Energy Inc.	492,200	34,65
	,		Avangrid Inc.	940,457	40,42
	,	,	Clearway Energy Inc. Class C	1,293,808	41,23
·			Avista Corp.	994,266	44,08
	,		California Water Service Group	756,149	45,85
•			NorthWestern Corp.	777,863	46,15
	,		American States Water Co.	500,840	46,35
			Spire Inc.	694,634	47,83
•			ALLETE Inc.	768,955	49,60
			Southwest Gas Holdings Inc.	834,756	51,65
	,		ONE Gas Inc.	740,679	56,08
			PNM Resources Inc.	1,172,296	57,19
	,		Ormat Technologies Inc.	663,426	57,37
Ranch Co.	336,878	6,347	South Jersey Industries Inc.	1,622,621	57,65
in Corp.	1,531,268	6,493			59,65
Centers Inc.	169,462	6,894	·	,	62,38 61,62
ander's Inc.	31,850	7,009	· · · · · · · · · · · · · · · · · · ·		64,69
Office REIT Inc.	822,764	7,026			73,58
•					77,77
·		,			104,79
	, ,	,		, ,	106,99
•			•		117,83
•				3,247,697	155,01
	,		Utilities (2.2%)		
					5,115,51
•	,		JW Mays Inc.	5 _	_
			Opine With Cherr		-
					(\$00
	Charao			Charas	Value (\$00
elles n koa en a ( i n e e : I h o C eo e h Da o A r l A e c e r u	nder's Inc. Centers Inc. n Corp. Ranch Co. age Growth Properties Class A astone REIT Group Inc. Class A Liberty Properties Inc. Holdings Inc. Ork Inc. Office REIT Inc. Realty Trust Inc. Oint Diversified Real Estate Trust atar Group Inc. I Realty Trust Class A lin Street Properties Corp. IAX Holdings Inc. Class A In Street Properties Corp. IAX Holdings Inc. Class A Inar Hotels & Resorts Inc. Realty Growth Inc. Apartments Corp. Itrial Logistics Properties Trust ord Hospitality Trust Inc. I Inc. Inc. Inc. Inc. Inc. Inc. Inc. Inc.	e Properties Income Trust land Partners Inc. land Biddle Properties Inc. land Biddle B	Amam Lodging Trust   708,834   8,697	Shares   Value   Shares   Value   Shares   Value   Shares   Value   Shares   Share	Shares   S

	Shares	Market Value* (\$000)
Temporary Cash Investments (2.6%)		
Money Market Fund (2.6%) 3.4 Vanguard Market Liquidity Fund, 4.334% (Cost \$2,023,699)	20,244,880	2,024,286
Total Investments (101.6%) (Cost \$78,486,450)		80,261,260
Other Assets and Liabilities—Net (-1.6%)		(1,264,905)
Net Assets (100%)		78,996,355

Cost is in \$000.

- See Note A in Notes to Financial Statements.
- \* Non-income-producing security.
- 1 Includes partial security positions on loan to broker-dealers. The total value of securities on loan is \$1,207,979,000.
- Security value determined using significant unobservable inputs.
   Affiliated money market fund available only to Vanguard funds and certain trusts and accounts managed by Vanguard. Rate shown is the 7-day yield.
- 4 Collateral of \$1,364,585,000 was received for securities on loan.
  - CVR—Contingent Value Rights.
  - REIT—Real Estate Investment Trust.

## 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				
E-mini Russell 2000 Index	March 2023	6,504	575,897	(13,076)
E-mini S&P 500 Index	March 2023	174	33,591	(463)
E-mini S&P Mid-Cap 400 Index	March 2023	91	22,227	(401)
				(13,940)

## Over-the-Counter Total Return Swaps

Reference Entity	Termination Date	Counterparty	Notional Amount (\$000)	Floating Interest Rate Received (Paid) <sup>1</sup> (%)	Value and Unrealized Appreciation (\$000)	Value and Unrealized (Depreciation) (\$000)
ACI Worldwide Inc.	8/31/23	BANA	1,400	(4.515)	136	
Airbnb Inc. Class A	8/31/23	BANA	23,492	(4.115)	_	(3,904)
Bill.com Holdings Inc.	8/31/23	BANA	10,236	(4.115)	_	(1,008)
Chewy Inc. Class A	1/31/23	GSI	12,688	(4.329)	_	(1,210)
Datadog Inc. Class A	8/31/23	BANA	9,851	(4.115)	_	(329)
DocuSign Inc. Class A	8/31/23	BANA	8,567	(4.115)	1,491	
Lucid Group Inc.	1/31/23	GSI	13,708	(4.329)	_	(1,159)
Seagen Inc.	8/31/23	BANA	9,104	(4.115)	504	_
Sirius XM Holdings Inc.	1/31/23	GSI	23,880	(4.329)	_	(552)
Snowflake Inc. Class A	8/31/23	BANA	22,578	(4.115)	27	_

## Over-the-Counter Total Return Swaps (continued)

Reference Entity	Termination Date	Counterparty	Notional Amount (\$000)	Floating Interest Rate Received (Paid) <sup>1</sup> (%)	Value and Unrealized Appreciation (\$000)	Value and Unrealized (Depreciation) (\$000)
Virtu Financial Inc. Class A	8/31/23	BANA	710	(4.515)	_	(52)
Wayfair Inc. Class A	8/31/23	BANA	4,763	(4.115)	_	(503)
					2,158	(8,717)

Based on USD Overnight Bank Funding Rate as of the most recent payment date. Floating interest payment received/paid monthly. BANA—Bank of America, N.A.
 GSI—Goldman Sachs International.

# Statement of Assets and Liabilities As of December 31, 2022

(\$000s, except shares, footnotes, and per-share amounts)	Amount
Assets	
Investments in Securities, at Value <sup>1</sup>	
Unaffiliated Issuers (Cost \$76,462,751)	78,236,974
Affiliated Issuers (Cost \$2,023,699)	2,024,286
Total Investments in Securities	80,261,260
Investment in Vanguard	3,078
Cash	39,180
Cash Collateral Pledged—Futures Contracts	40,802
Cash Collateral Pledged—Over-the-Counter Swap Contracts	5,920
Receivables for Investment Securities Sold	53,034
Receivables for Accrued Income	98,166
Receivables for Capital Shares Issued	48,718
Unrealized Appreciation—Over-the-Counter Swap Contracts	2,158
Total Assets	80,552,316
Liabilities	
Payables for Investment Securities Purchased	80,887
Collateral for Securities on Loan	1,364,585
Payables for Capital Shares Redeemed	97,988
Payables to Vanguard	1,552
Variation Margin Payable—Futures Contracts	2,232
Unrealized Depreciation—Over-the-Counter Swap Contracts	8,717
Total Liabilities	1,555,961
Net Assets	78,996,355

<sup>1</sup> Includes \$1,207,979,000 of securities on loan.

## Statement of Assets and Liabilities (continued)

At December 31, 2022, net assets consisted of:	
(\$000s, except shares, footnotes, and per-share amounts)	Amount
Paid-in Capital	82,042,698
Total Distributable Earnings (Loss)	(3,046,343)
Net Assets	78,996,355
Investor Shares – Net Assets	
Applicable to 2,266,396 outstanding \$.001 par value shares of beneficial interest (unlimited authorization)	228,739
Net Asset Value Per Share—Investor Shares	\$100.93
ETF Shares – Net Assets	
Applicable to 98,473,074 outstanding \$.001 par value shares of beneficial interest (unlimited authorization)	13,088,703
Net Asset Value Per Share—ETF Shares	\$132.92
Admiral Shares – Net Assets	
Applicable to 198,441,179 outstanding \$.001 par value shares of beneficial interest (unlimited authorization)	20,011,892
Net Asset Value Per Share—Admiral Shares	\$100.85
Institutional Shares—Net Assets	
Applicable to 128,749,790 outstanding \$.001 par value shares of beneficial interest (unlimited authorization)	12,982,872
Net Asset Value Per Share—Institutional Shares	\$100.84
Institutional Plus Shares—Net Assets	
Applicable to 41,975,408 outstanding \$.001 par value shares of beneficial interest (unlimited authorization)	10,445,503
Net Asset Value Per Share—Institutional Plus Shares	\$248.85
Institutional Select Shares – Net Assets	
Applicable to 137,238,506 outstanding \$.001 par value shares of beneficial interest (unlimited authorization)	22,238,646
Net Asset Value Per Share—Institutional Select Shares	\$162.04

# Statement of Operations

Year Ended December 31, 2022

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	(\$000)
Investment Income	
Income	
Dividends <sup>1</sup>	1,043,250
Interest <sup>2</sup>	10,910
Securities Lending—Net	126,876
Total Income	1,181,036
Expenses	
The Vanguard Group—Note B	
Investment Advisory Services	1,993
Management and Administrative—Investor Shares	503
Management and Administrative—ETF Shares	6,811
Management and Administrative—Admiral Shares	11,639
Management and Administrative—Institutional Shares	6,395
Management and Administrative—Institutional Plus Shares	4,146
Management and Administrative—Institutional Select Shares	3,935
Marketing and Distribution—Investor Shares	15
Marketing and Distribution—ETF Shares	730
Marketing and Distribution—Admiral Shares	831
Marketing and Distribution—Institutional Shares	477
Marketing and Distribution—Institutional Plus Shares	366
Marketing and Distribution—Institutional Select Shares	2
Custodian Fees	836
Auditing Fees	46
Shareholders' Reports—Investor Shares	1
Shareholders' Reports—ETF Shares	462
Shareholders' Reports—Admiral Shares	206
Shareholders' Reports—Institutional Shares	240
Shareholders' Reports—Institutional Plus Shares	170
Shareholders' Reports—Institutional Select Shares	_
Trustees' Fees and Expenses	32
Other Expenses	29
Total Expenses	39,865
Expenses Paid Indirectly	(157)
Net Expenses	39,708
Net Investment Income	1,141,328
Realized Net Gain (Loss)	
Investment Securities Sold <sup>2,3</sup>	2,723,167
Futures Contracts	(101,085)
Swap Contracts	(210,653)
Realized Net Gain (Loss)	2,411,429
Change in Unrealized Appreciation (Depreciation)	
Investment Securities <sup>2</sup>	(32,270,214)
Futures Contracts	(24,737)
Swap Contracts	15,231
Change in Unrealized Appreciation (Depreciation)	(32,279,720)
Net Increase (Decrease) in Net Assets Resulting from Operations	(28,726,963)
Change in Unrealized Appreciation (Depreciation)	(32,279,720

<sup>1</sup> Dividends are net of foreign withholding taxes of \$11,000.

<sup>2</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 \$10,594,000, (\$447,000), \$2,000, and \$486,000, respectively. Purchases and sales are for temporary cash investment purposes.

 $<sup>3\,</sup>$  Includes \$4,073,598,000 of net gain (loss) resulting from in-kind redemptions.

# Statement of Changes in Net Assets

	Year Ende	d December 31,
	2022 (\$000)	2021 (\$000)
Increase (Decrease) in Net Assets		
Operations		
Net Investment Income	1,141,328	1,130,746
Realized Net Gain (Loss)	2,411,429	8,497,813
Change in Unrealized Appreciation (Depreciation)	(32,279,720)	2,395,353
Net Increase (Decrease) in Net Assets Resulting from Operations	(28,726,963)	12,023,912
Distributions		
Investor Shares	(2,370)	(4,470)
ETF Shares	(148,188)	(191,121)
Admiral Shares	(232,052)	(332,583)
Institutional Shares	(154,028)	(236,015)
Institutional Plus Shares	(131,076)	(169,310)
Institutional Select Shares	(248,096)	(319,405)
Total Distributions	(915,810)	(1,252,904)
Capital Share Transactions		
Investor Shares	(72,334)	(107,099)
ETF Shares	344,966	2,323,941
Admiral Shares	(1,252,838)	(743,562)
Institutional Shares	(1,209,959)	(1,373,546)
Institutional Plus Shares	(1,175,993)	3,042,375
Institutional Select Shares	3,290,411	(994,136)
Net Increase (Decrease) from Capital Share Transactions	(75,747)	2,147,973
Total Increase (Decrease)	(29,718,520)	12,918,981
Net Assets		
Beginning of Period	108,714,875	95,795,894
End of Period	78,996,355	108,714,875

#### **Investor Shares**

For a Share Outstanding			Year	Ended Dec	ember 31,
Throughout Each Period	2022	2021	2020	2019	2018
Net Asset Value, Beginning of Period	\$138.80	\$124.83	\$95.66	\$75.74	\$84.80
Investment Operations					
Net Investment Income <sup>1</sup>	1.280	1.216	.983	.962	1.193
Net Realized and Unrealized Gain (Loss) on Investments	(38.141)	14.134	29.401	20.089	(9.104
Total from Investment Operations	(36.861)	15.350	30.384	21.051	(7.911
Distributions					
Dividends from Net Investment Income	(1.009)	(1.380)	(1.214)	(1.131)	(1.149
Distributions from Realized Capital Gains	_	_	_	_	_
Total Distributions	(1.009)	(1.380)	(1.214)	(1.131)	(1.149
Net Asset Value, End of Period	\$100.93	\$138.80	\$124.83	\$95.66	\$75.74
Total Return <sup>2</sup>	-26.56%	12.31%	32.04%	27.87%	-9.47%
Ratios/Supplemental Data					
Net Assets, End of Period (Millions)	\$229	\$399	\$454	\$455	\$1,139
Ratio of Total Expenses to Average Net Assets	0.19% <sup>3</sup>	0.19%	0.19%	0.19%	0.19%
Ratio of Net Investment Income to Average Net Assets	1.14%	0.87%	1.04%	1.09%	1.38%
Portfolio Turnover Rate <sup>4</sup>	11%	19%	19%	13%	10%

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

## **ETF Shares**

For a Share Outstanding	Year Ended December 31,				cember 31,
Throughout Each Period	2022	2021	2020	2019	2018
Net Asset Value, Beginning of Period	\$182.81	\$164.43	\$126.02	\$99.77	\$111.72
Investment Operations					
Net Investment Income <sup>1</sup>	1.914	1.867	1.509	1.636	1.742
Net Realized and Unrealized Gain (Loss) on Investments	(50.278)	18.576	38.668	26.255	(12.036)
Total from Investment Operations	(48.364)	20.443	40.177	27.891	(10.294)
Distributions					
Dividends from Net Investment Income	(1.526)	(2.063)	(1.767)	(1.641)	(1.656)
Distributions from Realized Capital Gains	_	_	_	_	_
Total Distributions	(1.526)	(2.063)	(1.767)	(1.641)	(1.656)
Net Asset Value, End of Period	\$132.92	\$182.81	\$164.43	\$126.02	\$99.77
Total Return	-26.46%	12.44%	32.20%	28.04%	-9.37%
Ratios/Supplemental Data					
Net Assets, End of Period (Millions)	\$13,089	\$17,593	\$13,761	\$8,119	\$6,095
Ratio of Total Expenses to Average Net Assets	0.06%2	0.06%	0.06%	0.06%	0.07%
Ratio of Net Investment Income to Average Net Assets	1.31%	1.02%	1.20%	1.40%	1.50%
Portfolio Turnover Rate <sup>3</sup>	11%	19%	19%	13%	10%
Calculated based on average shares outstanding					

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

See accompanying Notes, which are an integral part of the Financial Statements.

<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 0.19%.

<sup>4</sup> Excludes the value of portfolio securities received or delivered as a result of in-kind purchases or redemptions of the fund's capital shares, including ETF Creation Units.

<sup>2</sup> The ratio of expenses to average net assets for the period net of reduction from custody fee offset arrangements was 0.06%.

<sup>3</sup> Excludes the value of portfolio securities received or delivered as a result of in-kind purchases or redemptions of the fund's capital shares, including ETF Creation Units.

#### Admiral Shares

For a Share Outstanding			Year	Ended Dec	ember 31,
Throughout Each Period	2022	2021	2020	2019	2018
Net Asset Value, Beginning of Period	\$138.70	\$124.75	\$95.61	\$75.70	\$84.76
Investment Operations					
Net Investment Income <sup>1</sup>	1.437	1.408	1.112	1.236	1.307
Net Realized and Unrealized Gain (Loss) on Investments	(38.129)	14.106	29.367	19.918	(9.111)
Total from Investment Operations	(36.692)	15.514	30.479	21.154	(7.804)
Distributions					
Dividends from Net Investment Income	(1.158)	(1.564)	(1.339)	(1.244)	(1.256)
Distributions from Realized Capital Gains	_	_	_	_	_
Total Distributions	(1.158)	(1.564)	(1.339)	(1.244)	(1.256)
Net Asset Value, End of Period	\$100.85	\$138.70	\$124.75	\$95.61	\$75.70
Total Return <sup>2</sup>	-26.47%	12.45%	32.21%	28.03%	-9.36%
Ratios/Supplemental Data					
Net Assets, End of Period (Millions)	\$20,012	\$29,054	\$26,784	\$22,391	\$17,644
Ratio of Total Expenses to Average Net Assets	0.06% <sup>3</sup>	0.06%	0.06%	0.06%	0.07%
Ratio of Net Investment Income to Average Net Assets	1.29%	1.01%	1.18%	1.39%	1.50%
Portfolio Turnover Rate <sup>4</sup>	11%	19%	19%	13%	10%

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

## Institutional Shares

For a Share Outstanding	Year Ended December				ember 31,
Throughout Each Period	2022	2021	2020	2019	2018
Net Asset Value, Beginning of Period	\$138.69	\$124.74	\$95.60	\$75.69	\$84.75
Investment Operations					
Net Investment Income <sup>1</sup>	1.439	1.413	1.125	1.239	1.319
Net Realized and Unrealized Gain (Loss) on Investments	(38.120)	14.115	29.364	19.925	(9.113)
Total from Investment Operations	(36.681)	15.528	30.489	21.164	(7.794)
Distributions					
Dividends from Net Investment Income	(1.169)	(1.578)	(1.349)	(1.254)	(1.266)
Distributions from Realized Capital Gains	_	_	_	_	_
Total Distributions	(1.169)	(1.578)	(1.349)	(1.254)	(1.266)
Net Asset Value, End of Period	\$100.84	\$138.69	\$124.74	\$95.60	\$75.69
Total Return	-26.46%	12.47%	32.23%	28.05%	-9.35%
Ratios/Supplemental Data					
Net Assets, End of Period (Millions)	\$12,983	\$19,456	\$18,659	\$14,927	\$12,443
Ratio of Total Expenses to Average Net Assets	$0.05\%^{2}$	0.05%	0.05%	0.05%	0.06%
Ratio of Net Investment Income to Average Net Assets	1.29%	1.01%	1.19%	1.40%	1.51%
Portfolio Turnover Rate <sup>3</sup>	11%	19%	19%	13%	10%
					,

<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 0.06%.

<sup>4</sup> Excludes the value of portfolio securities received or delivered as a result of in-kind purchases or redemptions of the fund's capital shares, including ETF Creation Units.

<sup>2</sup> The ratio of expenses to average net assets for the period net of reduction from custody fee offset arrangements was 0.05%.

<sup>3</sup> Excludes the value of portfolio securities received or delivered as a result of in-kind purchases or redemptions of the fund's capital shares, including ETF Creation Units.

## Institutional Plus Shares

For a Share Outstanding			Ye	ear Ended De	cember 31,
Throughout Each Period	2022	2021	2020	2019	2018
Net Asset Value, Beginning of Period	\$342.27	\$307.85	\$235.94	\$186.80	\$209.16
Investment Operations					
Net Investment Income <sup>1</sup>	3.597	3.595	2.798	3.078	3.208
Net Realized and Unrealized Gain (Loss) on Investments	(94.104)	34.757	72.466	49.178	(22.426)
Total from Investment Operations	(90.507)	38.352	75.264	52.256	(19.218)
Distributions					
Dividends from Net Investment Income	(2.913)	(3.932)	(3.354)	(3.116)	(3.142)
Distributions from Realized Capital Gains	_				_
Total Distributions	(2.913)	(3.932)	(3.354)	(3.116)	(3.142)
Net Asset Value, End of Period	\$248.85	\$342.27	\$307.85	\$235.94	\$186.80
Total Return	-26.45%	12.48%	32.24%	28.07%	-9.35%
Ratios/Supplemental Data					
Net Assets, End of Period (Millions)	\$10,446	\$15,973	\$11,665	\$9,486	\$7,559
Ratio of Total Expenses to Average Net Assets	0.04%2	0.04%	0.04%	0.04%	0.05%
Ratio of Net Investment Income to Average Net Assets	1.31%	1.04%	1.20%	1.41%	1.52%
Portfolio Turnover Rate <sup>3</sup>	11%	19%	19%	13%	10%
1. Coloulated based on average oberes outstanding					

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

## Institutional Select Shares

For a Share Outstanding	Year Ended December 31,				cember 31,
Throughout Each Period	2022	2021	2020	2019	2018
Net Asset Value, Beginning of Period	\$222.86	\$200.45	\$153.63	\$121.63	\$136.19
Investment Operations					
Net Investment Income <sup>1</sup>	2.421	2.352	1.855	2.059	2.184
Net Realized and Unrealized Gain (Loss) on Investments	(61.319)	22.661	47.179	31.999	(14.655)
Total from Investment Operations	(58.898)	25.013	49.034	34.058	(12.471)
Distributions					
Dividends from Net Investment Income	(1.922)	(2.603)	(2.214)	(2.058)	(2.089)
Distributions from Realized Capital Gains	_				_
Total Distributions	(1.922)	(2.603)	(2.214)	(2.058)	(2.089)
Net Asset Value, End of Period	\$162.04	\$222.86	\$200.45	\$153.63	\$121.63
Total Return	-26.44%	12.50%	32.27%	28.09%	-9.32%
Ratios/Supplemental Data					
Net Assets, End of Period (Millions)	\$22,239	\$26,240	\$24,472	\$19,166	\$13,390
Ratio of Total Expenses to Average Net Assets	0.02%2	0.02%	0.02%	0.02%	0.02%
Ratio of Net Investment Income to Average Net Assets	1.36%	1.05%	1.22%	1.44%	1.55%
Portfolio Turnover Rate <sup>3</sup>	11%	19%	19%	13%	10%

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

<sup>2</sup> The ratio of expenses to average net assets for the period net of reduction from custody fee offset arrangements was 0.04%.

<sup>3</sup> Excludes the value of portfolio securities received or delivered as a result of in-kind purchases or redemptions of the fund's capital shares, including ETF Creation Units.

<sup>2</sup> The ratio of expenses to average net assets for the period net of reduction from custody fee offset arrangements was 0.02%.

<sup>3</sup> Excludes the value of portfolio securities received or delivered as a result of in-kind purchases or redemptions of the fund's capital shares, including FTF Creation Units.

## Notes to Financial Statements

Vanguard Extended Market Index Fund is registered under the Investment Company Act of 1940 as an open-end investment company, or mutual fund. The fund offers six classes of shares: Investor Shares, ETF Shares, Admiral Shares, Institutional Shares, Institutional Plus Shares, and Institutional Select Shares. Each of the share classes has different eligibility and minimum purchase requirements, and is designed for different types of investors. ETF Shares are listed for trading on NYSE Arca; they can be purchased and sold through a broker.

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.

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. Equity securities are valued at the latest quoted sales prices or official closing prices taken from the primary market in which each security trades; such securities not traded on the valuation date are valued at the mean of the latest quoted bid and asked prices. 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. Investments in Vanguard Market Liquidity Fund are valued at that fund's net asset value. Bonds and 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.
- 2. Futures Contracts: The fund uses index futures contracts to a limited extent, with the objectives of maintaining full exposure to the stock market, maintaining liquidity, and minimizing transaction costs. The fund may purchase futures contracts to immediately invest incoming cash in the market, or sell futures in response to cash outflows, thereby simulating a fully invested position in the underlying index while maintaining a cash balance for liquidity. The primary risks associated with the use of futures contracts are imperfect correlation between changes in market values of stocks 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, 2022, the fund's average investments in long and short futures contracts represented 1% and 0% of net assets, respectively, based on the average of the notional amounts at each quarter-end during the period.

3. Swap Contracts: The fund has entered into equity swap contracts to earn the total return on selected reference stocks in the fund's target index. Under the terms of the swaps, the fund receives the total return on the referenced stock (i.e., receiving the increase or paying the decrease in value of the selected reference stock and receiving the equivalent of any dividends in respect of the selected referenced stock) over a specified period of time, applied to a notional amount that represents the value of a designated number of shares of the selected reference stock at the beginning of the equity swap contract. The fund also pays a floating rate that is based on short-term interest rates, applied to the notional amount. At the same time, the fund generally invests an amount approximating the notional amount of the swap in high-quality temporary cash investments.

A risk associated with all types of swaps is the possibility that a counterparty may default on its obligation to pay net amounts due to the fund. The fund's maximum amount subject to counterparty risk is the unrealized appreciation on the swap contract. The fund mitigates its counterparty risk by entering into swaps only with a diverse group of pregualified counterparties, monitoring their financial strength, entering into master netting arrangements with its counterparties, and requiring its counterparties to transfer collateral as security for their performance. In the absence of a default, the collateral pledged or received by the fund cannot be repledged, resold, or rehypothecated. In the event of a counterparty's default (including bankruptcy), the fund may terminate any swap contracts with that counterparty, determine the net amount owed by either party in accordance with its master netting arrangements, and sell or retain any collateral held up to the net amount owed to the fund under the master netting arrangements. The swap contracts contain provisions whereby a counterparty may terminate open contracts if the fund's net assets decline below a certain level, triggering a payment by the fund if the fund is in a net liability position at the time of the termination. The payment amount would be reduced by any collateral the fund has pledged. Any securities pledged as collateral for open contracts are noted in the Schedule of Investments. The value of collateral received or pledged is compared daily to the value of the swap contracts exposure with each counterparty, and any difference, if in excess of a specified minimum transfer amount, is adjusted and settled within two business days.

The notional amounts of swap contracts are not recorded in the Statement of Assets and Liabilities. Swaps are valued daily based on market quotations received from independent pricing services or recognized dealers and the change in value is recorded in the Statement of Assets and Liabilities as an asset (liability) and in the Statement of Operations as unrealized appreciation (depreciation) until periodic payments are made or the termination of the swap, at which time realized gain (loss) is recorded.

During the year ended December 31, 2022, the fund's average amounts of investments in total return swaps represented less than 1% of net assets, based on the average of notional amounts at each quarter-end during the period.

- 4. 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.
- 5. 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.
- 6. Securities Lending: To earn additional income, the fund lends its securities to qualified institutional borrowers. Security loans are subject to termination by the fund at any time, and are required to be secured at all times by collateral in an amount at least equal to the market value of securities loaned. Daily market fluctuations could cause the value of loaned securities to be more or less than the value of the collateral received. When this occurs, the collateral is adjusted and settled before the opening of the market on the next business day. The fund further mitigates its counterparty risk by entering into securities lending transactions only with a diverse group of prequalified counterparties, monitoring their financial strength, and entering into master securities lending agreements with its counterparties. The master securities lending agreements provide that, in the event of a counterparty's default (including bankruptcy), the fund may terminate any loans with that borrower, determine the net amount owed, and sell or retain the collateral up to the net amount owed to the fund; however, such actions may be subject to legal proceedings. While collateral mitigates counterparty risk, in the event of a default, the fund may experience delays and costs in recovering the securities loaned. The fund invests cash collateral received in Vanguard Market Liquidity Fund, and records a liability in the Statement of Assets and Liabilities for the return of the collateral, during the period the securities are on loan. Collateral investments in Vanguard Market Liquidity Fund are subject to market appreciation or depreciation. Securities lending income represents fees charged to borrowers plus income earned on invested cash collateral, less expenses associated with the loan. During the term of the loan, the fund is entitled to all distributions made on or in respect of the loaned securities.
- 7. Credit Facilities and Interfund Lending Program: The fund and certain other funds managed by The Vanguard Group ("Vanguard") participate in a \$4.4 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, 2022, the fund did not utilize the credit facilities or the Interfund Lending Program.

8. Other: Dividend income is recorded on the ex-dividend date. Non-cash dividends included in income, if any, are recorded at the fair value of the securities received. 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. 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, 2022, the fund had contributed to Vanguard capital in the amount of \$3,078,000, representing less than 0.01% of the fund's net assets and 1.23% of Vanguard's capital received pursuant to the FSA. The fund's trustees and officers are also directors and employees, respectively, of Vanguard.

- C. The fund's custodian bank has agreed to reduce its fees when the fund maintains cash on deposit in the non-interest-bearing custody account. For the year ended December 31, 2022, custodian fee offset arrangements reduced the fund's expenses by \$157,000 (an annual rate of less than 0.01% of average net assets).
- **D.** 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, 2022, based on the inputs used to value them:

	Level 1	Level 2	Level 3	Total
	(\$000)	(\$000)	(\$000)	(\$000)
Investments				
Assets				
Common Stocks	78,230,244	_	6,590	78,236,834
Preferred Stocks	140	_	_	140
Temporary Cash Investments	2,024,286	_	_	2,024,286
Total	80,254,670	_	6,590	80,261,260
Derivative Financial Instruments				
Assets				
Swap Contracts	_	2,158	_	2,158
Liabilities				
Futures Contracts <sup>1</sup>	13,940	_	_	13,940
Swap Contracts	_	8,717	_	8,717
Total	13,940	8,717	_	22,657

<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.

E. Permanent differences between book-basis and tax-basis components of net assets 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. As of period end, permanent differences primarily attributable to the accounting for applicable in-kind redemptions, passive foreign investment companies, and swap agreements were reclassified between the following accounts:

	Amount (\$000)
Paid-in Capital	4,072,438
Total Distributable Earnings (Loss)	(4,072,438)

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 the deferral of losses from wash sales; the recognition of unrealized gains or losses from certain derivative contracts; the recognition of unrealized gains from passive foreign investment companies; the deferral of qualified late-year losses; and the classification of securities for tax purposes. 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	
Undistributed Long-Term Gains	
Capital Loss Carryforwards	(4,466,238)
Qualified Late-Year Losses	(22,227)
Net Unrealized Gains (Losses)	1,442,122

The tax character of distributions paid was as follows:

	Year Ended I	Year Ended December 31,		
	2022 Amount (\$000)	2021 Amount (\$000)		
Ordinary Income*	915,810	1,252,904		
Long-Term Capital Gains	_	_		
Total	915,810	1,252,904		

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

As of December 31, 2022, 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	78,819,138
Gross Unrealized Appreciation	22,926,599
Gross Unrealized Depreciation	(21,484,477)
Net Unrealized Appreciation (Depreciation)	1,442,122

F. During the year ended December 31, 2022, the fund purchased \$17,888,595,000 of investment securities and sold \$17,755,526,000 of investment securities, other than temporary cash investments. Purchases and sales include \$8,012,541,000 and \$7,644,926,000, respectively, in connection with in-kind purchases and redemptions of the fund's capital shares.

The fund purchased securities from and sold securities to other Vanguard funds or accounts managed by Vanguard or its affiliates, in accordance with procedures adopted by the board of trustees in compliance with Rule 17a-7 of the Investment Company Act of 1940. For the year ended December 31, 2022, such purchases were \$648,893,000 and sales were \$1,043,802,000, resulting in net realized loss of \$504,006,000; these amounts, other than temporary cash investments, are included in the purchases and sales of investment securities noted above.

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

	Year Ended December					
		2022		2021		
	Amount (\$000)	Shares (000)	Amount (\$000)	Shares (000)		
Investor Shares						
Issued	10,368	92	39,158	282		
Issued in Lieu of Cash Distributions	2,370	23	4,470	33		
Redeemed	(85,072)	(721)	(150,727)	(1,083)		
Net Increase (Decrease)—Investor Shares	(72,334)	(606)	(107,099)	(768)		
ETF Shares						
Issued	7,785,642	54,535	15,985,886	87,247		
Issued in Lieu of Cash Distributions	_	_	_	_		
Redeemed	(7,440,676)	(52,300)	(13,661,945)	(74,700)		
Net Increase (Decrease)—ETF Shares	344,966	2,235	2,323,941	12,547		
Admiral Shares						
Issued	2,057,224	18,437	3,642,653	26,360		
Issued in Lieu of Cash Distributions	193,334	1,884	279,124	2,035		
Redeemed	(3,503,396)	(31,355)	(4,665,339)	(33,620)		
Net Increase (Decrease)—Admiral Shares	(1,252,838)	(11,034)	(743,562)	(5,225)		
Institutional Shares						
Issued	2,414,097	21,403	4,149,788	30,111		
Issued in Lieu of Cash Distributions	143,746	1,400	221,019	1,611		
Redeemed	(3,767,802)	(34,333)	(5,744,353)	(41,017)		
Net Increase (Decrease)—Institutional Shares	(1,209,959)	(11,530)	(1,373,546)	(9,295)		

			Year Ended December 31,		
		2022		2021	
	Amount (\$000)	Shares (000)	Amount (\$000)	Shares (000)	
Institutional Plus Shares					
Issued	3,581,013	13,375	5,116,528	14,794	
Issued in Lieu of Cash Distributions	125,346	495	161,853	477	
Redeemed	(4,882,352)	(18,563)	(2,236,006)	(6,495)	
Net Increase (Decrease)—Institutional Plus Shares	(1,175,993)	(4,693)	3,042,375	8,776	
Institutional Select Shares					
Issued	4,415,226	25,617	1,654,421	7,468	
Issued in Lieu of Cash Distributions	248,096	1,506	319,405	1,448	
Redeemed	(1,372,911)	(7,624)	(2,967,962)	(13,263)	
Net Increase (Decrease)—Institutional Select Shares	3.290.411	19,499	(994,136)	(4,347)	

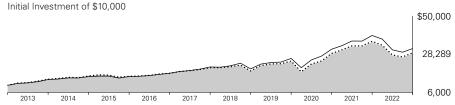
H. Management has determined that no events or transactions occurred subsequent to December 31, 2022, that would require recognition or disclosure in these financial statements.

## Mid-Cap Index 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, 2012, Through December 31, 2022



#### Average Annual Total Returns Periods Ended December 31, 2022

-	One Year	Five Years	Ten Years	Final Value of a \$10,000 Investment
Mid-Cap Index Fund Investor Shares	-18.80%	7.19%	10.96%	\$28,289
······ Spliced Mid-Cap Index	-18.68	7.34	11.13	28,728
Dow Jones U.S. Total Stock Market Float Adjusted Index	-19.53	8.65	12.03	31,151

Spliced Mid-Cap Index: MSCI US Mid Cap 450 Index through January 30, 2013; CRSP US Mid Cap Index thereafter.

	One Year	Five Years	Ten Years	Final Value of a \$10,000 Investment
Mid-Cap Index Fund ETF Shares Net Asset Value	-18.68%	7.33%	11.10%	\$28,650
Mid-Cap Index Fund ETF Shares Market Price	-18.69	7.32	11.10	28,641
Spliced Mid-Cap Index	-18.68	7.34	11.13	28,728
Dow Jones U.S. Total Stock Market Float Adjusted Index	-19.53	8.65	12.03	31,151

	One Year	Five Years	Ten Years	Final Value of a \$10,000 Investment
Mid-Cap Index Fund Admiral Shares	-18.71%	7.32%	11.10%	\$28,640
Spliced Mid-Cap Index	-18.68	7.34	11.13	28,728
Dow Jones U.S. Total Stock Market Float Adjusted Index	-19.53	8.65	12.03	31,151

## Average Annual Total Returns Periods Ended December 31, 2022

-	One Year	Five Years	Ten Years	Final Value of a \$5,000,000 Investment
Mid-Cap Index Fund Institutional Shares	-18.70%	7.32%	11.11 %	\$14,335,635
Spliced Mid-Cap Index	-18.68	7.34	11.13	14,364,070
Dow Jones U.S. Total Stock Market Float Adjusted Index	-19.53	8.65	12.03	15,575,514

	One Year	Five Years	Ten Years	Final Value of a \$100,000,000 Investment
Mid-Cap Index Fund Institutional Plus Shares	-18.69%	7.34%	11.12%	\$287,070,500
Spliced Mid-Cap Index	-18.68	7.34	11.13	287,281,390
Dow Jones U.S. Total Stock Market Float Adjusted Index	-19.53	8.65	12.03	311,510,280

## Cumulative Returns of ETF Shares: December 31, 2012, Through December 31, 2022

	One Year	Five Years	Ten Years
Mid-Cap Index Fund ETF Shares Market Price	-18.69%	42.36%	186.41%
Mid-Cap Index Fund ETF Shares Net Asset Value	-18.68	42.40	186.50
Spliced Mid-Cap Index	-18.68	42.48	187.28

For the ETF Shares, the market price is determined by the midpoint of the bid-offer spread as of the closing time of the New York Stock Exchange (generally 4 p.m., Eastern time). The net asset value is also determined as of the NYSE closing time. For more information about how the ETF Shares' market prices have compared with their net asset value, visit vanguard.com, select your ETF, click on Price, and then scroll down to the Premium/Discount chart. The ETF premium/discount chart there shows the percentage and days on which the ETF Shares' market price was above or below the NAV.

## **Fund Allocation**

As of December 31, 2022

Basic Materials	3.9%
Consumer Discretionary	13.0
Consumer Staples	5.0
Energy	6.7
Financials	13.0
Health Care	11.0
Industrials	15.7
Real Estate	9.0
Technology	13.1
Telecommunications	1.7
Utilities	7.9

The table reflects the fund's investments, except for short-term investments and derivatives. Sector categories are based on the Industry Classification Benchmark ("ICB"), except for the "Other" category (if applicable), which includes securities that have not been provided an ICB classification as of the effective reporting period.

The fund may invest in derivatives (such as futures and swap contracts) for various reasons, including, but not limited to, attempting to remain fully invested and tracking its target index as closely as possible.

## **Financial Statements**

## Schedule of Investments

As of December 31, 2022

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.

	Shares	Market Value* (\$000)		Shares	Market Value* (\$000)
Common Stocks (99.1%)		(4000)	* Caesars Entertainment Inc.	4,739,512	197,164
Basic Materials (3.9%)			* Las Vegas Sands Corp.	3,998,059	192,187
Nucor Corp.	5.970.654	786,992	Paramount Global Class B	11,313,259	190,968
Fastenal Co.	13,333,531	630,943	*,1 Carnival Corp.	23,286,340	187,688
International Flavors & Fragrances Inc.	5,935,747	622,304	Hasbro Inc.	3,050,986	186,141
Albemarle Corp.	2,727,514	591,489	Interpublic Group of Cos. Inc.	4,517,834	150,489
LyondellBasell Industries NV Class A	6,066,352	503,689	* Liberty Media CorpLiberty SiriusXM Class C	3,546,735	138,784
CF Industries Holdings Inc.	4,570,081	389,371	Pool Corp.	431,327	130,403
FMC Corp.	2,935,009	366,289	Vail Resorts Inc.	468,831	111,746
Mosaic Co.	7,917,261	347,330	Bath & Body Works Inc.	2,522,423	106,295
Avery Dennison Corp.	1,882,779	340,783	* American Airlines Group Inc.	7,556,087	96,113
International Paper Co.	8,270,450	286,406	Warner Music Group Corp. Class A	2,712,017	94,975
Celanese Corp. Class A	2,269,151	231,998	*,1 Lucid Group Inc.	13,676,289	93,409
Eastman Chemical Co.	2,790,167	227,231	Whirlpool Corp.	633,668	89,639
Westlake Corp.	370,708	38,012	Fox Corp. Class B	3,081,254	87,662
'	· -	5,362,837	Lear Corp.	687,195	85,226
Consumer Discretionary (12.9%)		5,302,637	*.1 Chewy Inc. Class A	2,074,673	76,929
* Dollar Tree Inc.	4,891,177	691,808	* Endeavor Group Holdings Inc. Class A	3,028,922	68,272
DR Horton Inc.	7,217,058	643,329	* Liberty Media CorpLiberty SiriusXM Class A	1,726,256	67,859
* Copart Inc.	9,981,427	607,769	Sinds Aivi Floralings inc.	11,094,539	64,792
* Aptiv plc	6,313,272	587,955	Lennar Corp. Class B	212,879	15,919
Tractor Supply Co.	2,572,086	578,642	News Corp. Class B	355,310	6,552
Genuine Parts Co.	3,286,608	570,042	Paramount Global Class A	194,789	3,820
* Ulta Beauty Inc.	1,192,678	559,449			17,611,157
Lennar Corp. Class A	6,035,912	546,250	Consumer Staples (4.9%)		
* AutoZone Inc.	221,009	545,048	Corteva Inc.	16,709,693	982,196
eBay Inc.	12,635,686	524,002	Kroger Co.	14,996,913	668,562
* Delta Air Lines Inc.	14,941,728	490,985	AmerisourceBergen Corp.	3,830,605	634,770
* Southwest Airlines Co.	13,826,215	465,529	Archer-Daniels-Midland Co.	6,394,988	593,775
* Trade Desk Inc. Class A	10,372,752	465,010	McCormick & Co. Inc. (Non-Voting)	5,835,914	483,739
* Chipotle Mexican Grill Inc. Class A	322,786	447,862	Church & Dwight Co. Inc.	5,679,812	457,850
* Take-Two Interactive Software Inc.	3,909,444	407,090	Conagra Brands Inc.	11,163,643	432,033
Hilton Worldwide Holdings Inc.	3,150,012	398,035	Kellogg Co.	5,962,000	424,733
Darden Restaurants Inc.	2,851,101	394,393	Tyson Foods Inc. Class A	6,745,263	419,893
Omnicom Group Inc.	4,751,231	387,558	Clorox Co.	2,869,068	402,616
Best Buy Co. Inc.	4,720,747	378,651	J M Smucker Co.	2,360,553	374,053
* Etsy Inc.	2,928,576	350,785	Hormel Foods Corp.	5,900,359	268,761
Garmin Ltd.	3,565,427	329,053	Campbell Soup Co.	4,530,702	257,117
* NVR Inc.	70,606	325,676	Lamb Weston Holdings Inc.	1,672,265	149,434
LKQ Corp.	5,902,055	315,229	Molson Coors Beverage Co. Class B	2,094,293	107,898
* Expedia Group Inc.	3,509,246	307,410	Albertsons Cos. Inc. Class A	4,354,363	90,309
* Burlington Stores Inc.	1,515,901	307,364	* Olaplex Holdings Inc.	1,132,684	5,901
* United Airlines Holdings Inc.	7,597,457	286,424			6,753,640
Domino's Pizza Inc.	825,200	285,849	Energy (6.7%)		
* Live Nation Entertainment Inc.	3,758,093	262,089	Devon Energy Corp.	15,213,883	935,806
* Royal Caribbean Cruises Ltd.	5,043,691	249,310	Hess Corp.	6,457,713	915,833
* Warner Bros Discovery Inc.	25,468,365	241,440	Cheniere Energy Inc.	5,786,696	867,773
PulteGroup Inc.	5,297,576	241,199	* Enphase Energy Inc.	3,163,826	838,287
MGM Resorts International	7,143,820	239,532	Halliburton Co.	19,023,757	748,585
Rollins Inc.	6,298,074	230,132	Baker Hughes Co. Class A	23,313,074	688,435
VF Corp.	8,131,783	224,518	ONEOK Inc.	10,404,300	683,563
* CarMax Inc.	3,674,350	223,731	Phillips 66	5,502,511	572,701
BorgWarner Inc.	5,444,855	219,155	Valero Energy Corp.	4,488,589	569,422
* ROBLOX Corp. Class A	7,665,939	218,173	Diamondback Energy Inc.	4,098,009	560,526
Fox Corp. Class A	7,025,520	213,365	Williams Cos. Inc.	14,187,288	466,762
News Corp. Class A	11,290,279	205,483	Coterra Energy Inc.	17,417,631	427,951
Advance Auto Parts Inc.	1,377,839	202,584	Marathon Oil Corp.	14,791,666	400,410

	Shares	Market Value* (\$000)		Shares	Market Value* (\$000)
Texas Pacific Land Corp.	71,634	167,927	STERIS plc	2,325,065	429,416
* Plug Power Inc.	13,554,251	167,666	* Hologic Inc.	5,716,425	427,646
EQT Corp.	3,840,740	129,932	* Seagen Inc.	3,243,617	416,837
	•	9,141,579	Quest Diagnostics Inc.	2,648,256	414,293
Financials (12.9%)		2,:::,::	PerkinElmer Inc.	2,942,444	412,589
Arthur J Gallagher & Co.	4,906,543	925,080	West Pharmaceutical Services Inc.	1,724,570	405,878
MSCI Inc. Class A	1,768,842	822,812	* IDEXX Laboratories Inc.	962,879	392,816
Ameriprise Financial Inc.	2,477,073	771,286	Cooper Cos. Inc.	1,149,754	380,189
Discover Financial Services	6,363,409	622,532	* Align Technology Inc.	1,725,533	363,915
Willis Towers Watson plc	2,519,914	616,321	* Incyte Corp.	4,397,257	353,188
M&T Bank Corp.	4,019,039	583,002	Royalty Pharma plc Class A  * Avantor Inc.	8,718,426 14,928,527	344,552 314,843
T. Rowe Price Group Inc.	5,204,310	567,582	Viatris Inc.	28,264,962	314,589
Hartford Financial Services Group Inc.	7,406,758	561,654	Baxter International Inc.	5,873,020	299,348
Nasdaq Inc.	9,150,283	561,370	Teleflex Inc.	1,090,718	272,276
American International Group Inc.	8,650,306	547,045	* Henry Schein Inc.	3,151,909	251,743
Fifth Third Bancorp	15,984,035	524,436	* Bio-Rad Laboratories Inc. Class A	489,164	205,689
First Republic Bank	4,259,714	519,217	* Catalent Inc.	3,975,465	178,936
* Arch Capital Group Ltd. Apollo Global Management Inc.	8,183,063 7,997,748	513,733 510,176	* Charles River Laboratories International Inc.	591,535	128,895
Raymond James Financial Inc.	4,507,604	481,638	Universal Health Services Inc. Class B	708,644	99,841
Principal Financial Group Inc.	5,698,143	478,188	* DaVita Inc.	576,403	43,040
Huntington Bancshares Inc.	33,601,874	473,786		-	14,904,906
Regions Financial Corp.	21,764,241	469,237	Industrials (15.5%)		1-1,00-1,000
State Street Corp.	5,871,308	455,437	Cintas Corp.	2,007,052	906,425
Citizens Financial Group Inc.	11,471,198	451,621	Carrier Global Corp.	19,462,747	802,838
Northern Trust Corp.	4,603,975	407,406	TransDigm Group Inc.	1,202,627	757,234
* Markel Corp.	297,121	391,454	* Mettler-Toledo International Inc.	518,910	750,058
KeyCorp	21,694,408	377,917	AMETEK Inc.	5,345,430	746,864
Cincinnati Financial Corp.	3,662,038	374,956	PACCAR Inc.	7,285,474	721,043
Broadridge Financial Solutions Inc.	2,735,849	366,959	* Keysight Technologies Inc.	4,154,779	710,758
FactSet Research Systems Inc.	885,891	355,428	Rockwell Automation Inc.	2,673,673	688,658
W R Berkley Corp.	4,629,835	335,987	Old Dominion Freight Line Inc.	2,314,775	656,887
* SVB Financial Group	1,374,357	316,295	Verisk Analytics Inc. Class A	3,640,581	642,271
Choe Global Markets Inc.	2,466,732	309,501	Ferguson plc	4,881,843	619,848
Everest Re Group Ltd.	910,713	301,692	WW Grainger Inc.	1,058,767	588,939
Loews Corp. Ares Management Corp. Class A	4,692,860	273,735 248,383	* United Rentals Inc. Equifax Inc.	1,614,028	573,658
Equitable Holdings Inc.	3,629,203 8,604,649	248,383	Fortive Corp.	2,851,156 8,238,358	554,151 529,315
MarketAxess Holdings Inc.	831,405	240,953	Vulcan Materials Co.	2,940,023	514,827
Annaly Capital Management Inc.	10,878,809	229,325	Ingersoll Rand Inc.	9,429,465	492,690
Fidelity National Financial Inc.	6,011,504	226,153	Martin Marietta Materials Inc.	1,445,849	488,654
LPL Financial Holdings Inc.	879,199	190,056	Quanta Services Inc.	3,327,119	474,114
Franklin Resources Inc.	6,969,522	183,856	* Waters Corp.	1,383,593	473,991
Tradeweb Markets Inc. Class A	2,582,867	167,706	Xylem Inc.	4,197,225	464,087
Interactive Brokers Group Inc. Class A	2,272,490	164,415	Dover Corp.	3,263,672	441,934
Brown & Brown Inc.	2,634,304	150,076	* Teledyne Technologies Inc.	1,091,676	436,572
Globe Life Inc.	1,017,827	122,699	Westinghouse Air Brake Technologies Corp.	4,017,547	400,991
*,1 Coinbase Global Inc. Class A	3,327,020	117,743	Expeditors International of Washington Inc.	3,707,105	385,242
Ally Financial Inc.	3,126,393	76,440	Otis Worldwide Corp.	4,843,437	379,290
Corebridge Financial Inc.	1,499,848	30,087	Ball Corp.	7,313,358	374,005
<sup>1</sup> Rocket Cos. Inc. Class A	2,690,101	18,831	Jacobs Solutions Inc.	2,943,734	353,454
		17,672,077	Synchrony Financial	10,476,722	344,265
Health Care (10.9%)			Textron Inc.	4,854,610	343,706
* Centene Corp.	13,176,462	1,080,602	JB Hunt Transport Services Inc.	1,926,054	335,827
* Dexcom Inc.	8,991,736	1,018,224	Global Payments Inc.	3,150,846	312,942
* IQVIA Holdings Inc.	4,322,528	885,643	<ul><li>Zebra Technologies Corp. Class A</li><li>FleetCor Technologies Inc.</li></ul>	1,203,492 1,629,238	308,587 299,258
ResMed Inc.	3,409,593	709,639	* Trimble Inc.	5,734,781	289,256
* Alnylam Pharmaceuticals Inc.	2,863,949	680,617	Snap-on Inc.	1,236,010	282,416
Zimmer Biomet Holdings Inc.	4,885,561	622,909	Packaging Corp. of America	2,151,718	275,226
* Horizon Therapeutics plc	5,276,312	600,444	Stanley Black & Decker Inc.	3,559,103	267,360
* Veeva Systems Inc. Class A	3,271,673	527,983	TransUnion	4,492,874	254,971
Laboratory Corp. of America Holdings	2,063,495	485,912	* Bill.com Holdings Inc.	2,334,332	254,349
* Insulet Corp.	1,617,303	476,118	CH Robinson Worldwide Inc.	2,737,169	250,615
Cardinal Health Inc.  * Molina Healthcare Inc.	6,105,078	469,297	Masco Corp.	5,244,237	244,749
* BioMarin Pharmaceutical Inc.	1,359,842 4,328,462	449,047 447,952	Crown Holdings Inc.	2,789,135	229,295
DIOIVIAIIII FIIAITTIACEULICAI IIIC.	4,320,402	447,302	Westrock Co.	5,917,099	208,045

		Markat			Markat
		Market Value*			Market Value*
	Shares	(\$000)		Shares	(\$000)
HEICO Corp. Class A	1,717,637	205,859	* Cloudflare Inc. Class A	6,288,733	284,314
Jack Henry & Associates Inc.	848,157	148,902	Gen Digital Inc.	12,906,701	276,591
Hubbell Inc. Class B	624,410	146,537	* Match Group Inc.	6,512,463	270,202
HEICO Corp.	950,748	146,073	* GoDaddy Inc. Class A	3,605,780	269,784
Fortune Brands Innovations Inc.	1,510,859	86,285	SS&C Technologies Holdings Inc.	4,979,120	259,213
* Generac Holdings Inc.	736,934	74,180	* DocuSign Inc. Class A	4,614,723	255,748
	-	21,238,196	* Palantir Technologies Inc. Class A	38,853,490	249,439
Real Estate (8.9%)		21,200,100	Seagate Technology Holdings plc	4,574,349	240,657
Realty Income Corp.	14,583,152	925,009	* ZoomInfo Technologies Inc. Class A	7,978,169	240,223
* CoStar Group Inc.	9,467,110	731,618	* Western Digital Corp.	7,386,321	233,038
Welltower Inc.	10,998,583	720,957	* Okta Inc. Class A	3,354,589	229,219
SBA Communications Corp. Class A	2,513,283	704,498	* Zscaler Inc.	2,011,988	225,141
Digital Realty Trust Inc.	6,695,011	671,309	* Qorvo Inc.	2,357,625	213,695
VICI Properties Inc.	20,563,605	666,261	* Black Knight Inc.	3,446,687	212,833
Alexandria Real Estate Equities Inc.	3,821,372	556,659	Shap inc. Class A	23,698,058	212,098
* CBRE Group Inc. Class A	6,993,958	538,255	*.1 Unity Software Inc.	7,205,118	205,994
Weyerhaeuser Co.	17,135,294	531,194	* Twilio Inc. Class A	4,058,186	198,689
AvalonBay Communities Inc.	3,257,386	526,133	Bentley Systems Inc. Class B	5,148,996	190,307
Equity Residential	8,360,051	493,243	Leidos Holdings Inc.	1,589,224	167,171
Extra Space Storage Inc.	3,118,893	459,039	* F5 Inc.	701,870	100,725
Simon Property Group Inc.	3,807,499	447,305	* Dropbox Inc. Class A	3,097,329	69,318
Invitation Homes Inc.	14,240,569	422,090	loast inc. Class A	3,499,355	63,093
Mid-America Apartment Communities Inc.	2,685,195	421,549	* UiPath Inc. Class A	3,531,873	44,890
Ventas Inc.	9,310,779	419,451	* AppLovin Corp. Class A	2,045,013	21,534
Sun Communities Inc.	2,880,822	411,958			17,753,719
WP Carey Inc.	4,846,568	378,759	Telecommunications (1.7%)		
Iron Mountain Inc.	6,773,637	337,666	Motorola Solutions Inc.	3,890,803	1,002,699
Essex Property Trust Inc.	1,505,709	319,090	* Arista Networks Inc.	5,334,861	647,385
Healthpeak Properties Inc.	12,499,462	313,362	* Liberty Broadband Corp. Class C	2,812,634	214,520
UDR Inc.	7,569,829	293,179	Juniper Networks Inc.	3,773,473	120,600
Camden Property Trust	2,477,121	277,140	* Roku Inc. Class A	2,833,328	115,316
Boston Properties Inc.	3,280,519	221,697	* DISH Network Corp. Class A	5,776,746	81,106
Host Hotels & Resorts Inc.	8,313,278	133,428	Lumen Technologies Inc.	12,033,956	62,817
Regency Centers Corp.	1,989,580	124,349	* Liberty Broadband Corp. Class A	372,630	28,264
* Zillow Group Inc. Class C	3,654,166	117,701			2,272,707
* Zillow Group Inc. Class A	918,943	28,680	Utilities (7.8%)		
		12,191,579	* PG&E Corp.	48,770,608	793,010
Technology (13.0%)			Waste Connections Inc.	5,980,703	792,802
Amphenol Corp. Class A	13,837,722	1,053,604	Consolidated Edison Inc.	8,251,634	786,463
* Cadence Design Systems Inc.	6,386,050	1,025,855	WEC Energy Group Inc.	7,342,443	688,427
Microchip Technology Inc.	12,801,213	899,285	Eversource Energy	8,107,979	679,773
* ON Semiconductor Corp.	10,068,154	627,951	Constellation Energy Corp.	7,604,175	655,556
* Gartner Inc.	1,747,842	587,520	American Water Works Co. Inc.	4,232,778	645,160
Corning Inc.	17,723,123	566,077	Edison International	8,890,832	565,635
CDW Corp.	3,152,154	562,912	Ameren Corp.	6,001,240	533,630
* ANSYS Inc.	2,029,775	490,373	Entergy Corp.	4,737,948	533,019
Hewlett Packard Enterprise Co.	29,966,148	478,260	FirstEnergy Corp.	12,647,964	530,456
* Datadog Inc. Class A	6,123,770	450,097	PPL Corp.	16,265,897	475,290
* Atlassian Corp. Class A	3,453,288	444,369	DTE Energy Co.	3,835,632	450,802
* VeriSign Inc.	2,095,442	430,488	AES Corp.	15,557,457	447,432
* EPAM Systems Inc.	1,272,612	417,086	CenterPoint Energy Inc.	14,660,476	439,668
Fortinet Inc. Paycom Software Inc.	7,734,457 1,186,315	378,138	CMS Energy Corp.	6,760,972	428,172 335,800
Marvell Technology Inc.	9,936,966	368,125 368,065	Evergy Inc. Alliant Energy Corp.	5,336,082 5,837,031	322,263
Monolithic Power Systems Inc.	1,038,863	367,352	NiSource Inc.	9,443,942	258,953
Skyworks Solutions Inc.	3,724,229	339,389	Vistra Corp.	9,253,762	214,687
* Pinterest Inc. Class A	13,662,358	331,722	Avangrid Inc.	1,798,079	77,281
* Zoom Video Communications Inc. Class A	4,864,790	329,541	, wangna mo.	1,700,070	
* DoorDash Inc. Class A	6,698,305	327,011			10,654,279
* Splunk Inc.	3,791,654	326,424	Total Common Stocks		
Teradyne Inc.	3,621,810	316,365	(Cost \$102,085,908)		135,556,676
* Tyler Technologies Inc.	968,260	312,177			
* HubSpot Inc.	1,075,842	311,058			
* Akamai Technologies Inc.	3,656,394	308,234			
NetApp Inc.	5,054,434	303,569			
* MongoDB Inc. Class A	1,517,763	298,756			

	Shares	Market Value* (\$000)
Temporary Cash Investments (1.1%)		
Money Market Fund (1.1%)  2.3 Vanguard Market Liquidity Fund, 4.334% (Cost \$1,505,415)	15,059,457	1,505,795
Total Investments (100.2%) (Cost \$103,591,323)		137,062,471
Other Assets and Liabilities – Net (-0.2%)		(297,690)
Net Assets (100%)		136,764,781

Cost is in \$000.

- \* See Note A in Notes to Financial Statements.
- \* Non-income-producing security.
- 1 Includes partial security positions on loan to broker-dealers. The total value of securities on loan is \$427,348,000.
- 2 Affiliated money market fund available only to Vanguard funds and certain trusts and accounts managed by Vanguard. Rate shown is the 7-day yield.
- 3 Collateral of \$445,226,000 was received for securities on loan.

## 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				
E-mini Russell 2000 Index	March 2023	2,770	245,270	(4,405)
E-mini S&P 500 Index	March 2023	1,932	372,972	(8,202)
E-mini S&P Mid-Cap 400 Index	March 2023	1,111	271,373	(4,124)
				(16,731)

#### Over-the-Counter Total Return Swaps

				Floating Interest		
Reference Entity	Termination Date	Counterparty	Notional Amount (\$000)	Rate Received (Paid) <sup>1</sup> (%)	Value and Unrealized Appreciation (\$000)	Value and Unrealized (Depreciation) (\$000)
Ameren Corp.	1/31/23	GSI	1,323	(4.329)	18	
CRSP US Mid Cap TR Index	8/31/23	BANA	91,837	(4.515)	_	(5,543)
DocuSign Inc. Class A	8/31/23	BANA	2,542	(4.115)	443	_
Hormel Foods Corp.	1/31/23	GSI	20,561	(4.329)	_	(90)
Palantir Technologies Inc. Class A	8/31/23	BANA	2,010	(4.115)	_	(296)
Sirius XM Holdings Inc.	1/31/23	GSI	14,776	(4.329)	_	(341)
State Street Corp.	8/30/24	BANA	163,324	(4.715)	_	(3,630)
State Street Corp.	8/30/24	BANA	9,560	(4.715)	_	(213)
State Street Corp.	8/30/24	BANA	5,975	(4.715)	_	(133)
VICI Properties Inc.	8/31/23	BANA	90,630	(4.665)	_	(4,075)
	·				461	(14,321)

<sup>1</sup> Based on USD Overnight Bank Funding Rate as of the most recent payment date. Floating interest payment received/paid monthly. BANA—Bank of America, N.A.

GSI—Goldman Sachs International.

# Statement of Assets and Liabilities As of December 31, 2022

(\$000s, except shares, footnotes, and per-share amounts)	Amount
Assets	
Investments in Securities, at Value <sup>1</sup>	
Unaffiliated Issuers (Cost \$102,085,908)	135,556,676
Affiliated Issuers (Cost \$1,505,415)	1,505,795
Total Investments in Securities	137,062,471
Investment in Vanguard	5,251
Cash	30,045
Cash Collateral Pledged—Futures Contracts	54,625
Cash Collateral Pledged—Over-the-Counter Swap Contracts	13,559
Receivables for Investment Securities Sold	5,063
Receivables for Accrued Income	235,094
Receivables for Capital Shares Issued	54,303
Unrealized Appreciation—Over-the-Counter Swap Contracts	461
Total Assets	137,460,872
Liabilities	
Payables for Investment Securities Purchased	29,451
Collateral for Securities on Loan	445,226
Payables for Capital Shares Redeemed	200,908
Payables to Vanguard	2,594
Variation Margin Payable—Futures Contracts	3,591
Unrealized Depreciation—Over-the-Counter Swap Contracts	14,321
Total Liabilities	696,091
Net Assets	136,764,781

<sup>1</sup> Includes \$427,348,000 of securities on loan.

## Statement of Assets and Liabilities (continued)

At December 31, 2022, net assets consisted of:	
(\$000s, except shares, footnotes, and per-share amounts)	Amount
Paid-in Capital	118,684,872
Total Distributable Earnings (Loss)	18,079,909
Net Assets	136,764,781
Investor Shares—Net Assets	
Applicable to 8,547,059 outstanding \$.001 par value shares of beneficial interest (unlimited authorization)	475,758
Net Asset Value Per Share—Investor Shares	\$55.66
ETF Shares – Net Assets	
Applicable to 244,609,287 outstanding \$.001 par value shares of beneficial interest (unlimited authorization)	49,860,521
Net Asset Value Per Share—ETF Shares	\$203.84
Admiral Shares—Net Assets	
Applicable to 203,396,544 outstanding \$.001 par value shares of beneficial interest (unlimited authorization)	51,351,897
Net Asset Value Per Share—Admiral Shares	\$252.47
Institutional Shares—Net Assets	
Applicable to 362,742,499 outstanding \$.001 par value shares of beneficial interest (unlimited authorization)	20,230,995
Net Asset Value Per Share—Institutional Shares	\$55.77
Institutional Plus Shares – Net Assets	
Applicable to 53,972,998 outstanding \$.001 par value shares of beneficial interest (unlimited authorization)	14,845,610
Net Asset Value Per Share—Institutional Plus Shares	\$275.06

# Statement of Operations

Year Ended December 31, 2022

	(\$000)
Investment Income	
Income	
Dividends <sup>1</sup>	2,201,173
Interest <sup>2</sup>	13,756
Securities Lending—Net	32,877
Total Income	2,247,806
Expenses	
The Vanguard Group—Note B	
Investment Advisory Services	2,547
Management and Administrative—Investor Shares	896
Management and Administrative—ETF Shares	15,465
Management and Administrative—Admiral Shares	23,517
Management and Administrative—Institutional Shares	7,622
Management and Administrative—Institutional Plus Shares	3,861
Marketing and Distribution—Investor Shares	28
Marketing and Distribution—ETF Shares	2,654
Marketing and Distribution—Admiral Shares	2,151
Marketing and Distribution—Institutional Shares	628
Marketing and Distribution—Institutional Plus Shares	374
Custodian Fees	235
Auditing Fees	35
Shareholders' Reports—Investor Shares	2
Shareholders' Reports—ETF Shares	1,282
Shareholders' Reports—Admiral Shares	623
Shareholders' Reports—Institutional Shares	230
Shareholders' Reports—Institutional Plus Shares	92
Trustees' Fees and Expenses	53
Other Expenses	134
Total Expenses	62,429
Expenses Paid Indirectly	(147)
Net Expenses	62,282
Net Investment Income	2,185,524
Realized Net Gain (Loss)	
Investment Securities Sold <sup>2,3</sup>	2,968,793
Futures Contracts	(99,355)
Swap Contracts	(15,892)
Realized Net Gain (Loss)	2,853,546
Change in Unrealized Appreciation (Depreciation)	
Investment Securities <sup>2</sup>	(36,616,166)
Futures Contracts	(16,738)
Swap Contracts	(29,599)
Change in Unrealized Appreciation (Depreciation)	(36,662,503)
Net Increase (Decrease) in Net Assets Resulting from Operations	(31,623,433)

<sup>1</sup> Dividends are net of foreign withholding taxes of \$860,000.

<sup>2</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 \$13,366,000, (\$276,000), \$4,000, and \$272,000, respectively. Purchases and sales are for temporary cash investment purposes.

<sup>3</sup> Includes \$10,314,164,000 of net gain (loss) resulting from in-kind redemptions.

# Statement of Changes in Net Assets

	Year Ended December		
	2022 (\$000)	2021 (\$000)	
Increase (Decrease) in Net Assets			
Operations			
Net Investment Income	2,185,524	1,763,819	
Realized Net Gain (Loss)	2,853,546	12,682,950	
Change in Unrealized Appreciation (Depreciation)	(36,662,503)	18,190,970	
Net Increase (Decrease) in Net Assets Resulting from Operations	(31,623,433)	32,637,739	
Distributions			
Investor Shares	(7,365)	(9,018)	
ETF Shares	(779,343)	(617,083)	
Admiral Shares	(818,365)	(728,126)	
Institutional Shares	(331,945)	(304,735)	
Institutional Plus Shares	(235,283)	(201,610)	
Total Distributions	(2,172,301)	(1,860,572)	
Capital Share Transactions			
Investor Shares	(126,905)	(268,407)	
ETF Shares	3,900,034	6,295,046	
Admiral Shares	(830,405)	(452,497)	
Institutional Shares	(1,758,614)	(72,833)	
Institutional Plus Shares	710,097	(563,005)	
Net Increase (Decrease) from Capital Share Transactions	1,894,207	4,938,304	
Total Increase (Decrease)	(31,901,527)	35,715,471	
Net Assets			
Beginning of Period	168,666,308	132,950,837	
End of Period	136,764,781	168,666,308	

#### **Investor Shares**

For a Share Outstanding			Year	Ended Dec	ember 31,
Throughout Each Period	2022	2021	2020	2019	2018
Net Asset Value, Beginning of Period	\$69.54	\$56.52	\$48.64	\$37.71	\$42.23
Investment Operations					
Net Investment Income <sup>1</sup>	.807	.652	.698	.577	.640
Net Realized and Unrealized Gain (Loss) on Investments	(13.875)	13.065	7.937	11.018	(4.528)
Total from Investment Operations	(13.068)	13.717	8.635	11.595	(3.888)
Distributions					
Dividends from Net Investment Income	(.812)	(.697)	(.755)	(.665)	(.632)
Distributions from Realized Capital Gains	_		_	_	_
Total Distributions	(.812)	(.697)	(.755)	(.665)	(.632)
Net Asset Value, End of Period	\$55.66	\$69.54	\$56.52	\$48.64	\$37.71
Total Return <sup>2</sup>	-18.80%	24.36%	18.10%	30.86%	-9.34%
Ratios/Supplemental Data					
Net Assets, End of Period (Millions)	\$476	\$740	\$834	\$877	\$3,043
Ratio of Total Expenses to Average Net Assets	0.17% <sup>3</sup>	0.17%	0.17%	0.17%	0.17%
Ratio of Net Investment Income to Average Net Assets	1.36%	1.02%	1.49%	1.31%	1.49%
Portfolio Turnover Rate <sup>4</sup>	12%	16%	26%	15%	16%

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

## **ETF Shares**

For a Share Outstanding	Year Ended December 31,				cember 31,
Throughout Each Period	2022	2021	2020	2019	2018
Net Asset Value, Beginning of Period	\$254.69	\$207.00	\$178.14	\$138.08	\$154.65
Investment Operations					
Net Investment Income <sup>1</sup>	3.302	2.741	2.772	2.663	2.535
Net Realized and Unrealized Gain (Loss) on Investments	(50.886)	47.811	29.084	40.043	(16.584)
Total from Investment Operations	(47.584)	50.552	31.856	42.706	(14.049)
Distributions					
Dividends from Net Investment Income	(3.266)	(2.862)	(2.996)	(2.646)	(2.521)
Distributions from Realized Capital Gains	_	_	_	_	_
Total Distributions	(3.266)	(2.862)	(2.996)	(2.646)	(2.521)
Net Asset Value, End of Period	\$203.84	\$254.69	\$207.00	\$178.14	\$138.08
Total Return	-18.68%	24.52%	18.22%	31.04%	-9.21%
Ratios/Supplemental Data					
Net Assets, End of Period (Millions)	\$49,861	\$57,774	\$41,587	\$29,014	\$21,261
Ratio of Total Expenses to Average Net Assets	0.04%2	0.04%	0.04%	0.04%	0.04%
Ratio of Net Investment Income to Average Net Assets	1.53%	1.16%	1.61%	1.62%	1.62%
Portfolio Turnover Rate <sup>3</sup>	12%	16%	26%	15%	16%
1 Calculated based on average shares outstanding					

 $<sup>1 \ \ {\</sup>it Calculated based on average shares outstanding}.$ 

See accompanying Notes, which are an integral part of the Financial Statements.

<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 0.17%.

<sup>4</sup> Excludes the value of portfolio securities received or delivered as a result of in-kind purchases or redemptions of the fund's capital shares, including ETF Creation Units.

<sup>2</sup> The ratio of expenses to average net assets for the period net of reduction from custody fee offset arrangements was 0.04%.

<sup>3</sup> Excludes the value of portfolio securities received or delivered as a result of in-kind purchases or redemptions of the fund's capital shares, including ETF Creation Units.

#### Admiral Shares

For a Share Outstanding			Ye	ear Ended De	cember 31,
Throughout Each Period	2022	2021	2020	2019	2018
Net Asset Value, Beginning of Period	\$315.46	\$256.40	\$220.66	\$171.04	\$191.55
Investment Operations					
Net Investment Income <sup>1</sup>	4.028	3.333	3.418	3.296	3.135
Net Realized and Unrealized Gain (Loss) on Investments	(63.000)	59.242	36.010	49.578	(20.539)
Total from Investment Operations	(58.972)	62.575	39.428	52.874	(17.404)
Distributions					
Dividends from Net Investment Income	(4.018)	(3.515)	(3.688)	(3.254)	(3.106)
Distributions from Realized Capital Gains	_	_	_	_	_
Total Distributions	(4.018)	(3.515)	(3.688)	(3.254)	(3.106)
Net Asset Value, End of Period	\$252.47	\$315.46	\$256.40	\$220.66	\$171.04
Total Return <sup>2</sup>	-18.71%	24.51%	18.24%	31.03%	-9.23%
Ratios/Supplemental Data					
Net Assets, End of Period (Millions)	\$51,352	\$65,118	\$53,301	\$47,640	\$34,754
Ratio of Total Expenses to Average Net Assets	0.05%3	0.05%	0.05%	0.05%	0.05%
Ratio of Net Investment Income to Average Net Assets	1.51%	1.14%	1.61%	1.62%	1.61%
Portfolio Turnover Rate <sup>4</sup>	12%	16%	26%	15%	16%
1 Calculated based on average charge outstanding					

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

## Institutional Shares

For a Share Outstanding	Year Ended December				ember 31,
Throughout Each Period	2022	2021	2020	2019	2018
Net Asset Value, Beginning of Period	\$69.69	\$56.64	\$48.74	\$37.78	\$42.32
Investment Operations					
Net Investment Income <sup>1</sup>	.893	.743	.759	.727	.697
Net Realized and Unrealized Gain (Loss) on Investments	(13.919)	13.090	7.961	10.957	(4.547)
Total from Investment Operations	(13.026)	13.833	8.720	11.684	(3.850)
Distributions					
Dividends from Net Investment Income	(.894)	(.783)	(.820)	(.724)	(.690)
Distributions from Realized Capital Gains	_	_	_	_	_
Total Distributions	(.894)	(.783)	(.820)	(.724)	(.690)
Net Asset Value, End of Period	\$55.77	\$69.69	\$56.64	\$48.74	\$37.78
Total Return	-18.70%	24.53%	18.26%	31.04%	-9.24%
Ratios/Supplemental Data					
Net Assets, End of Period (Millions)	\$20,231	\$27,312	\$22,291	\$20,425	\$16,524
Ratio of Total Expenses to Average Net Assets	0.04%2	0.04%	0.04%	0.04%	0.04%
Ratio of Net Investment Income to Average Net Assets	1.51%	1.15%	1.62%	1.62%	1.62%
Portfolio Turnover Rate <sup>3</sup>	12%	16%	26%	15%	16%
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 $<sup>1 \ \ {\</sup>it Calculated based on average shares outstanding}.$ 

See accompanying Notes, which are an integral part of the Financial Statements.

<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 0.05%.

<sup>4</sup> Excludes the value of portfolio securities received or delivered as a result of in-kind purchases or redemptions of the fund's capital shares, including ETF Creation Units.

<sup>2</sup> The ratio of expenses to average net assets for the period net of reduction from custody fee offset arrangements was 0.04%.

<sup>3</sup> Excludes the value of portfolio securities received or delivered as a result of in-kind purchases or redemptions of the fund's capital shares, including ETF Creation Units.

## Institutional Plus Shares

For a Share Outstanding	Year Ended December 31,				cember 31,
Throughout Each Period	2022	2021	2020	2019	2018
Net Asset Value, Beginning of Period	\$343.68	\$279.34	\$240.40	\$186.34	\$208.69
Investment Operations					
Net Investment Income <sup>1</sup>	4.458	3.688	3.774	3.598	3.464
Net Realized and Unrealized Gain (Loss) on Investments	(68.641)	64.544	39.230	54.052	(22.388)
Total from Investment Operations	(64.183)	68.232	43.004	57.650	(18.924)
Distributions					
Dividends from Net Investment Income	(4.437)	(3.892)	(4.064)	(3.590)	(3.426)
Distributions from Realized Capital Gains	_	_	_	_	_
Total Distributions	(4.437)	(3.892)	(4.064)	(3.590)	(3.426)
Net Asset Value, End of Period	\$275.06	\$343.68	\$279.34	\$240.40	\$186.34
Total Return	-18.69%	24.53%	18.27%	31.06%	-9.21%
Ratios/Supplemental Data					
Net Assets, End of Period (Millions)	\$14,846	\$17,723	\$14,937	\$13,612	\$11,426
Ratio of Total Expenses to Average Net Assets	0.03%2	0.03%	0.03%	0.03%	0.03%
Ratio of Net Investment Income to Average Net Assets	1.53%	1.16%	1.63%	1.62%	1.63%
Portfolio Turnover Rate <sup>3</sup>	12%	16%	26%	15%	16%

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

<sup>2</sup> The ratio of expenses to average net assets for the period net of reduction from custody fee offset arrangements was 0.03%.

<sup>3</sup> Excludes the value of portfolio securities received or delivered as a result of in-kind purchases or redemptions of the fund's capital shares, including ETF Creation Units.

## Notes to Financial Statements

Vanguard Mid-Cap Index Fund is registered under the Investment Company Act of 1940 as an open-end investment company, or mutual fund. The fund offers five classes of shares: Investor Shares, ETF Shares, Admiral Shares, Institutional Shares, and Institutional Plus Shares. Each of the share classes has different eligibility and minimum purchase requirements, and is designed for different types of investors. ETF Shares are listed for trading on NYSE Arca; they can be purchased and sold through a broker.

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.

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. Equity securities are valued at the latest quoted sales prices or official closing prices taken from the primary market in which each security trades; such securities not traded on the valuation date are valued at the mean of the latest quoted bid and asked prices. 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. Investments in Vanguard Market Liquidity Fund are valued at that fund's net asset value.
- 2. Futures Contracts: The fund uses index futures contracts to a limited extent, with the objectives of maintaining full exposure to the stock market, maintaining liquidity, and minimizing transaction costs. The fund may purchase futures contracts to immediately invest incoming cash in the market, or sell futures in response to cash outflows, thereby simulating a fully invested position in the underlying index while maintaining a cash balance for liquidity. The primary risks associated with the use of futures contracts are imperfect correlation between changes in market values of stocks 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, 2022, the fund's average investments in long and short futures contracts represented less than 1% and 0% of net assets, respectively, based on the average of the notional amounts at each quarter-end during the period.

3. Swap Contracts: The fund has entered into equity swap contracts to earn the total return on selected reference stocks in the fund's target index. Under the terms of the swaps, the fund receives the total return on the referenced stock (i.e., receiving the increase or paying the decrease in value of the selected reference stock and receiving the equivalent of any dividends in respect of the selected referenced stock) over a specified period of time, applied to a notional amount that represents the value of a designated number of shares of the selected reference stock at the beginning of the equity swap contract. The fund also pays a floating rate that is based on short-term interest rates, applied to the notional amount. At the same time, the fund generally invests an amount approximating the notional amount of the swap in high-quality temporary cash investments.

A risk associated with all types of swaps is the possibility that a counterparty may default on its obligation to pay net amounts due to the fund. The fund's maximum amount subject to counterparty risk is the unrealized appreciation on the swap contract. The fund mitigates its counterparty risk by entering into swaps only with a diverse group of prequalified counterparties, monitoring their

financial strength, entering into master netting arrangements with its counterparties, and requiring its counterparties to transfer collateral as security for their performance. In the absence of a default, the collateral pledged or received by the fund cannot be repledged, resold, or rehypothecated. In the event of a counterparty's default (including bankruptcy), the fund may terminate any swap contracts with that counterparty, determine the net amount owed by either party in accordance with its master netting arrangements, and sell or retain any collateral held up to the net amount owed to the fund under the master netting arrangements. The swap contracts contain provisions whereby a counterparty may terminate open contracts if the fund's net assets decline below a certain level, triggering a payment by the fund if the fund is in a net liability position at the time of the termination. The payment amount would be reduced by any collateral the fund has pledged. Any securities pledged as collateral for open contracts are noted in the Schedule of Investments. The value of collateral received or pledged is compared daily to the value of the swap contracts exposure with each counterparty, and any difference, if in excess of a specified minimum transfer amount, is adjusted and settled within two business days.

The notional amounts of swap contracts are not recorded in the Statement of Assets and Liabilities. Swaps are valued daily based on market quotations received from independent pricing services or recognized dealers and the change in value is recorded in the Statement of Assets and Liabilities as an asset (liability) and in the Statement of Operations as unrealized appreciation (depreciation) until periodic payments are made or the termination of the swap, at which time realized gain (loss) is recorded.

During the year ended December 31, 2022, the fund's average amounts of investments in total return swaps represented less than 1% of net assets, based on the average of notional amounts at each quarter-end during the period.

- 4. 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.
- 5. 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.
- 6. Securities Lending: To earn additional income, the fund lends its securities to qualified institutional borrowers. Security loans are subject to termination by the fund at any time, and are required to be secured at all times by collateral in an amount at least equal to the market value of securities loaned. Daily market fluctuations could cause the value of loaned securities to be more or less than the value of the collateral received. When this occurs, the collateral is adjusted and settled before the opening of the market on the next business day. The fund further mitigates its counterparty risk by entering into securities lending transactions only with a diverse group of prequalified counterparties, monitoring their financial strength, and entering into master securities lending agreements with its counterparties. The master securities lending agreements provide that, in the event of a counterparty's default (including bankruptcy), the fund may terminate any loans with that borrower, determine the net amount owed, and sell or retain the collateral up to the net amount owed to the fund; however, such actions may be subject to legal proceedings. While collateral mitigates counterparty risk, in the event of a default, the fund may experience delays and costs in recovering the securities loaned. The fund invests cash collateral received in Vanguard Market Liquidity Fund, and records a liability in the Statement of Assets and Liabilities for the return of the collateral, during the period the securities are on Ioan. Collateral investments in Vanguard Market Liquidity Fund are subject to market appreciation or depreciation. Securities lending income represents fees charged to borrowers plus income earned on invested cash collateral, less expenses associated with the loan. During the term of the loan, the fund is entitled to all distributions made on or in respect of the loaned securities.
- 7. Credit Facilities and Interfund Lending Program: The fund and certain other funds managed by The Vanguard Group ("Vanguard") participate in a \$4.4 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, 2022, the fund did not utilize the credit facilities or the Interfund Lending Program.

8. Other: Dividend income is recorded on the ex-dividend date. Non-cash dividends included in income, if any, are recorded at the fair value of the securities received. Interest income includes income distributions received from Vanguard Market Liquidity Fund and is accrued daily. 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, 2022, the fund had contributed to Vanguard capital in the amount of \$5,251,000, representing less than 0.01% of the fund's net assets and 2.10% of Vanguard's capital received pursuant to the FSA. The fund's trustees and officers are also directors and employees, respectively, of Vanguard.

- **C.** The fund's custodian bank has agreed to reduce its fees when the fund maintains cash on deposit in the non-interest-bearing custody account. For the year ended December 31, 2022, custodian fee offset arrangements reduced the fund's expenses by \$147,000 (an annual rate of less than 0.01% of average net assets).
- **D.** 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, 2022, based on the inputs used to value them:

	Level 1 (\$000)	Level 2 (\$000)	Level 3 (\$000)	Total (\$000)
Investments	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,	(77-7-7
Assets				
Common Stocks	135,556,676	_	_	135,556,676
Temporary Cash Investments	1,505,795	_	_	1,505,795
Total	137,062,471	_	_	137,062,471
Derivative Financial Instruments				
Assets				
Swap Contracts	_	461	_	461
Liabilities				
Futures Contracts <sup>1</sup>	16,731	_	_	16,731
Swap Contracts	_	14,321	_	14,321
Total	16,731	14,321	_	31,052

<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.

E. Permanent differences between book-basis and tax-basis components of net assets 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. As of period end, permanent differences primarily attributable to the accounting for applicable in-kind redemptions, passive foreign investment companies, and swap agreements were reclassified between the following accounts:

	Amount (\$000)
Paid-in Capital	10,313,200
Total Distributable Earnings (Loss)	(10,313,200)

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 the deferral of losses from wash sales; the recognition of unrealized gains or losses from certain derivative contracts; and the recognition of unrealized gains from passive foreign investment companies. 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	16,735
Undistributed Long-Term Gains	
Capital Loss Carryforwards	(15,297,730)
Qualified Late-Year Losses	_
Net Unrealized Gains (Losses)	33,360,904

The tax character of distributions paid was as follows:

	Year Ended [	December 31,
	2022 Amount (\$000)	2021 Amount (\$000)
Ordinary Income*	2,172,301	1,860,572
Long-Term Capital Gains	_	
Total	2,172,301	1,860,572

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

As of December 31, 2022, 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	103,701,567
Gross Unrealized Appreciation	44,283,191
Gross Unrealized Depreciation	(10,922,287)
Net Unrealized Appreciation (Depreciation)	33,360,904

F. During the year ended December 31, 2022, the fund purchased \$36,608,792,000 of investment securities and sold \$35,473,087,000 of investment securities, other than temporary cash investments. Purchases and sales include \$19,618,525,000 and \$17,719,773,000, respectively, in connection with in-kind purchases and redemptions of the fund's capital shares.

The fund purchased securities from and sold securities to other Vanguard funds or accounts managed by Vanguard or its affiliates, in accordance with procedures adopted by the board of trustees in compliance with Rule 17a-7 of the Investment Company Act of 1940. For the year ended December 31, 2022, such purchases were \$885,533,000 and sales were \$4,479,365,000, resulting in net realized loss of \$6,104,603,000; these amounts, other than temporary cash investments, are included in the purchases and sales of investment securities noted above.

G. Capital share transactions for each class of shares were:

	Year Ended Decem			
		2022		2021
	Amount	Shares	Amount	Shares
	(\$000)	(000)	(\$000)	(000)
Investor Shares				
Issued	38,431	646	57,093	901
Issued in Lieu of Cash Distributions	7,365	130	9,018	140
Redeemed	(172,701)	(2,864)	(334,518)	(5,165)
Net Increase (Decrease)—Investor Shares	(126,905)	(2,088)	(268,407)	(4,124)
ETF Shares				
Issued	22,366,377	104,145	23,926,059	100,340
Issued in Lieu of Cash Distributions	_	_	_	_
Redeemed	(18,466,343)	(86,375)	(17,631,013)	(74,400)
Net Increase (Decrease)—ETF Shares	3,900,034	17,770	6,295,046	25,940
Admiral Shares				
Issued	6,210,546	23,079	8,108,777	28,148
Issued in Lieu of Cash Distributions	713,328	2,783	628,000	2,134
Redeemed	(7,754,279)	(28,889)	(9,189,274)	(31,741)
Net Increase (Decrease)—Admiral Shares	(830,405)	(3,027)	(452,497)	(1,459)
Institutional Shares				
Issued	3,105,126	52,367	4,726,431	73,690
Issued in Lieu of Cash Distributions	306,818	5,408	282,871	4,349
Redeemed	(5,170,558)	(86,962)	(5,082,135)	(79,672)
Net Increase (Decrease)—Institutional Shares	(1,758,614)	(29,187)	(72,833)	(1,633)
Institutional Plus Shares				
Issued	2,083,499	7,084	1,743,703	5,449
Issued in Lieu of Cash Distributions	233,744	837	200,859	626
Redeemed	(1,607,146)	(5,516)	(2,507,567)	(7,981)
Net Increase (Decrease)—Institutional Plus Shares	710,097	2,405	(563,005)	(1,906)

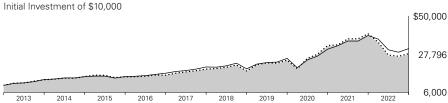
H. Management has determined that no events or transactions occurred subsequent to December 31, 2022, that would require recognition or disclosure in these financial statements.

## Mid-Cap Growth Index 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, 2012, Through December 31, 2022



#### Average Annual Total Returns Periods Ended December 31, 2022

_	One Year	Five Years	Ten Years	Final Value of a \$10,000 Investment
Mid-Cap Growth Index Fund Investor Shares	-28.93%	7.68%	10.76%	\$ 27,796
······ Spliced Mid-Cap Growth Index	-28.83	7.86	10.94	28,236
Dow Jones U.S. Total Stock Market Float Adjusted Index	-19.53	8.65	12.03	31,151

Spliced Mid-Cap Growth Index: MSCI US Mid Cap Growth Index through April 16, 2013; CRSP US Mid Cap Growth Index thereafter.

	One Year	Five Years	Ten Years	Final Value of a \$10,000 Investment
Mid-Cap Growth Index Fund ETF Shares Net Asset Value	-28.84%	7.81%	10.90%	\$28,147
Mid-Cap Growth Index Fund ETF Shares Market Price	-28.84	7.81	10.90	28,141
Spliced Mid-Cap Growth Index	-28.83	7.86	10.94	28,236
Dow Jones U.S. Total Stock Market Float Adjusted Index	-19.53	8.65	12.03	31,151

	One Year	Five Years	Ten Years	Final Value of a \$10,000 Investment
Mid-Cap Growth Index Fund Admiral Shares	-28.84%	7.81%	10.90%	\$28,148
Spliced Mid-Cap Growth Index	-28.83	7.86	10.94	28,236
Dow Jones U.S. Total Stock Market Float Adjusted Index	-19.53	8.65	12.03	31,151

## Cumulative Returns of ETF Shares: December 31, 2012, Through December 31, 2022

	One Year	Five Years	Ten Years
Mid-Cap Growth Index Fund ETF Shares Market Price	-28.84%	45.64%	181.41 %
Mid-Cap Growth Index Fund ETF Shares Net Asset Value	-28.84	45.67	181.47
Spliced Mid-Cap Growth Index	-28.83	45.97	182.36

For the ETF Shares, the market price is determined by the midpoint of the bid-offer spread as of the closing time of the New York Stock Exchange (generally 4 p.m., Eastern time). The net asset value is also determined as of the NYSE closing time. For more information about how the ETF Shares' market prices have compared with their net asset value, visit vanguard.com, select your ETF, click on Price, and then scroll down to the Premium/Discount chart. The ETF premium/discount chart there shows the percentage and days on which the ETF Shares' market price was above or below the NAV.

## **Fund Allocation**

As of December 31, 2022

Basic Materials         2.8%           Consumer Discretionary         13.7           Consumer Staples         1.4           Energy         9.2           Financials         6.2           Health Care         14.8           Industrials         17.3           Real Estate         7.3           Technology         22.8           Telecommunications         3.2           Utilities         1.3		
Consumer Staples         1.4           Energy         9.2           Financials         6.2           Health Care         14.8           Industrials         17.3           Real Estate         7.3           Technology         22.8           Telecommunications         3.2	Basic Materials	2.8%
Energy         9.2           Financials         6.2           Health Care         14.8           Industrials         17.3           Real Estate         7.3           Technology         22.8           Telecommunications         3.2	Consumer Discretionary	13.7
Financials         6.2           Health Care         14.8           Industrials         17.3           Real Estate         7.3           Technology         22.8           Telecommunications         3.2	Consumer Staples	1.4
Health Care 14.8 Industrials 17.3 Real Estate 7.3 Technology 22.8 Telecommunications 3.2	Energy	9.2
Industrials 17.3 Real Estate 7.3 Technology 22.8 Telecommunications 3.2	Financials	6.2
Real Estate         7.3           Technology         22.8           Telecommunications         3.2	Health Care	14.8
Technology 22.8 Telecommunications 3.2	Industrials	17.3
Telecommunications 3.2	Real Estate	7.3
	Technology	22.8
Utilities 1.3	Telecommunications	3.2
	Utilities	1.3

The table reflects the fund's investments, except for short-term investments and derivatives. Sector categories are based on the Industry Classification Benchmark ("ICB"), except for the "Other" category (if applicable), which includes securities that have not been provided an ICB classification as of the effective reporting period.

The fund may invest in derivatives (such as futures and swap contracts) for various reasons, including, but not limited to, attempting to remain fully invested and tracking its target index as closely as possible.

## **Financial Statements**

## Schedule of Investments

As of December 31, 2022

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.

		Market Value*			Market Value*
	Shares	(\$000)		Shares	(\$000)
Common Stocks (99.9%)			Financials (6.2%)		
Basic Materials (2.8%)			MSCI Inc. Class A	518,044	240,979
Fastenal Co.	3,906,172	184,840	Apollo Global Management Inc.	2,341,766	149,381
Albemarle Corp.	798,975	173,266	Broadridge Financial Solutions Inc.	802,395	107,625
Mosaic Co.	2,322,058	101,868	FactSet Research Systems Inc.	259,828	104,246
FMC Corp.	429,542	53,607	First Republic Bank	623,761	76,030
		513,581	Ares Management Corp. Class A	1,064,441	72,850
Consumer Discretionary (13.7%)		313,301	MarketAxess Holdings Inc.	243,847	68,006
* Copart Inc.	2,923,498	178,012	* Markel Corp.	43,572	57,406 EE 742
* Aptiv plc	1,847,852	172,090	LPL Financial Holdings Inc. Tradeweb Markets Inc. Class A	257,865 757,541	55,743
Tractor Supply Co.	753,355	169,482	Interactive Brokers Group Inc. Class A	666,504	49,187
* Ulta Beauty Inc.	349,329	163,860	* SVB Financial Group	201,539	48,222
* AutoZone Inc.	64,726	159,626	Brown & Brown Inc.	772,620	46,382 44,016
* Trade Desk Inc. Class A	3,036,818	136,141	*,1 Coinbase Global Inc. Class A		34,533
* Chipotle Mexican Grill Inc. Class A	94,528	131,157	Compase Global Inc. Class A	975,790	
* Take-Two Interactive Software Inc.	1,144,514	119,178			1,154,606
Hilton Worldwide Holdings Inc.	922,247	116,535	Health Care (14.8%)		
* Etsy Inc.	857,191	102,674	* Dexcom Inc.	2,634,258	298,303
* NVR Inc.	20,706	95,508	* IQVIA Holdings Inc.	1,266,736	259,542
LKQ Corp.	1,731,010	92,453	ResMed Inc.	999,010	207,924
* Burlington Stores Inc.	444,600	90,147	* Alnylam Pharmaceuticals Inc.	839,047	199,399
* Expedia Group Inc.	1,026,856	89,953	* Horizon Therapeutics plc	1,545,546	175,883
Domino's Pizza Inc.	241,420	83,628	* Veeva Systems Inc. Class A	958,310	154,652
* Live Nation Entertainment Inc.	1,102,180	76,866	* Insulet Corp.	473,636	139,434
* Royal Caribbean Cruises Ltd.	1,479,274	73,121	* Molina Healthcare Inc.	398,285	131,522
MGM Resorts International	2,095,174	70,251	* BioMarin Pharmaceutical Inc.	1,267,482	131,172
Rollins Inc.	1,847,257	67,499	* Seagen Inc.	949,669	122,042
* ROBLOX Corp. Class A	2,248,440	63,991	West Pharmaceutical Services Inc.	504,900	118,828
* Caesars Entertainment Inc.	1,390,149	57,830	* IDEXX Laboratories Inc.	282,401	115,208
* Las Vegas Sands Corp.	1,172,605	56,367	Cooper Cos. Inc.	336,534	111,282
Pool Corp.	126,502	38,245	* Align Technology Inc.	506,083	106,733
Vail Resorts Inc.	137,500	32,773	Incyte Corp.	1,289,683	103,587
Warner Music Group Corp. Class A	795,302	27,851	Avantor Inc.	4,368,114	92,124
<sup>1</sup> Sirius XM Holdings Inc.	3,981,453	23,252	STERIS plc	340,391	62,867
*,1 Chewy Inc. Class A	608,222	22,553	PerkinElmer Inc.	430,733	60,397
* Endeavor Group Holdings Inc. Class A	888,511	20,027	* Bio-Rad Laboratories Inc. Class A	143,471	60,328
		2,531,070	* Catalent Inc.	1,165,965	52,480
Consumer Staples (1.3%)		2,331,070	* Charles River Laboratories International Inc.	173,494	37,804
Church & Dwight Co. Inc.	1,663,164	134,068			2,741,511
McCormick & Co. Inc. (Non-Voting)	854,544	70,833	Industrials (17.3%)		
Lamb Weston Holdings Inc.	490,462	43,828	Cintas Corp.	588,654	265,848
* Olaplex Holdings Inc.	332,673	1,733	TransDigm Group Inc.	352,288	221,818
- aproximate man			* Mettler-Toledo International Inc.	152,045	219,774
F(0.00/)		250,462	AMETEK Inc.	1,566,210	218,831
Energy (9.2%)	4 450 100	074 004	Old Dominion Freight Line Inc.	678,130	192,440
Devon Energy Corp.	4,458,190	274,224	Verisk Analytics Inc. Class A	1,066,556	188,162
Hess Corp.	1,892,385	268,378	Equifax Inc.	835,055	162,301
Cheniere Energy Inc. * Enphase Energy Inc.	1,695,846	254,309	Vulcan Materials Co.	861,096	150,787
Diamondback Energy Inc.	926,993	245,616	Martin Marietta Materials Inc.	423,453	143,114
9,	1,200,294	164,176 125,514	Quanta Services Inc.	974,580	138,878
Coterra Energy Inc.	5,108,422		* Waters Corp.	405,156	138,798
Marathon Oil Corp. Halliburton Co.	4,331,112 2,786,764	117,243 109,659	Xylem Inc.	1,229,097	135,901
Texas Pacific Land Corp.			* Teledyne Technologies Inc.	319,657	127,834
*,1 Plug Power Inc.	21,018 3,975,323	49,271 49,175	JB Hunt Transport Services Inc.	564,895	98,495
EQT Corp.	1,126,454	49,175 38,108	* Zebra Technologies Corp. Class A	352,108	90,284
LQ1 σοιρ.	1,120,404		* FleetCorTechnologies Inc.	477,831	87,768
		1,695,673	WW Grainger Inc.	155,073	86,259

		Shares	Market Value* (\$000)
* -	Trimble Inc.	1,681,951	85,039
	Bill.com Holdings Inc.	684,637	74,598
	TransUnion	1,314,190	74,580
	Masco Corp.	1,538,065	71,782
	HEICO Corp. Class A	503,809	60,382
	Ball Corp.	1,070,448	54,743
	Jack Henry & Associates Inc.	248,755	43,671
	HEICO Corp.	278,820	42,838
	Generac Holdings Inc.	216,164	21,759
		-	3,196,684
	I Estate (7.3%)	4.077400	074 000
	Realty Income Corp.	4,277,162	271,300
	CoStar Group Inc.	2,773,606	214,344
	SBA Communications Corp. Class A	736,317	206,397
	Extra Space Storage Inc.	913,335	134,425
	Invitation Homes Inc.	4,169,772	123,592
	Sun Communities Inc.	844,923	120,824
	Welltower Inc.	1,611,284	105,620
	Digital Realty Trust Inc.	980,439	98,309
	Camden Property Trust	363,247	40,640
	Zillow Group Inc. Class C	1,064,542	34,289
4	Zillow Group Inc. Class A	277,028	8,646 1,358,386
Tech	nnology (22.8%)		1,330,300
	Amphenol Corp. Class A	4,058,504	309,014
* (	Cadence Design Systems Inc.	1,870,818	300,528
1	Microchip Technology Inc.	3,751,034	263,510
	ON Semiconductor Corp.	2,949,108	183,936
* (	Gartner Inc.	511,993	172,101
*	ANSYS Inc.	594,096	143,528
*	Datadog Inc. Class A	1,792,581	131,755
*	Atlassian Corp. Class A	1,011,206	130,122
* \	VeriSign Inc.	614,567	126,257
*	EPAM Systems Inc.	372,626	122,124
*	Fortinet Inc.	2,264,387	110,706
*	Paycom Software Inc.	347,933	107,967
1	Marvell Technology Inc.	2,907,330	107,687
1	Monolithic Power Systems Inc.	304,135	107,545
;	Skyworks Solutions Inc.	1,092,279	99,539
*	Pinterest Inc. Class A	4,007,059	97,291
* -	Zoom Video Communications Inc. Class A	1,424,025	96,463
*	DoorDash Inc. Class A	1,964,576	95,911
* (	Splunk Inc.	1,109,660	95,531
	Teradyne Inc.	1,062,242	92,787
* -	Tyler Technologies Inc.	283,979	91,558
*	HubSpot Inc.	314,720	90,995
*	Akamai Technologies Inc.	1,072,371	90,401
* 1	MongoDB Inc. Class A	445,148	87,623

		Shares	Market Value* (\$000)
* * *	Cloudflare Inc. Class A GoDaddy Inc. Class A Match Group Inc. DocuSign Inc. Class A Palantir Technologies Inc. Class A ZoomInfo Technologies Inc. Class A Zosaler Inc. Black Knight Inc. Snap Inc. Class A Unity Software Inc. Twilio Inc. Class A Bentley Systems Inc. Class B Dropbox Inc. Class A UiPath Inc. Class A UiPath Inc. Class A AppLovin Corp. Class A	1,844,432 1,057,531 1,904,834 1,369,294 11,473,997 2,339,972 983,847 590,104 1,010,881 6,950,350 2,113,488 1,190,223 1,510,142 908,807 1,026,650 1,035,236 600,622	83,387 79,124 79,032 75,886 73,663 70,457 67,226 66,033 62,422 62,206 60,425 58,273 55,815 20,339 18,510 13,158 6,325
	ecommunications (3.2%) Motorola Solutions Inc. Arista Networks Inc. Liberty Broadband Corp. Class C Roku Inc. Class A Liberty Broadband Corp. Class A	1,140,316 1,562,991 824,516 830,947 109,611	4,207,160 293,871 189,669 62,886 33,819 8,314
Uti	lities (1.3%) Waste Connections Inc.	1,754,100	588,559 232,523
	al Common Stocks est \$16,073,132)		18,470,215
Ter	nporary Cash Investments (0.6%)		
	ney Market Fund (0.6%) Vanguard Market Liquidity Fund, 4.334% (Cost \$114,172)	1,142,083	114,197
	al Investments (100.5%) ost \$16,187,304)		18,584,412
Oth	ner Assets and Liabilities—Net (-0.5%)		(100,762)
Ne	t Assets (100%)		18,483,650

## Cost is in \$000.

- See Note A in Notes to Financial Statements.
- \* Non-income-producing security.

  1 Includes partial security positions on loan to broker-dealers. The total value of securities on loan is \$100,691,000.
- 2 Affiliated money market fund available only to Vanguard funds and certain trusts and accounts managed by Vanguard. Rate shown is the 7-day yield.
- 3 Collateral of \$104,082,000 was received for securities on loan.

## Derivative Financial Instruments Outstanding as of Period End

### Futures Contracts

rutures contracts				
				(\$000)
	Expiration	Number of Long (Short) Contracts	Notional Amount	Value and Unrealized Appreciation (Depreciation)
Long Futures Contracts				
E-mini S&P 500 Index	March 2023	36	6,950	(117)
E-mini S&P Mid-Cap 400 Index	March 2023	41	10,014	(122)
				(239)

## Statement of Assets and Liabilities

As of December 31, 2022

(\$000s, except shares, footnotes, and per-share amounts)	Amount
Assets	
Investments in Securities, at Value <sup>1</sup>	
Unaffiliated Issuers (Cost \$16,073,132)	18,470,215
Affiliated Issuers (Cost \$114,172)	114,197
Total Investments in Securities	18,584,412
Investment in Vanguard	718
Cash	3,803
Cash Collateral Pledged—Futures Contracts	940
Receivables for Investment Securities Sold	17,084
Receivables for Accrued Income	8,593
Receivables for Capital Shares Issued	7,628
Total Assets	18,623,178
Liabilities	
Payables for Investment Securities Purchased	4,865
Collateral for Securities on Loan	104,082
Payables for Capital Shares Redeemed	29,934
Payables to Vanguard	573
Variation Margin Payable—Futures Contracts	74
Total Liabilities	139,528
Net Assets	18,483,650
At December 31, 2022, net assets consisted of:	
Paid-in Capital	19,433,518
Total Distributable Earnings (Loss)	(949,868)
Net Assets	18,483,650
Investor Shares – Net Assets	
Applicable to 652,165 outstanding \$.001 par value shares of beneficial interest (unlimited authorization)	46,096
Net Asset Value Per Share—Investor Shares	\$70.68
ETF Shares – Net Assets	
Applicable to 51,817,934 outstanding \$.001 par value shares of beneficial interest (unlimited authorization)	9,313,086
Net Asset Value Per Share — ETF Shares	\$179.73
Applicable to 117,939,484 outstanding \$.001 par value shares of	
beneficial interest (unlimited authorization)	9,124,468

## Statement of Operations

Year Ended December 31, 2022 (\$000)

	(\$000)
Investment Income	
Income	
Dividends <sup>1</sup>	153,597
Interest <sup>2</sup>	127
Securities Lending—Net	3,372
Total Income	157,096
Expenses	
The Vanguard Group—Note B	
Investment Advisory Services	985
Management and Administrative—Investor Shares	92
Management and Administrative—ETF Shares	5,530
Management and Administrative—Admiral Shares	5,716
Marketing and Distribution—Investor Shares	4
Marketing and Distribution—ETF Shares	519
Marketing and Distribution—Admiral Shares	471
Custodian Fees	178
Auditing Fees	32
Shareholders' Reports—Investor Shares	1
Shareholders' Reports—ETF Shares	381
Shareholders' Reports—Admiral Shares	155
Trustees' Fees and Expenses	7
Other Expenses	21
Total Expenses	14,092
Expenses Paid Indirectly	(2)
Net Expenses	14,090
Net Investment Income	143,006
Realized Net Gain (Loss)	
Investment Securities Sold <sup>2,3</sup>	(283,988)
Futures Contracts	(3,639)
Realized Net Gain (Loss)	(287,627)
Change in Unrealized Appreciation (Depreciation)	
Investment Securities <sup>2</sup>	(7,289,064)
Futures Contracts	(1,509)
Change in Unrealized Appreciation (Depreciation)	(7,290,573)
Net Increase (Decrease) in Net Assets Resulting from Operations	(7,435,194)

<sup>1</sup> Dividends are net of foreign withholding taxes of \$251,000.

<sup>2</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 \$118,000, (\$16,000), less than \$1,000, and \$25,000, respectively. Purchases and sales are for temporary cash investment purposes.

 $<sup>3\,</sup>$  Includes \$1,862,906,000 of net gain (loss) resulting from in-kind redemptions.

## Statement of Changes in Net Assets

	Year Ended December 31		
	2022	2021	
	(\$000)	(\$000)	
Increase (Decrease) in Net Assets			
Operations			
Net Investment Income	143,006	86,047	
Realized Net Gain (Loss)	(287,627)	2,746,227	
Change in Unrealized Appreciation (Depreciation)	(7,290,573)	1,423,310	
Net Increase (Decrease) in Net Assets Resulting from Operations	(7,435,194)	4,255,584	
Distributions			
Investor Shares	(306)	(202)	
ETF Shares	(71,823)	(41,740)	
Admiral Shares	(70,682)	(43,398)	
Total Distributions	(142,811)	(85,340)	
Capital Share Transactions			
Investor Shares	(17,561)	(10,066)	
ETF Shares	298,485	630,212	
Admiral Shares	99,556	(65,985)	
Net Increase (Decrease) from Capital Share Transactions	380,480	554,161	
Total Increase (Decrease)	(7,197,525)	4,724,405	
Net Assets			
Beginning of Period	25,681,175	20,956,770	
End of Period	18,483,650	25,681,175	

### **Investor Shares**

For a Share Outstanding			Year	Ended Dec	ember 31,
Throughout Each Period	2022	2021	2020	2019	2018
Net Asset Value, Beginning of Period	\$100.07	\$83.37	\$62.43	\$47.02	\$50.21
Investment Operations					
Net Investment Income <sup>1</sup>	.444	.229	.340	.345	.333
Net Realized and Unrealized Gain (Loss) on Investments	(29.381)	16.697	20.984	15.485	(3.193)
Total from Investment Operations	(28.937)	16.926	21.324	15.830	(2.860)
Distributions					
Dividends from Net Investment Income	(.453)	(.226)	(.384)	(.420)	(.330)
Distributions from Realized Capital Gains	_	_	_	_	_
Total Distributions	(.453)	(.226)	(.384)	(.420)	(.330)
Net Asset Value, End of Period	\$70.68	\$100.07	\$83.37	\$62.43	\$47.02
Total Return <sup>2</sup>	-28.93%	20.32%	34.32%	33.72%	-5.74%
Ratios/Supplemental Data					
Net Assets, End of Period (Millions)	\$46	\$86	\$81	\$63	\$405
Ratio of Total Expenses to Average Net Assets	0.19% <sup>3</sup>	0.19%	0.19%	0.19%	0.19%
Ratio of Net Investment Income to Average Net Assets	0.57%	0.25%	0.51%	0.62%	0.64%
Portfolio Turnover Rate <sup>4</sup>	22%	25%	22%	18%	25%

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

### **ETF Shares**

For a Share Outstanding	Year Ended December 31,				
Throughout Each Period	2022	2021	2020	2019	2018
Net Asset Value, Beginning of Period	\$254.49	\$212.00	\$158.76	\$119.58	\$127.67
Investment Operations					
Net Investment Income <sup>1</sup>	1.405	.870	1.074	1.386	1.016
Net Realized and Unrealized Gain (Loss) on Investments	(74.767)	42.479	53.347	39.040	(8.101)
Total from Investment Operations	(73.362)	43.349	54.421	40.426	(7.085)
Distributions					
Dividends from Net Investment Income	(1.398)	(.859)	(1.181)	(1.246)	(1.005)
Distributions from Realized Capital Gains	_	_	_	_	_
Total Distributions	(1.398)	(.859)	(1.181)	(1.246)	(1.005)
Net Asset Value, End of Period	\$179.73	\$254.49	\$212.00	\$158.76	\$119.58
Total Return	-28.84%	20.47%	34.46%	33.86%	-5.60%
Ratios/Supplemental Data					
Net Assets, End of Period (Millions)	\$9,313	\$12,798	\$10,164	\$6,995	\$4,956
Ratio of Total Expenses to Average Net Assets	0.07%2	0.07%	0.07%	0.07%	0.07%
Ratio of Net Investment Income to Average Net Assets	0.72%	0.37%	0.63%	0.95%	0.76%
Portfolio Turnover Rate <sup>3</sup>	22%	25%	22%	18%	25%
1 Calculated based on average shares outstanding					

 $<sup>1 \ \ {\</sup>it Calculated based on average shares outstanding}.$ 

See accompanying Notes, which are an integral part of the Financial Statements.

<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 0.19%.

<sup>4</sup> Excludes the value of portfolio securities received or delivered as a result of in-kind purchases or redemptions of the fund's capital shares, including ETF Creation Units.

<sup>2</sup> The ratio of expenses to average net assets for the period net of reduction from custody fee offset arrangements was 0.07%.

<sup>3</sup> Excludes the value of portfolio securities received or delivered as a result of in-kind purchases or redemptions of the fund's capital shares, including ETF Creation Units.

### **Admiral Shares**

For a Share Outstanding Year Ended December 31,					ember 31,
Throughout Each Period	2022	2021	2020	2019	2018
Net Asset Value, Beginning of Period	\$109.55	\$91.26	\$68.34	\$51.48	\$54.96
Investment Operations					
Net Investment Income <sup>1</sup>	.602	.373	.461	.603	.437
Net Realized and Unrealized Gain (Loss) on Investments	(32.180)	18.287	22.967	16.793	(3.485)
Total from Investment Operations	(31.578)	18.660	23.428	17.396	(3.048)
Distributions					
Dividends from Net Investment Income	(.602)	(.370)	(.508)	(.536)	(.432)
Distributions from Realized Capital Gains	_	_	_	_	_
Total Distributions	(.602)	(.370)	(.508)	(.536)	(.432)
Net Asset Value, End of Period	\$77.37	\$109.55	\$91.26	\$68.34	\$51.48
Total Return <sup>2</sup>	-28.84%	20.48%	34.48%	33.86%	-5.60%
Ratios/Supplemental Data					
Net Assets, End of Period (Millions)	\$9,124	\$12,797	\$10,712	\$8,173	\$5,544
Ratio of Total Expenses to Average Net Assets	0.07%3	0.07%	0.07%	0.07%	0.07%
Ratio of Net Investment Income to Average Net Assets	0.71%	0.37%	0.63%	0.96%	0.76%
Portfolio Turnover Rate <sup>4</sup>	22%	25%	22%	18%	25%

<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 0.07%.

<sup>4</sup> Excludes the value of portfolio securities received or delivered as a result of in-kind purchases or redemptions of the fund's capital shares, including ETF Creation Units.

## Notes to Financial Statements

Vanguard Mid-Cap Growth Index 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, ETF Shares, and Admiral Shares. Each of the share classes has different eligibility and minimum purchase requirements, and is designed for different types of investors. ETF Shares are listed for trading on NYSE Arca; they can be purchased and sold through a broker.

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.

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. Equity securities are valued at the latest quoted sales prices or official closing prices taken from the primary market in which each security trades; such securities not traded on the valuation date are valued at the mean of the latest quoted bid and asked prices. 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. Investments in Vanguard Market Liquidity Fund are valued at that fund's net asset value.
- 2. Futures Contracts: The fund uses index futures contracts to a limited extent, with the objectives of maintaining full exposure to the stock market, maintaining liquidity, and minimizing transaction costs. The fund may purchase futures contracts to immediately invest incoming cash in the market, or sell futures in response to cash outflows, thereby simulating a fully invested position in the underlying index while maintaining a cash balance for liquidity. The primary risks associated with the use of futures contracts are imperfect correlation between changes in market values of stocks 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, 2022, the fund's average investments in long and short futures contracts represented less than 1% and 0% of net assets, respectively, based on the average of the notional amounts at each quarter-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. Securities Lending: To earn additional income, the fund lends its securities to qualified institutional borrowers. Security loans are subject to termination by the fund at any time, and are required to be secured at all times by collateral in an amount at least equal to the market value of securities loaned. Daily market fluctuations could cause the value of loaned securities to be more or less than the value

of the collateral received. When this occurs, the collateral is adjusted and settled before the opening of the market on the next business day. The fund further mitigates its counterparty risk by entering into securities lending transactions only with a diverse group of prequalified counterparties, monitoring their financial strength, and entering into master securities lending agreements with its counterparties. The master securities lending agreements provide that, in the event of a counterparty's default (including bankruptcy), the fund may terminate any loans with that borrower, determine the net amount owed, and sell or retain the collateral up to the net amount owed to the fund; however, such actions may be subject to legal proceedings. While collateral mitigates counterparty risk, in the event of a default, the fund may experience delays and costs in recovering the securities loaned. The fund invests cash collateral received in Vanguard Market Liquidity Fund, and records a liability in the Statement of Assets and Liabilities for the return of the collateral, during the period the securities are on Ioan. Collateral investments in Vanguard Market Liquidity Fund are subject to market appreciation or depreciation. Securities lending income represents fees charged to borrowers plus income earned on invested cash collateral, less expenses associated with the loan. During the term of the loan, the fund is entitled to all distributions made on or in respect of the loaned securities.

6. Credit Facilities and Interfund Lending Program: The fund and certain other funds managed by The Vanguard Group ("Vanguard") participate in a \$4.4 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, 2022, the fund did not utilize the credit facilities or the Interfund Lending Program.

7. Other: Dividend income is recorded on the ex-dividend date. Non-cash dividends included in income, if any, are recorded at the fair value of the securities received. Interest income includes income distributions received from Vanguard Market Liquidity Fund and is accrued daily. 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, 2022, the fund had contributed to Vanguard capital in the amount of

\$718,000, representing less than 0.01% of the fund's net assets and 0.29% of Vanguard's capital received pursuant to the FSA. The fund's trustees and officers are also directors and employees, respectively, of Vanguard.

- C. The fund's custodian bank has agreed to reduce its fees when the fund maintains cash on deposit in the non-interest-bearing custody account. For the year ended December 31, 2022, custodian fee offset arrangements reduced the fund's expenses by \$2,000 (an annual rate of less than 0.01% of average net assets).
- **D.** 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.

At December 31, 2022, 100% of the market value of the fund's investments and derivatives was determined based on Level 1 inputs.

E. Permanent differences between book-basis and tax-basis components of net assets 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. As of period end, permanent differences primarily attributable to the accounting for applicable in-kind redemptions were reclassified between the following accounts:

	Amount (\$000)
Paid-in Capital	1,862,740
Total Distributable Earnings (Loss)	(1,862,740)

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 the deferral of losses from wash sales; 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	1,270
Undistributed Long-Term Gains	_
Capital Loss Carryforwards	(3,336,371)
Qualified Late-Year Losses	_
Net Unrealized Gains (Losses)	2,385,233

The tax character of distributions paid was as follows:

	2022 Amount	2021 Amount
	(\$000)	(\$000)
Ordinary Income*	142,811	85,340
Long-Term Capital Gains	_	_
Total	142,811	85,340

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

As of December 31, 2022, 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	16,199,179
Gross Unrealized Appreciation	4,810,426
Gross Unrealized Depreciation	(2,425,193)
Net Unrealized Appreciation (Depreciation)	2,385,233

F. During the year ended December 31, 2022, the fund purchased \$8,733,403,000 of investment securities and sold \$8,306,280,000 of investment securities, other than temporary cash investments. Purchases and sales include \$4,258,499,000 and \$3,889,181,000, respectively, in connection with in-kind purchases and redemptions of the fund's capital shares.

The fund purchased securities from and sold securities to other Vanguard funds or accounts managed by Vanguard or its affiliates, in accordance with procedures adopted by the board of trustees in compliance with Rule 17a-7 of the Investment Company Act of 1940. For the year ended December 31, 2022, such purchases were \$619,973,000 and sales were \$1,462,956,000, resulting in net realized loss of \$1,621,799,000; these amounts, other than temporary cash investments, are included in the purchases and sales of investment securities noted above.

G. Capital share transactions for each class of shares were:

			Year Ended De	cember 31,
		2022		2021
	Amount (\$000)	Shares (000)	Amount (\$000)	Shares (000)
Investor Shares				
Issued	7,152	91	19,175	208
Issued in Lieu of Cash Distributions	306	4	202	2
Redeemed	(25,019)	(303)	(29,443)	(320)
Net Increase (Decrease)—Investor Shares	(17,561)	(208)	(10,066)	(110)
ETF Shares				
Issued	4,309,536	22,204	5,301,356	22,469
Issued in Lieu of Cash Distributions	_	_	_	_
Redeemed	(4,011,051)	(20,674)	(4,671,144)	(20,125)
Net Increase (Decrease)—ETF Shares	298,485	1,530	630,212	2,344
Admiral Shares				
Issued	1,795,061	20,960	2,259,984	22,820
Issued in Lieu of Cash Distributions	63,404	794	38,861	380
Redeemed	(1,758,909)	(20,629)	(2,364,830)	(23,759)
Net Increase (Decrease)—Admiral Shares	99,556	1,125	(65,985)	(559)

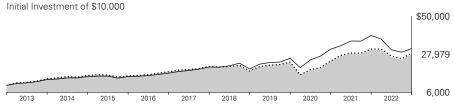
H. Management has determined that no events or transactions occurred subsequent to December 31, 2022, that would require recognition or disclosure in these financial statements.

## Mid-Cap Value Index 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, 2012, Through December 31, 2022



#### Average Annual Total Returns Periods Ended December 31, 2022

_	One Year	Five Years	Ten Years	Final Value of a \$10,000 Investment
Mid-Cap Value Index Fund Investor Shares	-8.00%	6.26%	10.84%	\$ 27,979
······ Spliced Mid-Cap Value Index	-7.84	6.42	11.02	28,454
Dow Jones U.S. Total Stock Market Float Adjusted Index	-19.53	8.65	12.03	31,151

Spliced Mid-Cap Value Index: MSCI US Mid Cap Value Index through April 16, 2013; CRSP US Mid Cap Value Index thereafter.

	One Year	Five Years	Ten Years	Final Value of a \$10,000 Investment
Mid-Cap Value Index Fund ETF Shares Net Asset Value	-7.88%	6.38%	10.97%	\$28,324
Mid-Cap Value Index Fund ETF Shares Market Price	-7.90	6.37	10.97	28,319
Spliced Mid-Cap Value Index	-7.84	6.42	11.02	28,454
Dow Jones U.S. Total Stock Market Float Adjusted Index	-19.53	8.65	12.03	31,151

	One Year	Five Years	Ten Years	Final Value of a \$10,000 Investment
Mid-Cap Value Index Fund Admiral Shares	-7.90%	6.39%	10.98%	\$28,333
Spliced Mid-Cap Value Index	-7.84	6.42	11.02	28,454
Dow Jones U.S. Total Stock Market Float Adjusted Index	-19.53	8.65	12.03	31,151

### Cumulative Returns of ETF Shares: December 31, 2012, Through December 31, 2022

	One Year	Five Years	Ten Years
Mid-Cap Value Index Fund ETF Shares Market Price	-7.90%	36.21%	183.19%
Mid-Cap Value Index Fund ETF Shares Net Asset Value	-7.88	36.26	183.24
Spliced Mid-Cap Value Index	-7.84	36.47	184.54

For the ETF Shares, the market price is determined by the midpoint of the bid-offer spread as of the closing time of the New York Stock Exchange (generally 4 p.m., Eastern time). The net asset value is also determined as of the NYSE closing time. For more information about how the ETF Shares' market prices have compared with their net asset value, visit vanguard.com, select your ETF, click on Price, and then scroll down to the Premium/Discount chart. The ETF premium/discount chart there shows the percentage and days on which the ETF Shares' market price was above or below the NAV.

## **Fund Allocation**

As of December 31, 2022

Basic Materials	5.0%
Consumer Discretionary	12.4
Consumer Staples	8.1
Energy	4.6
Financials	18.9
Health Care	7.6
Industrials	14.2
Real Estate	10.5
Technology	4.7
Telecommunications	0.4
Utilities	13.6

The table reflects the fund's investments, except for short-term investments and derivatives. Sector categories are based on the Industry Classification Benchmark ("ICB"), except for the "Other" category (if applicable), which includes securities that have not been provided an ICB classification as of the effective reporting period.

The fund may invest in derivatives (such as futures and swap contracts) for various reasons, including, but not limited to, attempting to remain fully invested and tracking its target index as closely as possible.

## **Financial Statements**

## Schedule of Investments

As of December 31, 2022

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.

		Market Value•			Market Value*
0. 0. 1. (00.70/)	Shares	(\$000)		Shares	(\$000)
Common Stocks (99.7%)			Tyson Foods Inc. Class A Clorox Co.	2,568,742 1,094,527	159,904 153,595
Basic Materials (5.0%)			J M Smucker Co.	898,672	142,404
Nucor Corp.	2,275,687	299,958	Hormel Foods Corp.	2,422,718	110,355
International Flavors & Fragrances Inc.	2,261,641	237,111	Campbell Soup Co.	1,728,547	98,095
LyondellBasell Industries NV Class A	2,310,766	191,863	McCormick & Co. Inc. (Non-Voting)	1,111,310	92,116
CF Industries Holdings Inc.	1,740,333	148,276	Molson Coors Beverage Co. Class B	798,816	41,155
Avery Dennison Corp.	718,264	130,006	Albertsons Cos. Inc. Class A	1,660,974	34,449
International Paper Co.	3,155,231	109,266		-	
Celanese Corp. Class A	865,506	88,489	F (4.00/)		2,255,893
Eastman Chemical Co.	1,064,230	86,671	Energy (4.6%)	0.000.444	000 000
FMC Corp.	558,812	69,740	Baker Hughes Co. Class A	8,883,441	262,328
Westlake Corp.	141,528	14,512	ONEOK Inc.	3,964,760	260,485
		1,375,892	Phillips 66	2,096,272	218,180
Consumer Discretionary (12.3%)			Valero Energy Corp.	1,709,922	216,920
* Dollar Tree Inc.	1,863,943	263,636	Williams Cos. Inc.	5,403,709	177,782
DR Horton Inc.	2,749,085	245,053	Halliburton Co.	3,624,777	142,635
Genuine Parts Co.	1,252,190	217,267			1,278,330
Lennar Corp. Class A	2,265,287	205,008	Financials (18.8%)		
eBay Inc.	4,813,632	199,621	Arthur J Gallagher & Co.	1,870,269	352,621
* Delta Air Lines Inc.	5,687,633	186,896	Ameriprise Financial Inc.	943,828	293,880
* Southwest Airlines Co.	5,266,933	177,338	Discover Financial Services	2,423,548	237,096
Darden Restaurants Inc.	1,085,687	150,183	Willis Towers Watson plc	960,129	234,828
Omnicom Group Inc.	1,808,946	147,556	M&T Bank Corp.	1,531,174	222,112
Best Buy Co. Inc.	1,797,359	144,166	T. Rowe Price Group Inc.	1,981,942	216,151
Garmin Ltd.	1,360,189	125,532	Hartford Financial Services Group Inc.	2,821,714	213,971
* United Airlines Holdings Inc.	2,898,462	109,272	Nasdaq Inc.	3,485,778	213,852
PulteGroup Inc.	2,021,136	92,022	American International Group Inc.	3,295,291	208,394
* Warner Bros Discovery Inc.	9,694,708	91,906	Fifth Third Bancorp	6,088,601	199,767
VF Corp.	3,101,613	85,636	* Arch Capital Group Ltd.	3,116,954	195,682
* CarMax Inc.	1,401,872	85,360	Raymond James Financial Inc.	1,716,686	183,428
BorgWarner Inc.	2,077,337	83,613	Principal Financial Group Inc.	2,170,491	182,148
Fox Corp. Class A	2,680,575	81,409	Huntington Bancshares Inc.	12,797,873	180,450
Advance Auto Parts Inc.	525,704	77,294	Regions Financial Corp.	8,289,023	178,711
News Corp. Class A	4,049,487	73,701	State Street Corp.	2,276,726	176,606
Paramount Global Class B	4,293,246	72,470	Citizens Financial Group Inc.	4,368,608	171,992
* Carnival Corp.	8,881,807	71,587	Northern Trust Corp.	1,756,049	155,393
Hasbro Inc.	1,163,709	70,998	KeyCorp	8,274,657	144,145
Interpublic Group of Cos. Inc.	1,723,000	57,393	Cincinnati Financial Corp.	1,394,332	142,766
* Liberty Media CorpLiberty SiriusXM Class C	1,356,225	53,069	W R Berkley Corp.	1,766,254	128,177
Bath & Body Works Inc.	962,106	40,543	Cboe Global Markets Inc.	940,861	118,050
* American Airlines Group Inc.	2,881,983	36,659	Everest Re Group Ltd.	347,437	115,095
*,1 Lucid Group Inc.	5,216,473	35,628	Loews Corp.	1,790,350	104,431
Whirlpool Corp.	241,592	34,176	First Republic Bank	811,192	98,876
Fox Corp. Class B	1,175,009	33,429	Equitable Holdings Inc.	3,282,013	94,194
Lear Corp.	262,120	32,508	Annaly Capital Management Inc.	4,149,601	87,474
* Liberty Media CorpLiberty SiriusXM Class A	654,793	25,740	Fidelity National Financial Inc.	2,292,922	86,260
Lennar Corp. Class B	122,627	9,170	* Markel Corp.	56,664	74,654
News Corp. Class B	378,120	6,973	Franklin Resources Inc.	2,658,405	70,129
<sup>1</sup> Paramount Global Class A	93,047	1,825	* SVB Financial Group	262,101	60,320
		3,424,637	Globe Life Inc.	388,215	46,799
Consumer Staples (8.1%)			Ally Financial Inc.	1,192,121	29,147
Corteva Inc.	6,374,401	374,687	Corebridge Financial Inc.	571,635	11,467
Kroger Co.	5,714,707	254,762	<sup>1</sup> Rocket Cos. Inc. Class A	1,027,930	7,195
AmerisourceBergen Corp.	1,459,584	241,868			5,236,261
Archer-Daniels-Midland Co.	2,436,457	226,225	Health Care (7.6%)		
Conagra Brands Inc.	4,251,289	164,525	* Centene Corp.	5,023,061	411,941
Kellogg Co.	2,270,542	161,753	Zimmer Biomet Holdings Inc.	1,861,508	237,342

		Market			Market
	Shares	Value* (\$000)		Shares	Value* (\$000)
Laboratory Corp. of America Holdings	785,929	185,071	Technology (4.7%)		
Cardinal Health Inc.	2,325,332	178,748	Corning Inc.	6,752,575	215,677
* Hologic Inc.	2,180,708	163,139	CDW Corp.	1,200,995	214,474
Quest Diagnostics Inc.	1,010,255	158,044	Hewlett Packard Enterprise Co.	11,413,734	182,163
Royalty Pharma plc Class A	3,326,032	131,445	NetApp Inc.	1,928,273	115,812
Viatris Inc.	10,757,822	119,735	Gen Digital Inc.	4,911,659	105,257
Baxter International Inc.	2,236,059	113,972	SS&C Technologies Holdings Inc.	1,899,598	98,893
Teleflex Inc.	416,121	103,876	Seagate Technology Holdings plc	1,739,998	91,541
* Henry Schein Inc.	1,202,518	96,045	* Western Digital Corp.	2,817,288	88,885
STERIS plc	442,673	81,757	* Qorvo Inc.	899,237	81,507
PerkinElmer Inc.	560,161	78,546	Leidos Holdings Inc.	606,405	63,788
Universal Health Services Inc. Class B	270,290	38,081	* F5 Inc.	267,709	38,419
* DaVita Inc.	219,928	16,422			1,296,416
Industrials (44.00)		2,114,164	Telecommunications (0.4%)	1 400 070	4F 000
Industrials (14.2%)	7440440	005 007	Juniper Networks Inc.	1,439,276	45,999
Carrier Global Corp.	7,418,116	305,997	* DISH Network Corp. Class A	2,203,717	30,940
PACCAR Inc.	2,776,397	274,780	Lumen Technologies Inc.	4,584,615	23,932
* Keysight Technologies Inc.	1,583,394	270,871			100,871
Rockwell Automation Inc.	1,018,728	262,394	Utilities (13.5%)		
Ferguson plc	1,860,665	236,249	* PG&E Corp.	18,589,483	302,265
* United Rentals Inc.	614,797	218,511	Consolidated Edison Inc.	3,147,836	300,020
Fortive Corp.	3,138,395	201,642	WEC Energy Group Inc.	2,798,079	262,348
Ingersoll Rand Inc.	3,591,874	187,675	Eversource Energy	3,089,622	259,034
Dover Corp.	1,245,006	168,586	Constellation Energy Corp.	2,897,717	249,812
Westinghouse Air Brake Technologies Corp.	1,532,609	152,970	American Water Works Co. Inc.	1,612,887	245,836
Expeditors International of Washington Inc.	1,411,647	146,698	Edison International	3,387,438	215,509
Otis Worldwide Corp.	1,847,691	144,693	Ameren Corp.	2,291,909	203,797
Jacobs Solutions Inc.	1,120,670	134,559	Entergy Corp.	1,805,015	203,064
Synchrony Financial	3,996,678	131,331	FirstEnergy Corp.	4,818,226	202,076
Textron Inc.	1,851,976	131,120	PPL Corp.	6,204,890	181,307
Global Payments Inc.	1,199,371	119,122	DTE Energy Co.	1,460,831	171,691
WW Grainger Inc.	201,712	112,202	AES Corp.	5,924,995	170,403
Snap-on Inc.	471,548	107,744	CenterPoint Energy Inc.	5,583,626	167,453
Packaging Corp. of America	820,899	105,001	CMS Energy Corp.	2,574,768	163,060
Stanley Black & Decker Inc.	1,354,345	101,738	Evergy Inc.	2,035,683	128,106
CH Robinson Worldwide Inc.	1,044,260	95,613	Alliant Energy Corp.	2,226,803	122,942
Crown Holdings Inc.	1,064,122	87,482	NiSource Inc.	3,603,004	98,794
Westrock Co.	2,256,888	79,352	Vistra Corp.	3,530,558	81,909
Ball Corp.	1,392,101	71,192	Avangrid Inc.	685,868	29,479
Hubbell Inc. Class B	238,162	55,892	Avangria inc.	000,000	
Fortune Brands Innovations Inc.	567,751	32,424			3,758,905
		3,935,838	Total Common Stocks (Cost \$22,356,731)		27,689,329
Real Estate (10.5%) VICI Properties Inc.	8,847,437	286,657	Temporary Cash Investments (0.4%)		27,000,020
Alexandria Real Estate Equities Inc.	1,455,529	212.027			
* CBRE Group Inc. Class A	2,662,492	204,905	Money Market Fund (0.4%)		
Weyerhaeuser Co.	6,528,042	202,369	Vanguard Market Liquidity Fund, 4.334%	1 000 001	100 000
AvalonBay Communities Inc.	1,240,963	200,440	(Cost \$103,877)	1,039,081	103,898
Equity Residential	3,184,725	187,899	Total Investments (100.1%)		
Simon Property Group Inc.	1,450,084	170,356	(Cost \$22,460,608)		27,793,227
Mid-America Apartment Communities Inc.	1,024,357	160,814	Other Assets and Liabilities—Net (-0.1%)		(14,101)
Ventas Inc.	3,545,709	159,734			
WP Carey Inc.	1,845,440	144,221	Net Assets (100%)		27,779,126
Welltower Inc.	2,095,812	137,381	Cost is in \$000.		
Iron Mountain Inc.	2,578,879	128,557	<ul> <li>See Note A in Notes to Financial Statements.</li> </ul>		
Digital Realty Trust Inc.	1,275,287	127,873	* Non-income-producing security.		
Essex Property Trust Inc.	574,432	127,673	1 Includes partial security positions on loan to broker-dealers. T	he total value of securi	ties on loan is
Healthpeak Properties Inc.	4,768,536	119,547	\$46,796,000.		
UDR Inc.	2,887,931	111,850	2 Affiliated money market fund available only to Vanguard fund	s and certain trusts and	d accounts manac
Boston Properties Inc.	1,251,261		by Vanguard. Rate shown is the 7-day yield.		
•	, ,	84,560 52.070	3 Collateral of \$48,791,000 was received for securities on loan.		
Camden Property Trust	472,633	52,878			
Host Hotels & Resorts Inc.	3,170,820	50,892			
Regency Centers Corp.	758,852	47,428			
		2,912,122			

## 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				
E-mini S&P 500 Index	March 2023	81	15,637	(120)
E-mini S&P Mid-Cap 400 Index	March 2023	86	21,006	(270)
				(390)

### Over-the-Counter Total Return Swaps

Reference Entity	Termination Date	Counterparty	Notional Amount (\$000)	Floating Interest Rate Received (Paid) <sup>1</sup> (%)	Value and Unrealized Appreciation (\$000)	Value and Unrealized (Depreciation) (\$000)
State Street Corp.	8/30/24	BANA	61,744	(4.715)	_	(1,372)
State Street Corp.	8/30/24	BANA	3,187	(4.715)	_	(71)
					_	(1,443)

<sup>1</sup> Based on USD Overnight Bank Funding Rate as of the most recent payment date. Floating interest payment received/paid monthly. BANA—Bank of America, N.A.

## Statement of Assets and Liabilities

As of December 31, 2022

Assets	
Investments in Securities, at Value <sup>1</sup>	
Unaffiliated Issuers (Cost \$22,356,731)	27,689,329
Affiliated Issuers (Cost \$103,877)	103,898
Total Investments in Securities	27,793,227
Investment in Vanguard	1,059
Cash Collateral Pledged—Futures Contracts	2,020
Cash Collateral Pledged—Over-the-Counter Swap Contracts	2,270
Receivables for Investment Securities Sold	4,863
Receivables for Accrued Income	78,071
Receivables for Capital Shares Issued	6,723
Total Assets	27,888,233
Liabilities	
Due to Custodian	10,124
Payables for Investment Securities Purchased	25,531
Collateral for Securities on Loan	48,791
Payables for Capital Shares Redeemed	22,201
Payables to Vanguard	857
Variation Margin Payable—Futures Contracts	160
Unrealized Depreciation—Over-the-Counter Swap Contracts	1,443
Total Liabilities	109,107
Net Assets	27,779,126

## At December 31, 2022, net assets consisted of:

Paid-in Capital	26,397,227
Total Distributable Earnings (Loss)	1,381,899
Net Assets	27,779,126
Investor Shares—Net Assets	
Applicable to 835,413 outstanding \$.001 par value shares of beneficial interest (unlimited authorization)	44,500
Net Asset Value Per Share — Investor Shares	\$53.27
ETF Shares—Net Assets	
Applicable to 118,233,736 outstanding \$.001 par value shares of beneficial interest (unlimited authorization)	15,994,806
Net Asset Value Per Share—ETF Shares	\$135.28
Admiral Shares—Net Assets	
Applicable to 167,518,390 outstanding \$.001 par value shares of beneficial interest (unlimited authorization)	11,739,820
Net Asset Value Per Share – Admiral Shares	\$70.08

## Statement of Operations

Year Ended December 31, 2022

	(\$000)
Investment Income	
Income	
Dividends	636,535
Interest <sup>1</sup>	684
Securities Lending—Net	8,027
Total Income	645,246
Expenses	
The Vanguard Group—Note B	
Investment Advisory Services	1,098
Management and Administrative—Investor Shares	83
Management and Administrative—ETF Shares	8,988
Management and Administrative—Admiral Shares	7,211
Marketing and Distribution—Investor Shares	3
Marketing and Distribution—ETF Shares	688
Marketing and Distribution—Admiral Shares	578
Custodian Fees	132
Auditing Fees	33
Shareholders' Reports—Investor Shares	1
Shareholders' Reports—ETF Shares	739
Shareholders' Reports—Admiral Shares	185
Trustees' Fees and Expenses	10
Other Expenses	169
Total Expenses	19,918
Expenses Paid Indirectly	(25)
Net Expenses	19,893
Net Investment Income	625,353
Realized Net Gain (Loss)	
Investment Securities Sold <sup>1,2</sup>	1,044,697
Futures Contracts	(7,087)
Swap Contracts	(5,783)
Realized Net Gain (Loss)	1,031,827
Change in Unrealized Appreciation (Depreciation)	
Investment Securities <sup>1</sup>	(4,114,950)
Futures Contracts	(2,960)
Swap Contracts	(8,657)
Change in Unrealized Appreciation (Depreciation)	(4,126,567)
Net Increase (Decrease) in Net Assets Resulting from Operations	(2,469,387)

<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 \$676,000, (\$7,000), less than \$1,000, and \$22,000, respectively. Purchases and sales are for temporary cash investment purposes.

 $<sup>2\,</sup>$  Includes \$1,986,509,000 of net gain (loss) resulting from in-kind redemptions.

## Statement of Changes in Net Assets

	Year Ended December 3	
	2022 (\$000)	2021 (\$000)
Increase (Decrease) in Net Assets		
Operations		
Net Investment Income	625,353	514,018
Realized Net Gain (Loss)	1,031,827	1,280,568
Change in Unrealized Appreciation (Depreciation)	(4,126,567)	4,465,567
Net Increase (Decrease) in Net Assets Resulting from Operations	(2,469,387)	6,260,153
Distributions		
Investor Shares	(970)	(965)
ETF Shares	(356,532)	(274,814)
Admiral Shares	(267,459)	(232,248)
Total Distributions	(624,961)	(508,027)
Capital Share Transactions		
Investor Shares	(7,678)	2,483
ETF Shares	1,666,234	1,966,665
Admiral Shares	(147,140)	445,190
Net Increase (Decrease) from Capital Share Transactions	1,511,416	2,414,338
Total Increase (Decrease)	(1,582,932)	8,166,464
Net Assets		
Beginning of Period	29,362,058	21,195,594
End of Period	27,779,126	29,362,058

#### **Investor Shares**

For a Share Outstanding	Year Ended December 3			ember 31,	
Throughout Each Period	2022	2021	2020	2019	2018
Net Asset Value, Beginning of Period	\$59.16	\$46.83	\$46.96	\$37.50	\$43.89
Investment Operations					
Net Investment Income <sup>1</sup>	1.129	1.006	1.048 <sup>2</sup>	.808	1.001 <sup>3</sup>
Net Realized and Unrealized Gain (Loss) on Investments	(5.876)	12.311	(.122)	9.566	(6.415)
Total from Investment Operations	(4.747)	13.317	.926	10.374	(5.414)
Distributions					
Dividends from Net Investment Income	(1.143)	(.987)	(1.056)	(.914)	(.976)
Distributions from Realized Capital Gains	_	_	_	_	_
Total Distributions	(1.143)	(.987)	(1.056)	(.914)	(.976)
Net Asset Value, End of Period	\$53.27	\$59.16	\$46.83	\$46.96	\$37.50
Total Return <sup>4</sup>	-8.00%	28.59%	2.43%	27.82%	-12.53%
Ratios/Supplemental Data					
Net Assets, End of Period (Millions)	\$45	\$57	\$43	\$52	\$508
Ratio of Total Expenses to Average Net Assets	0.19%5	0.19%	0.19%	0.19%	0.19%
Ratio of Net Investment Income to Average Net Assets	2.05%	1.83%	2.58% <sup>2</sup>	1.90%	2.29% <sup>3</sup>
Portfolio Turnover Rate <sup>6</sup>	18%	17%	39%	17%	17%

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

<sup>2</sup> Net investment income per share and the ratio of net investment income to average net assets include \$.142 and 0.35%, respectively, resulting from a special dividend from NortonLifeLock Inc. in February 2020.

<sup>3</sup> Net investment income per share and the ratio of net investment income to average net assets include \$.111 and 0.26%, respectively, resulting from a special dividend from Dr Pepper Snapple Group Inc. in July 2018.

<sup>4</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>5</sup> The ratio of expenses to average net assets for the period net of reduction from custody fee offset arrangements was 0.19%.

<sup>6</sup> Excludes the value of portfolio securities received or delivered as a result of in-kind purchases or redemptions of the fund's capital shares, including ETF Creation Units.

### **ETF Shares**

For a Share Outstanding			Ye	ear Ended De	cember 31,
Throughout Each Period	2022	2021	2020	2019	2018
Net Asset Value, Beginning of Period	\$150.26	\$118.93	\$119.27	\$95.22	\$111.47
Investment Operations					
Net Investment Income <sup>1</sup>	3.091	2.744	2.781 <sup>2</sup>	2.497	2.645 <sup>3</sup>
Net Realized and Unrealized Gain (Loss) on Investments	(14.996)	31.258	(.310)	23.996	(16.278)
Total from Investment Operations	(11.905)	34.002	2.471	26.493	(13.633)
Distributions					
Dividends from Net Investment Income	(3.075)	(2.672)	(2.811)	(2.443)	(2.617)
Distributions from Realized Capital Gains	_	_	_	_	_
Total Distributions	(3.075)	(2.672)	(2.811)	(2.443)	(2.617)
Net Asset Value, End of Period	\$135.28	\$150.26	\$118.93	\$119.27	\$95.22
Total Return	-7.88%	28.74%	2.50%	27.98%	-12.41%
Ratios/Supplemental Data					
Net Assets, End of Period (Millions)	\$15,995	\$16,086	\$11,061	\$10,339	\$7,898
Ratio of Total Expenses to Average Net Assets	0.07%4	0.07%	0.07%	0.07%	0.07%
Ratio of Net Investment Income to Average Net Assets	2.22%	1.96%	2.69% <sup>2</sup>	2.26%	2.41% <sup>3</sup>
Portfolio Turnover Rate <sup>5</sup>	18%	17%	39%	17%	17%

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

<sup>2</sup> Net investment income per share and the ratio of net investment income to average net assets include \$.362 and 0.35%, respectively, resulting from a special dividend from NortonLifeLock Inc. in February 2020.

<sup>3</sup> Net investment income per share and the ratio of net investment income to average net assets include \$.282 and 0.26%, respectively, resulting from a special dividend from Dr Pepper Snapple Group Inc. in July 2018.

<sup>4</sup> The ratio of expenses to average net assets for the period net of reduction from custody fee offset arrangements was 0.07%.

<sup>5</sup> Excludes the value of portfolio securities received or delivered as a result of in-kind purchases or redemptions of the fund's capital shares, including ETF Creation Units.

### Admiral Shares

For a Share Outstanding	Year Ended December 31			ember 31,	
Throughout Each Period	2022	2021	2020	2019	2018
Net Asset Value, Beginning of Period	\$77.84	\$61.61	\$61.79	\$49.33	\$57.74
Investment Operations					
Net Investment Income <sup>1</sup>	1.586	1.413	1.438 <sup>2</sup>	1.303	1.385 <sup>3</sup>
Net Realized and Unrealized Gain (Loss) on Investments	(7.753)	16.201	(.162)	12.422	(8.439)
Total from Investment Operations	(6.167)	17.614	1.276	13.725	(7.054)
Distributions					
Dividends from Net Investment Income	(1.593)	(1.384)	(1.456)	(1.265)	(1.356)
Distributions from Realized Capital Gains	_	_	_	_	_
Total Distributions	(1.593)	(1.384)	(1.456)	(1.265)	(1.356)
Net Asset Value, End of Period	\$70.08	\$77.84	\$61.61	\$61.79	\$49.33
Total Return <sup>4</sup>	-7.90%	28.76%	2.54%	27.99%	-12.42%
Ratios/Supplemental Data					
Net Assets, End of Period (Millions)	\$11,740	\$13,218	\$10,092	\$11,148	\$7,738
Ratio of Total Expenses to Average Net Assets	0.07%5	0.07%	0.07%	0.07%	0.07%
Ratio of Net Investment Income to Average Net Assets	2.19%	1.95%	2.69% <sup>2</sup>	2.28%	2.41% <sup>3</sup>
Portfolio Turnover Rate <sup>6</sup>	18%	17%	39%	17%	17%

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

<sup>2</sup> Net investment income per share and the ratio of net investment income to average net assets include \$.187 and 0.35%, respectively, resulting from a special dividend from NortonLifeLock Inc. in February 2020.

<sup>3</sup> Net investment income per share and the ratio of net investment income to average net assets include \$.146 and 0.26%, respectively, resulting from a special dividend from Dr Pepper Snapple Group Inc. in July 2018.

<sup>4</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>5</sup> The ratio of expenses to average net assets for the period net of reduction from custody fee offset arrangements was 0.07%.

<sup>6</sup> Excludes the value of portfolio securities received or delivered as a result of in-kind purchases or redemptions of the fund's capital shares, including ETF Creation Units.

## Notes to Financial Statements

Vanguard Mid-Cap Value Index 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, ETF Shares, and Admiral Shares. Each of the share classes has different eligibility and minimum purchase requirements, and is designed for different types of investors. ETF Shares are listed for trading on NYSE Arca; they can be purchased and sold through a broker.

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.

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. Equity securities are valued at the latest quoted sales prices or official closing prices taken from the primary market in which each security trades; such securities not traded on the valuation date are valued at the mean of the latest quoted bid and asked prices. 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. Investments in Vanguard Market Liquidity Fund are valued at that fund's net asset value.
- 2. Futures Contracts: The fund uses index futures contracts to a limited extent, with the objectives of maintaining full exposure to the stock market, maintaining liquidity, and minimizing transaction costs. The fund may purchase futures contracts to immediately invest incoming cash in the market, or sell futures in response to cash outflows, thereby simulating a fully invested position in the underlying index while maintaining a cash balance for liquidity. The primary risks associated with the use of futures contracts are imperfect correlation between changes in market values of stocks 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, 2022, the fund's average investments in long and short futures contracts represented less than 1% and 0% of net assets, respectively, based on the average of the notional amounts at each quarter-end during the period.

3. Swap Contracts: The fund has entered into equity swap contracts to earn the total return on selected reference stocks in the fund's target index. Under the terms of the swaps, the fund receives the total return on the referenced stock (i.e., receiving the increase or paying the decrease in value of the selected reference stock and receiving the equivalent of any dividends in respect of the selected referenced stock) over a specified period of time, applied to a notional amount that represents the value of a designated number of shares of the selected reference stock at the beginning of the equity swap contract. The fund also pays a floating rate that is based on short-term interest rates, applied to the notional amount. At the same time, the fund generally invests an amount approximating the notional amount of the swap in high-quality temporary cash investments.

A risk associated with all types of swaps is the possibility that a counterparty may default on its obligation to pay net amounts due to the fund. The fund's maximum amount subject to counterparty risk is the unrealized appreciation on the swap contract. The fund mitigates its counterparty risk by entering into swaps only with a diverse group of prequalified counterparties, monitoring their financial strength, entering into master netting arrangements with its counterparties, and requiring its

counterparties to transfer collateral as security for their performance. In the absence of a default, the collateral pledged or received by the fund cannot be repledged, resold, or rehypothecated. In the event of a counterparty's default (including bankruptcy), the fund may terminate any swap contracts with that counterparty, determine the net amount owed by either party in accordance with its master netting arrangements, and sell or retain any collateral held up to the net amount owed to the fund under the master netting arrangements. The swap contracts contain provisions whereby a counterparty may terminate open contracts if the fund's net assets decline below a certain level, triggering a payment by the fund if the fund is in a net liability position at the time of the termination. The payment amount would be reduced by any collateral the fund has pledged. Any securities pledged as collateral for open contracts are noted in the Schedule of Investments. The value of collateral received or pledged is compared daily to the value of the swap contracts exposure with each counterparty, and any difference, if in excess of a specified minimum transfer amount, is adjusted and settled within two business days.

The notional amounts of swap contracts are not recorded in the Statement of Assets and Liabilities. Swaps are valued daily based on market quotations received from independent pricing services or recognized dealers and the change in value is recorded in the Statement of Assets and Liabilities as an asset (liability) and in the Statement of Operations as unrealized appreciation (depreciation) until periodic payments are made or the termination of the swap, at which time realized gain (loss) is recorded.

During the year ended December 31, 2022, the fund's average amounts of investments in total return swaps represented less than 1% of net assets, based on the average of notional amounts at each quarter-end during the period.

- 4. 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.
- 5. 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.
- 6. Securities Lending: To earn additional income, the fund lends its securities to qualified institutional borrowers. Security loans are subject to termination by the fund at any time, and are required to be secured at all times by collateral in an amount at least equal to the market value of securities loaned. Daily market fluctuations could cause the value of loaned securities to be more or less than the value of the collateral received. When this occurs, the collateral is adjusted and settled before the opening of the market on the next business day. The fund further mitigates its counterparty risk by entering into securities lending transactions only with a diverse group of pregualified counterparties. monitoring their financial strength, and entering into master securities lending agreements with its counterparties. The master securities lending agreements provide that, in the event of a counterparty's default (including bankruptcy), the fund may terminate any loans with that borrower, determine the net amount owed, and sell or retain the collateral up to the net amount owed to the fund; however, such actions may be subject to legal proceedings. While collateral mitigates counterparty risk, in the event of a default, the fund may experience delays and costs in recovering the securities loaned. The fund invests cash collateral received in Vanguard Market Liquidity Fund, and records a liability in the Statement of Assets and Liabilities for the return of the collateral, during the period the securities are on loan. Collateral investments in Vanguard Market Liquidity Fund are subject to market appreciation or depreciation. Securities lending income represents fees charged to borrowers plus income earned on invested cash collateral, less expenses associated with the loan. During the term of the loan, the fund is entitled to all distributions made on or in respect of the loaned securities
- 7. Credit Facilities and Interfund Lending Program: The fund and certain other funds managed by The Vanguard Group ("Vanguard") participate in a \$4.4 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, 2022, the fund did not utilize the credit facilities or the Interfund Lending Program.

8. Other: Dividend income is recorded on the ex-dividend date. Non-cash dividends included in income, if any, are recorded at the fair value of the securities received. Interest income includes income distributions received from Vanguard Market Liquidity Fund and is accrued daily. 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, 2022, the fund had contributed to Vanguard capital in the amount of \$1,059,000, representing less than 0.01% of the fund's net assets and 0.42% of Vanguard's capital received pursuant to the FSA. The fund's trustees and officers are also directors and employees, respectively, of Vanguard.

- C. The fund's custodian bank has agreed to reduce its fees when the fund maintains cash on deposit in the non-interest-bearing custody account. For the year ended December 31, 2022, custodian fee offset arrangements reduced the fund's expenses by \$25,000 (an annual rate of less than 0.01% of average net assets).
- D. 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, 2022, based on the inputs used to value them:

	Level 1 (\$000)	Level 2 (\$000)	Level 3 (\$000)	Total (\$000)
Investments				
Assets				
Common Stocks	27,689,329	_	_	27,689,329
Temporary Cash Investments	103,898	_	_	103,898
Total	27,793,227	_	_	27,793,227
Derivative Financial Instruments				
Liabilities				
Futures Contracts <sup>1</sup>	390	_	_	390
Swap Contracts	_	1,443	_	1,443
Total	390	1,443	_	1,833

<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.

E. Permanent differences between book-basis and tax-basis components of net assets 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. As of period end, permanent differences primarily attributable to the accounting for applicable in-kind redemptions, passive foreign investment companies, and swap agreements were reclassified between the following accounts:

	Amount (\$000)
Paid-in Capital	1,990,120
Total Distributable Earnings (Loss)	(1,990,120)

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 the deferral of losses from wash sales; the recognition of unrealized gains or losses from certain derivative contracts; and the recognition of unrealized gains from passive foreign investment companies. 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	5,031
Undistributed Long-Term Gains	
Capital Loss Carryforwards	(3,906,033)
Qualified Late-Year Losses	_
Net Unrealized Gains (Losses)	5,282,901

The tax character of distributions paid was as follows:

	Year Ended December 31,	
	2022 Amount (\$000)	2021 Amount (\$000)
Ordinary Income*	624,961	508,027
Long-Term Capital Gains	_	_
Total	624,961	508,027

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

As of December 31, 2022, 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	22,510,326
Gross Unrealized Appreciation	6,504,577
Gross Unrealized Depreciation	(1,221,676)
Net Unrealized Appreciation (Depreciation)	5,282,901

F. During the year ended December 31, 2022, the fund purchased \$10,892,237,000 of investment securities and sold \$9,249,611,000 of investment securities, other than temporary cash investments. Purchases and sales include \$5,825,393,000 and \$4,171,103,000, respectively, in connection with in-kind purchases and redemptions of the fund's capital shares.

The fund purchased securities from and sold securities to other Vanguard funds or accounts managed by Vanguard or its affiliates, in accordance with procedures adopted by the board of trustees in compliance with Rule 17a-7 of the Investment Company Act of 1940. For the year ended December 31, 2022, such purchases were \$684,672,000 and sales were \$966,934,000, resulting in net realized loss of \$508,663,000; these amounts, other than temporary cash investments, are included in the purchases and sales of investment securities noted above.

G. Capital share transactions for each class of shares were:

			Year Ended De	cember 31,
		2022		2021
	Amount (\$000)	Shares (000)	Amount (\$000)	Shares (000)
Investor Shares				
Issued	9,543	172	15,393	281
Issued in Lieu of Cash Distributions	970	18	965	17
Redeemed	(18,191)	(326)	(13,875)	(252)
Net Increase (Decrease)—Investor Shares	(7,678)	(136)	2,483	46
ETF Shares				
Issued	6,026,513	43,603	3,658,900	25,904
Issued in Lieu of Cash Distributions	_	_	_	_
Redeemed	(4,360,279)	(32,425)	(1,692,235)	(11,850)
Net Increase (Decrease)—ETF Shares	1,666,234	11,178	1,966,665	14,054
Admiral Shares				
Issued	2,265,008	31,170	2,834,601	39,559
Issued in Lieu of Cash Distributions	237,416	3,400	205,615	2,818
Redeemed	(2,649,564)	(36,866)	(2,595,026)	(36,366)
Net Increase (Decrease)—Admiral Shares	(147,140)	(2,296)	445,190	6,011

H. Management has determined that no events or transactions occurred subsequent to December 31, 2022, that would require recognition or disclosure in these financial statements.

# Report of Independent Registered Public Accounting Firm

To the Board of Trustees of Vanguard Index Funds and Shareholders of Vanguard Extended Market Index Fund, Vanguard Mid-Cap Index Fund, Vanguard Mid-Cap Growth Index Fund and Vanguard Mid-Cap Value Index Fund

#### Opinions on the Financial Statements

We have audited the accompanying statements of assets and liabilities, including the schedules of investments, of Vanguard Extended Market Index Fund, Vanguard Mid-Cap Index Fund, Vanguard Mid-Cap Growth Index Fund and Vanguard Mid-Cap Value Index Fund (four of the funds constituting Vanguard Index Funds, hereafter collectively referred to as the "Funds") as of December 31, 2022, the related statements of operations for the year ended December 31, 2022, the statements of changes in net assets for each of the two years in the period ended December 31, 2022, including the related notes, and the financial highlights for each of the five years in the period ended December 31, 2022 (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of each of the Funds as of December 31, 2022, the results of each of their operations for the year then ended, the changes in each of their net assets for each of the two years in the period ended December 31, 2022 and each of the financial highlights for each of the five years in the period ended December 31, 2022 in conformity with accounting principles generally accepted in the United States of America.

#### Basis for Opinions

These financial statements are the responsibility of the Funds' management. Our responsibility is to express an opinion on the Funds' 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 Funds 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, 2022 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 opinions.

/s/PricewaterhouseCoopers LLP Philadelphia, Pennsylvania February 16, 2023

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

### Tax information (unaudited)

The following percentages, or if subsequently determined to be different, the maximum percentages allowable by law, of ordinary income (dividend income plus short-term gains, if any) for the fiscal year qualified for the dividends-received deduction for corporate shareholders.

Fund	Percentage
Extended Market Index Fund	88.3%
Mid-Cap Index Fund	85.2
Mid-Cap Growth Index Fund	92.4
Mid-Cap Value Index Fund	84.7

The following amounts, or if subsequently determined to be different, the maximum amounts allowable by law, are hereby designated as qualified dividend income for individual shareholders for the fiscal year.

Fund	(\$000)
Extended Market Index Fund	832,013
Mid-Cap Index Fund	1,923,138
Mid-Cap Growth Index Fund	134,157
Mid-Cap Value Index Fund	552,341

The following amounts, or if subsequently determined to be different, the maximum amounts allowable by law, are hereby designated as interest earned from obligations of the U.S. government which is generally exempt from state income tax.

Fund	(\$000)
Extended Market Index Fund	3,014
Mid-Cap Index Fund	3,854
Mid-Cap Growth Index Fund	32
Mid-Cap Value Index Fund	194

The following amounts, or if subsequently determined to be different, the maximum amounts allowable by law, are hereby designated as qualified business income for individual shareholders for the fiscal year.

Fund	(\$000)
Extended Market Index Fund	83,797
Mid-Cap Index Fund	192,900
Mid-Cap Growth Index Fund	8,654
Mid-Cap Value Index Fund	50,622

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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 206 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. Trustee and vice chair of The Shipley School.

### 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 (2002–2006), the advisory board of the University of California, Berkeley School of Engineering (2020–present), and the advisory board of Santa Clara University's Leavey School of Business (2018–present).

### 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). Chairman of the board of Hillenbrand, Inc. (specialized consumer services). 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.

### 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: adjunct professor of finance at the University of Notre Dame (2020–present). Chief investment officer (retired 2020) and vice president (retired 2020) of the University of Notre Dame. Assistant professor (retired June 2020) of finance at the Mendoza College of Business, University of Notre Dame, and member of the Notre Dame 403(b) Investment Committee. Member of the board of Catholic Investment Services, Inc. (investment advisors), the board of superintendence of the Institute for the Works of Religion, 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. 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 co-managing partner of HighVista Strategies (private investment firm). Member of the board (2018–present) of RIT Capital Partners (investment firm). Member of the investment committee of Partners Health Care System.

### 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 (2021–present), professor (2020–present), Distinguished Fellow of the Global Financial Markets Center (2020–present), and Rubenstein Fellow (2017–2020) at Duke University. Trustee (2017–present) of Amherst College and member of Amherst College Investment Committee (2019–present). Member of the Regenerative Crisis Response Committee (2020–present).

### David A. 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 (2013–present). Trustee of Common Fund (2019–present).

### 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 Corporation.

#### 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).

#### Peter Mahoney

Born in 1974. Principal occupation(s) during the past five years and other experience: principal of Vanguard. Controller (2015–present) of each of the investment companies served by Vanguard. Head of International Fund Services (2008–2014) 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 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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All comparative mutual fund data are from Morningstar, Inc., unless otherwise noted.

You can obtain a free copy of Vanguard's proxy voting guidelines by visiting vanguard.com/proxyreporting or by calling Vanguard at 800-662-2739. The guidelines are also available from the SEC's website, www.sec.gov. In addition, you may obtain a free report on how your fund voted the proxies for securities it owned during the 12 months ended June 30. To get the report, visit either vanguard.com/proxyreporting or www.sec.gov.

You can review information about your fund on the SEC's website, and you can receive copies of this information, for a fee, by sending a request via email addressed to publicinfo@sec.gov.

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