Vanguard°

Annual Report | December 31, 2022

Vanguard Total Stock Market Index Fund

Contents

Your Fund's Performance at a Glance
About Your Fund's Expenses
Performance Summary4
Financial Statements

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

Your Fund's Performance at a Glance

- For the 12 months ended December 31, 2022, returns for Vanguard Total Stock Market Index Fund ranged from –19.60% for Investor Shares to –19.50% for ETF Shares (based on net asset value) and Institutional Select Shares.
- The period was a volatile, challenging one for financial markets. Overall, the economic backdrop deteriorated as inflation soared to multidecade highs, driven by government spending during the pandemic as well as higher energy and food prices in the wake of Russia's invasion of Ukraine. That prompted aggressive tightening by many central banks to bring inflation back in check, which increased fears of recession.
- The fund, which offers investors exposure to every segment, size, and style of the U.S. equity market, closely tracked its target index, the CRSP US Total Market Index.
- The majority of the 11 sectors recorded negative returns for the 12 months. Technology, financial, consumer discretionary, and industrial stocks hurt performance the most.

Market Barometer

	Average Annual Total Returns Periods Ended December 31, 2022			
	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	
СРІ				
Consumer Price Index	6.45%	4.92%	3.78%	

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

	Beginning Account Value 6/30/2022	Ending Account Value 12/31/2022	Expenses Paid During Period
Based on Actual Fund Return			
Total Stock Market Index Fund			
Investor Shares	\$1,000.00	\$1,023.20	\$0.71
ETF Shares	1,000.00	1,023.90	0.15
Admiral™ Shares	1,000.00	1,023.70	0.20
Institutional Shares	1,000.00	1,023.80	0.15
Institutional Plus Shares	1,000.00	1,023.80	0.10
Institutional Select Shares	1,000.00	1,023.80	0.05
Based on Hypothetical 5% Yearly Return			
Total Stock Market Index Fund			
Investor Shares	\$1,000.00	\$1,024.50	\$0.71
ETF Shares	1,000.00	1,025.05	0.15
Admiral Shares	1,000.00	1,025.00	0.20
Institutional Shares	1,000.00	1,025.05	0.15
Institutional Plus Shares	1,000.00	1,025.10	0.10
Institutional Select Shares	1,000.00	1,025.15	0.05

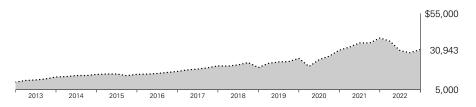
The calculations are based on expenses incurred in the most recent six-month period. The fund's annualized six-month expense ratios for that period are: 0.14% for Investor Shares, 0.03% for ETF Shares, 0.04% for Admiral Shares, 0.03% for Institutional Shares, 0.02% for Institutional Plus Shares, and 0.01% for Institutional Select 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).

Total Stock 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 Initial Investment of \$10.000



	Average Annual Total Returns Periods Ended December 31, 2022			
	One Year	Five Years	Ten Years	Final Value of a \$10,000 Investment
Total Stock Market Index Fund Investor Shares	-19.60%	8.60%	11.96%	\$30,943
······ Spliced Total Stock Market Index	-19.49	8.73	12.09	31,313

Spliced Total Stock Market Index: MSCI US Broad Market Index through June 2, 2013; and CRSP US Total Market Index thereafter.

	One Year	Five Years	Ten Years	Final Value of a \$10,000 Investment
Total Stock Market Index Fund ETF Shares Net Asset Value	-19.50%	8.72%	12.08%	\$31,284
Total Stock Market Index Fund ETF Shares Market Price	-19.51	8.70	12.08	31,272
Spliced Total Stock Market Index	-19.49	8.73	12.09	31,313

Average Annual Total Return	าร
Periods Ended December 31, 202	22

	1 CHOUS LIN	aca Decernio	01 01, 2022	_
	One Year	Five Years	Ten Years	Final Value of a \$10,000 Investment
Total Stock Market Index Fund Admiral Shares	-19.53%	8.71%	12.08%	\$31,271
Spliced Total Stock Market Index	-19.49	8.73	12.09	31,313

	One Year	Five Years	Ten Years	Final Value of a \$5,000,000 Investment
Total Stock Market Index Fund Institutional Shares	-19.51%	8.72%	12.08%	\$15,647,040
Spliced Total Stock Market Index	-19.49	8.73	12.09	15,656,666

	One Year	Five Years	Since Inception (4/28/2015)	Final Value of a \$100,000,000 Investment
Total Stock Market Index Fund Institutional Plus Shares	-19.51%	8.73%	9.50%	\$200,765,380
CRSP US Total Market Index	-19.49	8.73	9.50	200,657,550

[&]quot;Since Inception" performance is calculated from the Institutional Plus Shares' inception date for both the fund and its comparative standard(s).

	One Year	Five Years	Since Inception (6/27/2016)	Final Value of a \$5,000,000,000 Investment
Total Stock Market Index Fund Institutional Select Shares	-19.50%	8.74%	12.11%	\$10,527,155,500
CRSP US Total Market Index	-19.49	8.73	12.10	10,517,247,000

[&]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
Total Stock Market Index Fund ETF Shares Market Price	-19.51%	51.78%	212.72%
Total Stock Market Index Fund ETF Shares Net Asset Value	-19.50	51.88	212.84
Spliced Total Stock Market Index	-19.49	51.95	213.13

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	2.2%
Consumer Discretionary	13.2
Consumer Staples	6.0
Energy	5.3
Financials	11.9
Health Care	15.0
Industrials	13.7
Real Estate	3.4
Technology	23.4
Telecommunications	2.4
Utilities	3.5

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)
	Sildles	(2000)				
Common Stocks (99.3%)				Ashland Inc.	1,478,030	158,933
Basic Materials (2.2%)				Univar Solutions Inc.	4,954,403	157,550
Linde plc	15,019,901	4,899,191		Hexcel Corp.	2,546,678	149,872
Air Products and				Huntsman Corp.	5,261,743	144,593
Chemicals Inc.	6,747,414	2,079,958		UFP Industries Inc.	1,785,831	141,527
Freeport-				Timken Co.	1,994,295	140,937
McMoRan Inc.	43,468,283	1,651,795		Chemours Co.	4,597,360	140,771
Newmont Corp.	24,150,124	1,139,886		Element	0.000.050	400 500
Ecolab Inc.	7,794,372	1,134,549		Solutions Inc.	6,628,259	120,568
Dow Inc.	21,400,761	1,078,384		Balchem Corp.	980,941	119,783
Nucor Corp.	7,802,794	1,028,486		Cabot Corp.	1,708,327	114,185
Fastenal Co.	17,419,126	824,273		Livent Corp.	5,439,749	108,088
International Flavors				Westlake Corp.	971,987	99,668
& Fragrances Inc.	7,755,009	813,035		Hecla Mining Co.	17,560,999	97,639
Albemarle Corp.	3,563,120	772,698		Mueller		
LyondellBasell				Industries Inc.	1,637,331	96,603
Industries NV				Sensient	1 270 400	02 200
Class A	7,923,592	657,896		Technologies Corp.	1,279,489	93,300
CF Industries		500.040		Avient Corp.	2,757,611	93,097
Holdings Inc.	5,969,622	508,612		Boise Cascade Co.	1,198,131	82,276
Steel Dynamics Inc.	5,071,745	495,510	_	MP Materials Corp.	3,246,837	78,833
FMC Corp.	3,828,433	477,788		Innospec Inc.	759,391	78,111
Mosaic Co.	10,349,890	454,050		Ingevity Corp.	1,075,720	75,774
Avery Dennison		445.000		NewMarket Corp.	225,529	70,164
Corp.	2,463,992	445,983		Stepan Co.	654,667	69,696
International Paper	40.005.000	074 070		Quaker Chemical	440.550	00 504
Co.	10,825,230	374,878		Corp.	410,550	68,521
Reliance Steel &	1 700 067	261 005		Arconic Corp.	3,094,651	65,483
Aluminum Co.	1,783,267	361,005		Scotts Miracle-Gro	4 070 040	00.040
Celanese Corp. Class A	2,970,544	303,708		Co.	1,276,318	62,016
Eastman Chemical	2,370,344	303,700		Minerals	007046	E0 000
Co.	3,644,316	296,793		Technologies Inc.	987,946	59,988
* Cleveland-Cliffs Inc.	15,667,173	252,398		Sylvamo Corp.	1,138,184	55,304
Alcoa Corp.	5,374,987	244,401		Carpenter Technology Corp.	1,480,343	54,684
Royal Gold Inc.	2,001,237	225,579				,
Olin Corp.	4,161,097	220,289		Materion Corp.	623,304	54,545
* RBC Bearings Inc.				Tronox Holdings plc	3,504,026	48,040
•	884,390	185,147		Worthington	006 509	4E 063
Valvoline Inc.	5,296,473	172,930	*,1	Industries Inc. Uranium Energy	906,508	45,063
Commercial Metals Co.	3,568,887	172,377	, ,	Corp.	11,126,524	43,171
United States Steel	3,300,087	1/2,3//		Compass Minerals	11,120,024	40,1/1
Corp.	6,405,607	160,460		International Inc.	1,038,269	42,569
Corp.	0,400,007	100,400		manifectional info.	1,000,200	72,000

			Market Value•				Market Value•
		Shares	(\$000)			Shares	(\$000)
	Kaiser Aluminum			*	AgroFresh		
	Corp.	488,565	37,111		Solutions Inc.	1,057,843	3,131
	Mativ Holdings Inc.	1,663,708	34,772	*	NN Inc.	1,558,286	2,337
	AdvanSix Inc.	790,022	30,037	*,1	Hycroft Mining		
*	Resolute Forest	4 004 500	00.000		Holding Corp.	4 000 770	0.004
* 4	Products Inc.	1,384,596	29,893		Class A Friedman	4,292,776	2,284
*,1	Energy Fuels Inc.	4,573,542	28,402		Industries Inc.	205,359	2,011
	GrafTech International Ltd.	5,815,400	27,681	*	Perma-Pipe	200,000	2,011
*	US Silica	5,615,400	27,001		International		
	Holdings Inc.	2,172,290	27,154		Holdings Inc.	203,835	1,926
*	Coeur Mining Inc.	7,680,148	25,805	*	Universal Stainless &	k	
*	Ecovyst Inc.	2,704,904	23,965		Alloy Products Inc.	231,105	1,657
*	TimkenSteel Corp.	1,299,552	23,613	*,1	Idaho Strategic		
	Schnitzer Steel	,,	.,.		Resources Inc.	277,137	1,580
	Industries Inc.			*	Golden Minerals Co.	4,483,331	1,230
	Class A	766,436	23,491	*	United States	0.504.776	1 220
*	LSB Industries Inc.	1,753,855	23,326		Antimony Corp.	2,524,776	1,229
*	Piedmont			*	Culp Inc. Westwater	248,217	1,139
	Lithium Inc.	513,111	22,587		Resources Inc.	1,414,240	1,117
,	Hawkins Inc.	555,705	21,450	*	CPS Technologies	1,414,240	1,117
-	Rayonier Advanced	0.001.705	10 400		Corp.	388,523	1,045
	Materials Inc. Ryerson Holding	2,021,725	19,409	*	Ampco-Pittsburgh	, .	, -
	Corp.	622,511	18,837		Corp.	366,153	919
*	Clearwater Paper	022,011	10,007	*	Flexible Solutions		
	Corp.	486,081	18,379		International Inc.	277,169	859
	Koppers	,	,	*	US Gold Corp.	174,184	836
	Holdings Inc.	600,901	16,945	*	Ascent Industries Co	96,346	835
	American Vanguard				Chicago Rivet &		0.10
	Corp.	752,362	16,334		Machine Co.	28,369	812
	Haynes	0.47.400	45.070	*	United-Guardian Inc.		761
* 4	International Inc.	347,482	15,876	*	Solitario Zinc Corp.	1,173,263	728
*,1	Origin Materials Inc.	2,995,000	13,807		Paramount Gold Nevada Corp.	1,223,263	422
	Century Aluminum Co.	1,585,067	12.066	*	Comstock Inc.	1,073,641	295
*,1	Amyris Inc.	6,736,712	12,966 10,307	*	NextPlat Corp.	37,918	48
*	Northwest Pipe Co.	283,882	9,567	*	Hycroft Mining	07,010	10
	Olympic Steel Inc.	270,195	9,073		Holding Corp.		
*	Intrepid Potash Inc.	295,437	8,529		Warrants Exp.		
	Omega Flex Inc.	88,289	8,239		10/6/25	155,000	9
	Tredegar Corp.	804,870	8,226	*,2	F-star		
*,1	5E Advanced	00.,070	0,220		Therapeutics Inc.	01.001	4
	Materials Inc.	968,490	7,632		CVR	61,021_	4
*,1	Ur-Energy Inc.	6,553,123	7,536				25,113,243
*	Alto Ingredients Inc.	2,354,281	6,780	Cons	sumer Discretionary (13.1%)	
	FutureFuel Corp.	789,526	6,419	*	Amazon.com Inc.	263,718,686	22,152,370
	Gold Resource Corp.	3,353,910	5,132	*	Tesla Inc.	81,633,392	10,055,601
*	Gatos Silver Inc.	1,098,604	4,493		Home Depot Inc.	30,996,436	9,790,534
*	Unifi Inc.	515,832	4,441		Costco Wholesale	10 460 005	6 144 507
*	Dakota Gold Corp.	1,411,351	4,305		Corp.	13,460,235	6,144,597
	Northern				McDonald's Corp.	22,272,254	5,869,407
	Technologies	005 400	0.700	*	Walmart Inc.	41,273,961	5,852,235
	International Corp.	285,438	3,799		Walt Disney Co.	55,449,819	4,817,480
	Glatfelter Corp.	1,133,978	3,153	*	NIKE Inc. Class B Netflix Inc.	38,311,449	4,482,823
	Eastern Co.	163,220	3,147		Lowe's Cos. Inc.	13,534,983 18,391,941	3,991,196 3,664,410
					LOVVE 3 COS. IIIC.	10,001,041	5,004,410

		Shares	Market Value• (\$000)			Shares	Market Value• (\$000)
	0. 1 1 0			-	1.1/.0.0		(**/
	Starbucks Corp. TJX Cos. Inc.	34,907,224	3,462,797	*	LKQ Corp. Burlington	7,720,116	412,331
*	Booking	33,543,992	2,670,102		Stores Inc.	1,981,421	401,753
	Holdings Inc.	1,179,749	2,377,525	*	Expedia Group Inc.	4,582,512	401,428
	Target Corp.	14,001,889	2,086,842		Interpublic Group of	1,002,012	101,120
	Dollar General Corp.	6,859,824	1,689,232		Cos. Inc.	11,821,005	393,758
	Activision	0,000,02	.,000,202	*	United Airlines		•
	Blizzard Inc.	21,410,377	1,638,964		Holdings Inc.	9,919,904	373,980
*	O'Reilly				Domino's Pizza Inc.	1,075,770	372,647
	Automotive Inc.	1,902,552	1,605,811	*,1	Rivian		
	Estee Lauder Cos.				Automotive Inc.		
	Inc. Class A	6,333,250	1,571,343		Class A	19,462,254	358,689
*	Uber			*	Live Nation	4 000 000	040440
	Technologies Inc.	57,614,358	1,424,803		Entertainment Inc.	4,920,389	343,148
_	AutoZone Inc.	577,172	1,423,410	*	Pool Corp.	1,129,465	341,471
		120,145,687	1,397,294		Liberty Media CorpLiberty		
	General Motors Co.	40,957,858	1,377,822		Formula One		
	Marriott International Inc.				Class C	5,564,203	332,628
	Class A	8,662,687	1,289,788	*	Royal Caribbean		
	Ross Stores Inc.	10,557,045	1,225,356		Cruises Ltd.	6,594,623	325,972
*	Lululemon	10,007,010	1,220,000		Aramark	7,852,336	324,616
	Athletica Inc.	3,719,590	1,191,682	*	Deckers Outdoor		
*	Chipotle Mexican				Corp.	804,943	321,301
	Grill Inc. Class A	843,044	1,169,715		PulteGroup Inc.	6,909,199	314,576
	Yum! Brands Inc.	8,565,177	1,097,028		MGM Resorts		040 747
	Hilton Worldwide				International	9,327,373	312,747
	Holdings Inc.	8,224,414	1,039,237		Service Corp. International	1 115 775	207201
	Electronic Arts Inc.	8,397,124	1,025,961		Rollins Inc.	4,445,775 8,244,345	307,381 301,248
*	Airbnb Inc. Class A	10,902,531	932,166		VF Corp.	10,634,532	293,619
*	Dollar Tree Inc.	6,389,449	903,724	*	CarMax Inc.	4,804,822	292,566
	DR Horton Inc.	9,421,986	839,876		Vail Resorts Inc.	1,224,551	291,872
	Copart Inc.	13,032,315	793,538		BorgWarner Inc.	7,121,781	286,652
_	Aptiv plc	8,244,667	767,826	*	ROBLOX Corp.	,,121,701	200,002
	Tractor Supply Co.	3,359,499	755,787		Class A	10,028,220	285,403
*	Genuine Parts Co.	4,288,580	744,112	*	Five Below Inc.	1,605,339	283,936
	Ulta Beauty Inc.	1,557,066	730,373		Tapestry Inc.	7,319,005	278,708
	eBay Inc.	16,490,833	683,875		Bath & Body		
*	Lennar Corp. Class A Delta Air Lines Inc.		652,485		Works Inc.	6,602,122	278,213
*	Warner Bros	19,480,028	640,114	*	BJ's Wholesale Club		
	Discovery Inc.	66,500,210	630,422		Holdings Inc.	4,094,641	270,901
*	Southwest Airlines	00,000,210	000,422		Fox Corp. Class A	8,897,748	270,225
	Co.	18,072,820	608,512		Advance Auto	4 700 000	004.550
*	Trade Desk Inc.	-,- ,-	, .		Parts Inc.	1,799,333	264,556
	Class A	13,548,648	607,386		Caesars	6 102 610	257654
*	Take-Two Interactive			1	Entertainment Inc.	6,193,610	257,654
	Software Inc.	5,104,530	531,535		Paramount Global Class B	15,089,697	254,714
	Darden			*	American Airlines	10,000,007	204,714
	Restaurants Inc.	3,720,496	514,656		Group Inc.	19,732,785	251,001
	Omnicom Group Inc.	6,202,949	505,975		News Corp. Class A	13,751,459	250,277
*	Las Vegas Sands	10 462 005	E00.000	*,1	Carnival Corp.	30,450,640	245,432
	Corp.	10,463,685	502,989		Hasbro Inc.	3,988,650	243,348
*	Best Buy Co. Inc.	6,158,595	493,981	*	Wynn Resorts Ltd.	2,922,356	241,007
	Etsy Inc.	3,816,999	457,200		Whirlpool Corp.	1,657,276	234,438
*	Garmin Ltd. NVR Inc.	4,659,382	430,014		Williams-	-	
	INVITUIL.	92,156	425,077		Sonoma Inc.	2,020,154	232,156

		0.	Market Value*			01	Market Value•
		Shares	(\$000)			Shares	(\$000)
*	Capri Holdings Ltd.	3,986,202	228,489	*	AutoNation Inc.	1,201,800	128,953
	Lear Corp.	1,801,270	223,394		Academy Sports &		
	Churchill Downs Inc.	1,023,872	216,477		Outdoors Inc.	2,431,568	127,755
*	Floor & Decor			-	Hyatt Hotels Corp.	1 200 145	105 077
	Holdings Inc.	2.050.207	010.005		Class A	1,386,145	125,377
	Class A	3,059,387	213,025		Wingstop Inc. Warner Music Group	910,669	125,326
	Dick's Sporting Goods Inc.	1,730,252	208,132		Corp. Class A	3,542,132	124,045
*	Planet Fitness Inc.	1,730,232	200, 132		Fox Corp. Class B	4,353,580	123,859
	Class A	2,538,871	200,063	*,1	Lucid Group Inc.	17,882,334	122,136
	Gentex Corp.	7,157,507	195,185	*	Asbury Automotive	17,002,004	122,100
*	Crocs Inc.	1,784,916	193,538		Group Inc.	672,068	120,468
*	Mattel Inc.	10,784,383	192,393		Choice Hotels		,
	Wyndham Hotels &	, , , , , , , , , , , , , , , , , , , ,	,		International Inc.	1,054,345	118,761
	Resorts Inc.	2,677,970	190,966		Ralph Lauren Corp.		
	Nexstar Media				Class A	1,121,270	118,485
	Group Inc. Class A	1,087,704	190,381	*	Fox Factory Holding		
	Texas				Corp.	1,290,288	117,713
	Roadhouse Inc.		404.500	1	Thor Industries Inc.	1,552,829	117,223
*	Class A	2,028,688	184,509		Wendy's Co.	5,177,644	117,170
	Liberty Media				Boyd Gaming Corp.	2,055,075	112,063
	CorpLiberty SiriusXM Class C	4,645,336	181,772	*	Visteon Corp.	851,989	111,466
	Murphy USA Inc.	618,403	172,868	*	Bright Horizons		
	H&R Block Inc.	4,723,343	172,449		Family Solutions Inc.	1 740 054	110 422
	Lithia Motors Inc.	4,720,040	172,440	*	YETI Holdings Inc.	1,749,954 2,621,730	110,422 108,304
	Class A	834,300	170,815		Foot Locker Inc.	2,839,810	100,304
*	Skechers USA Inc.		,	*	Lyft Inc. Class A	9,670,095	106,564
	Class A	4,071,177	170,786	1	Sirius XM	3,070,033	100,504
	Tempur Sealy				Holdings Inc.	17,803,793	103,974
	International Inc.	4,951,828	169,996	*	Avis Budget	17,000,700	100,071
	Macy's Inc.	8,229,215	169,933		Group Inc.	628,732	103,068
	Polaris Inc.	1,676,005	169,277	*	Meritage Homes		,
*	Light & Wonder Inc.	2,855,552	167,335		Corp.	1,113,603	102,674
	Harley-Davidson Inc.	4,004,666	166,594	*,1	Chewy Inc. Class A	2,723,263	100,979
*	Alaska Air Group Inc.	3,873,133	166,312	*	Hilton Grand		
	Toll Brothers Inc.	3,261,844	162,831		Vacations Inc.	2,620,092	100,978
*	IAA Inc.	4,065,623	162,625	*	Grand Canyon		
*	SiteOne Landscape				Education Inc.	943,357	99,675
	Supply Inc.	1,370,077	160,737	*	Taylor Morrison	0.440.744	05.000
	U-Haul Holding Co.	2,894,243	159,126	*	Home Corp. Class A	3,142,741	95,382
*	Norwegian Cruise	40 770 400	450,000		National Vision Holdings Inc.	2 200 270	92,957
	Line Holdings Ltd.	12,776,406	156,383	*	Chegg Inc.	2,398,270 3,622,603	91,543
	New York Times Co. Class A	4,769,349	154,813		Signet Jewelers Ltd.	1,340,499	91,154
	Newell Brands Inc.	11,306,647	147,891		World Wrestling	1,340,433	31,154
*,1	GameStop Corp.	11,300,047	147,031		Entertainment Inc.		
, -	Class A	7,873,183	145,339		Class A	1,315,229	90,120
*	RH	540,951	144,537	*	Endeavor Group	, ,	
	TEGNA Inc.	6,808,979	144,282		Holdings Inc.		
	Marriott Vacations	5,555,575	111,202		Class A	3,985,252	89,828
	Worldwide Corp.	1,049,582	141,263		Kohl's Corp.	3,542,346	89,444
	PVH Corp.	1,984,816	140,108	*	Ollie's Bargain Outlet		
*	Penn	, ,	-,		Holdings Inc.	1,904,441	89,204
	Entertainment Inc.	4,704,727	139,730	*	Liberty Media		
*,1	DraftKings Inc.				CorpLiberty	0.004.704	00.040
	Class A	11,606,646	132,200		SiriusXM Class A	2,261,761	88,910
	Leggett & Platt Inc.	4,017,824	129,495				

		Shares	Market Value• (\$000)			Shares	Market Value• (\$000)
	Madison Square				Rush Enterprises Inc.		
	Garden Sports				Class A	1,208,458	63,178
	Corp.	484,090	88,748	*	Sabre Corp.	10,027,208	61,968
*	Coty Inc. Class A	10,359,108	88,674		Red Rock		
*	Goodyear Tire &				Resorts Inc. Class A	1,503,279	60,146
	Rubber Co.	8,574,736	87,034		Dana Inc.	3,919,480	59,302
	Travel + Leisure Co.	2,342,051	85,251	*	Duolingo Inc. Class A	826,323	58,776
*	Skyline Champion		0.4.400	*	Cavco Industries Inc.	255,081	57,712
	Corp.	1,633,281	84,130	*	SeaWorld		
_	elf Beauty Inc.	1,519,338	84,019		Entertainment Inc.	1,068,203	57,160
_	Topgolf Callaway	4 016 106	00 070	*	Tri Pointe Homes Inc.	3,055,927	56,810
	Brands Corp.	4,216,196	83,270	*	Under Armour Inc.	0.005.050	50544
	Columbia Sportswear Co.	940,133	82,337		Class C	6,335,652	56,514
	Carter's Inc.	1,103,474	82,330	_	Boot Barn	000 670	EC 210
	Gap Inc.	7,230,096	81,556	*	Holdings Inc.	900,679	56,310
	Lennar Corp. Class B	1,090,413	81,541	*	LGI Homes Inc.	602,905	55,829
*	Helen of Troy Ltd.	729,736	80,935		PowerSchool Holdings Inc.		
	Papa John's	729,730	60,933		Class A	2,410,713	55,639
	International Inc.	967,366	79,624	*	TripAdvisor Inc.	3,068,074	55,164
*	Victoria's Secret &	007,000	70,021		MDC Holdings Inc.	1,730,751	54,692
	Co.	2,216,580	79,309	*	Under Armour Inc.	1,700,701	34,032
*,1	Wayfair Inc. Class A	2,341,121	77,000		Class A	5,365,297	54,511
	Group 1	2,0 , . 2 .	, ,,000		Bloomin' Brands Inc.	2,680,832	53,938
	Automotive Inc.	420,210	75,793	*	ODP Corp.	1,183,270	53,886
	KB Home	2,352,938	74,941		Strategic	1,100,270	00,000
	Penske Automotive		•		Education Inc.	683,930	53,565
	Group Inc.	649,477	74,644		Inter Parfums Inc.	546,554	52,753
*	Peloton				John Wiley &		
	Interactive Inc.				Sons Inc. Class A	1,285,754	51,507
	Class A	9,136,928	72,547	*	Frontdoor Inc.	2,469,721	51,370
	American Eagle			*,1	Leslie's Inc.	4,174,728	50,973
	Outfitters Inc.	5,145,030	71,825	*	Six Flags		
*	Hertz Global	4 5 45 404	00.055		Entertainment Corp.	2,134,155	49,619
	Holdings Inc.	4,545,481	69,955		MillerKnoll Inc.	2,302,527	48,376
	Steven Madden Ltd.	2,163,573	69,148	*	Driven Brands		
	Graham Holdings Co. Class B	112,700	69 005		Holdings Inc.	1,768,993	48,311
	LCI Industries	734,952	68,095 67,946		Cheesecake	4 = 0.4 0.00	40.054
	Kontoor Brands Inc.	1,692,783	67,694		Factory Inc.	1,521,626	48,251
	Hanesbrands Inc.	10,569,184	67,220		Nordstrom Inc.	2,913,929	47,031
*	Gentherm Inc.	1,008,700	65,858		Winnebago Industries Inc.	000 040	46,816
*,1	AMC Entertainment	1,000,700	03,030	*	Shake Shack Inc.	888,348	40,010
	Holdings Inc.				Class A	1,124,894	46,717
	Class A	16,169,715	65,811		PriceSmart Inc.	764,138	46,444
*	Dorman		,	*	Adtalem Global	704,100	40,444
	Products Inc.	811,918	65,660		Education Inc.	1,294,415	45,952
*	Sonos Inc.	3,845,077	64,982	*	Knowles Corp.	2,762,002	45,352
*	JetBlue Airways				Monro Inc.	972,605	43,962
	Corp.	9,943,302	64,433	*	Dave & Buster's	0,2,000	.0,002
	Spirit Airlines Inc.	3,306,303	64,407		Entertainment Inc.	1,239,018	43,911
	Cracker Barrel Old				Century	•	
	Country Store Inc.	668,995	63,381		Communities Inc.	873,223	43,670
*	Liberty Media			*	Urban Outfitters Inc.	1,827,629	43,589
	CorpLiberty				Jack in the Box Inc.	638,523	43,566
	Formula One Class A	1 10/ 510	63,289		Laureate		
	Class A	1,184,518	03,209		Education Inc.		
					Class A	4,471,698	43,018

		Shares	Market Value• (\$000)			Shares	Market Value• (\$000)
*	KAR Auction				Sturm Ruger & Co.		
	Services Inc.	3,296,062	43.014		Inc.	538.741	27,271
	Oxford Industries Inc.		42,707	*	Revolve Group Inc.		,
*	Brinker	,	,		Class A	1,219,646	27,149
	International Inc.	1,330,441	42,454	*	Perdoceo Education		
	Levi Strauss & Co.				Corp.	1,939,276	26,956
	Class A	2,705,626	41,991	*	Figs Inc. Class A	4,002,813	26,939
*	Vista Outdoor Inc.	1,714,451	41,781	*	Cars.com Inc.	1,946,627	26,805
	Buckle Inc.	914,403	41,468	*	Overstock.com Inc.	1,375,498	26,630
	Acushnet Holdings				News Corp. Class B	1,435,652	26,473
	Corp.	975,000	41,399	*	Clean Energy Fuels		
*	Sally Beauty				Corp.	5,028,302	26,147
	Holdings Inc.	3,231,680	40,461	1	Camping World		
*,1	QuantumScape Corp.	7005 000	00.740		Holdings Inc.	4 400 000	00.047
* 4	Class A	7,005,022	39,719		Class A	1,166,986	26,047
*,1	Fisker Inc. Class A	5,379,833	39,111		Wolverine World	0.001.007	05.010
*	M/I Homes Inc.	839,631	38,774	*	Wide Inc.	2,361,607	25,812
*	Everi Holdings Inc.	2,693,297	38,649		American Axle &		
*	Stride Inc.	1,232,972	38,567		Manufacturing Holdings Inc.	3,262,182	25,510
1	Dillard's Inc. Class A	119,093	38,491	*	SkyWest Inc.	1,523,700	25,156
*	iRobot Corp.	788,335	37,943	*	PROG Holdings Inc.	1,489,256	25,150
*	Madison Square			*	Udemy Inc.	2,370,324	25,154
	Garden	004 000	00.000	*	Golden	2,370,324	25,007
	Entertainment Corp.	801,369	36,038		Entertainment Inc.	639,248	23,908
	Central Garden & Pet	002 041	2E 100	1	Sonic	033,240	23,300
*,1	Co. Class A Dutch Bros Inc.	982,941	35,189		Automotive Inc.		
, '	Class A	1,245,900	35,122		Class A	483,202	23,807
*	XPEL Inc.	575,443	34,561		Caleres Inc.	1,067,019	23,773
*,1	Luminar	575,443	34,301		RCI Hospitality	.,00,,0.0	20,770
, '	Technologies Inc.				Holdings Inc.	253,304	23,605
	Class A	6,970,324	34,503		Hibbett Inc.	344,284	23,487
*	Coursera Inc.	2,906,319	34,382	*	EW Scripps Co.	,	,
*	Liberty Media	2,000,010	04,002		Class A	1,779,286	23,469
	CorpLiberty Braves			*	Petco Health &	, ,	•
	Class C	1,030,274	33,206		Wellness Co. Inc.		
	Scholastic Corp.	835,492	32,969		Class A	2,436,785	23,101
*	Allegiant Travel Co.	482,849	32,829	*,1	Sweetgreen Inc.		
	HNI Corp.	1,149,191	32,672		Class A	2,597,085	22,257
*	Malibu Boats Inc.	, -, -	- ,-		Arko Corp.	2,482,070	21,495
	Class A	609,244	32,473	*	QuinStreet Inc.	1,490,772	21,393
*	Abercrombie & Fitch			*,1	Portillo's Inc. Class A	1,297,736	21,179
	Co. Class A	1,411,415	32,336	1	Krispy Kreme Inc.	2,044,211	21,096
	Rent-A-Center Inc.	1,427,240	32,184	*,1	Mister Car Wash Inc.	2,278,674	21,032
*	Monarch Casino &				A-Mark Precious		
	Resort Inc.	401,599	30,879		Metals Inc.	600,243	20,846
	La-Z-Boy Inc.	1,288,036	29,393	*	iHeartMedia Inc.		
*	ACV Auctions Inc.				Class A	3,280,407	20,109
	Class A	3,567,917	29,293	*	MarineMax Inc.	624,661	19,502
	Dine Brands				Sinclair Broadcast		
	Global Inc.	452,673	29,243		Group Inc. Class A	1,245,554	19,319
*	Cinemark			*	GoPro Inc. Class A	3,797,058	18,909
	Holdings Inc.	3,295,222	28,537		Standard Motor		
	Matthews				Products Inc.	542,883	18,892
	International Corp.	000 044	07.070	*	Green Brick	774 070	10 770
	Class A	909,011	27,670		Partners Inc.	774,676	18,770
	Gray Television Inc.	2,472,495	27,667		Steelcase Inc.	2 647612	10 710
					Class A	2,647,612	18,719

		Shares	Market Value• (\$000)			Shares	Market Value• (\$000)
*	Lions Gate			*	MasterCraft Boat		
	Entertainment Corp.				Holdings Inc.	519,098	13,429
	Class B	3,409,616	18,514	*	Rover Group Inc.		
*	BJ's Restaurants Inc.	690,579	18,218		Class A	3,628,532	13,317
	Ethan Allen	077.000	47005		Rush Enterprises Inc.		40.070
1	Interiors Inc.	677,692	17,905		Class B	232,433	13,079
*	Franchise Group Inc. Boston Omaha Corp.	750,953	17,888		Haverty Furniture Cos. Inc.	432,133	12,921
	Class A	670,390	17,765	*,1	Lions Gate	102,100	12,021
*	Genesco Inc.	385,373	17,735		Entertainment Corp.		
*	Chico's FAS Inc.	3,579,664	17,612		Class A	2,254,351	12,872
*	Central Garden & Pet			*	Accel		
	Co.	468,985	17,564		Entertainment Inc.	1 051 001	10 710
	Interface Inc. Class A	1,745,201	17,225	*	Class A America's	1,651,081	12,713
*	Life Time Group	4 400 700	47000		Car-Mart Inc.	175,495	12,681
	Holdings Inc.	1,423,736	17,028	1	Big Lots Inc.	829,589	12,195
	Guess? Inc.	822,162	17,011		Smith & Wesson	020,000	12,100
	G-III Apparel Group Ltd.	1,231,141	16,879		Brands Inc.	1,379,309	11,972
	Winmark Corp.	71,060	16,758		Global Industrial Co.	498,050	11,719
*	TravelCenters of	71,000	10,750	*	Clear Channel		
	America Inc.	373,245	16,714		Outdoor		
*	Qurate Retail Inc.			* 1	Holdings Inc.	11,059,231	11,612
	Class A	10,109,894	16,479	*,1	SES AI Corp.	3,668,700	11,556
*	Sleep Number Corp.	633,551	16,460		Beazer Homes USA Inc.	900,475	11,490
*,1	Bally's Corp.	844,552	16,367		Shoe Carnival Inc.	479,790	11,472
*	Poshmark Inc.	045.040	40.004	*	Sciplay Corp. Class A	705,371	11,342
*,1	Class A	915,018	16,361	*	Liquidity	700,071	11,012
*	Bowlero Corp. Stoneridge Inc.	1,212,627 753,568	16,346 16,247		Services Inc.	795,167	11,180
*	Denny's Corp.	1,741,210	16,247	*	Destination XL		
	U-Haul Holding Co.	265,952	16,008		Group Inc.	1,645,333	11,106
*,1	Liberty Media	200,002	10,000		Carriage		
	CorpLiberty Braves				Services Inc. Class A	402 101	11 076
	Class A	489,590	15,995	1	Marcus Corp.	402,181 731,652	11,076 10,529
*	Thryv Holdings Inc.	833,356	15,834	*,1	Mullen	731,002	10,529
*,1	Corsair Gaming Inc.	1,166,610	15,831		Automotive Inc.	36,210,051	10,356
*	Chuy's Holdings Inc.	537,332	15,207	*,1	Vizio Holding Corp.	, ,	-,
*	Sun Country Airlines	055.044	45.450		Class A	1,382,290	10,243
*	Holdings Inc. Hawaiian	955,614	15,156		Aaron's Co. Inc.	853,131	10,195
	Holdings Inc.	1,471,674	15,099	*	Daily Journal Corp.	40,386	10,117
*	2U Inc.	2,364,776	14,827	*	Frontier Group	004.000	40.440
	Designer Brands Inc.	2,001,770	,02,	*,1	Holdings Inc.	984,399	10,110
	Class A	1,507,736	14,746	*	Canoo Inc. Funko Inc. Class A	8,177,397 918,414	10,058
*	Integral Ad Science			*	CarParts.com Inc.	1,596,734	10,020 9,996
	Holding Corp.	1,675,809	14,730	*	Zumiez Inc.	459,022	9,979
*	Stagwell Inc.	2,346,495	14,572	*	Xponential	455,022	3,373
	Ruth's Hospitality	000 000	4.4.400		Fitness Inc. Class A	419,364	9,616
	Group Inc.	932,306	14,432	*	Build-A-Bear	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-,-
*	Movado Group Inc.	445,780	14,376		Workshop Inc.	398,931	9,511
*,1	Viad Corp. Blink Charging Co.	577,927 1,284,837	14,096 14,095	*	Sportsman's		
*	Children's Place Inc.	378,236	13,775		Warehouse	1 000 004	0.400
*	AMC Networks Inc.	370,230	13,773		Holdings Inc.	1,008,304	9,488
	Class A	862,736	13,519		European Wax Center Inc. Class A	757,745	9,434
*,1	Carvana Co. Class A	2,843,581	13,479	*	Gannett Co. Inc.	4,639,277	9,434
					2302. 00. 1110.	.,000,2,,	3,110

		Shares	Market Value• (\$000)			Shares	Market Value• (\$000)
*,1	Playstudios Inc. Johnson	2,424,521	9,407	*	Arhaus Inc. Class A Motorcar Parts of	621,273	6,057
	Outdoors Inc. Class A	142,149	9,399	*	America Inc. LL Flooring	508,069	6,026
*,1	ContextLogic Inc.				Holdings Inc.	1,068,848	6,007
	Class A	18,577,458	9,060	*	Tilly's Inc. Class A	658,710	5,961
*	Lovesac Co.	399,099	8,784	*	PlayAGS Inc.	1,155,888	5,895
*,1	Bed Bath &	0.447705	0.054	*	ONE Group		
*	Beyond Inc.	3,447,705	8,654		Hospitality Inc.	934,451	5,887
*	Arlo Technologies Inc. Quotient	2,406,916	8,448		El Pollo Loco	E07220	E 0E0
	Technology Inc.	2,441,688	8,375	*	Holdings Inc. Kura Sushi USA Inc.	587,328	5,850
*	First Watch	2, , 000	0,070		Class A	120,616	5,751
	Restaurant			1	Big 5 Sporting Goods	0,0.0	-,, -,
	Group Inc.	606,598	8,207		Corp.	645,200	5,697
*	OneWater			1	Bluegreen Vacations		
	Marine Inc. Class A	282,871	8,090		Holding Corp.		
*	1-800-Flowers.com	040 404	7004		Class A	226,451	5,652
	Inc. Class A	819,124	7,831	*	Rush Street	1 570 000	E 047
	Lindblad Expeditions Holdings Inc.	1 015 070	7016		Interactive Inc.	1,572,928	5,647
*	Allbirds Inc. Class A	1,015,079 3,156,493	7,816 7,639		Bassett Furniture Industries Inc.	316,454	5,500
	Entravision	3,150,493	7,039	*	Tupperware Brands	310,404	5,500
	Communications				Corp.	1,325,011	5,486
	Corp. Class A	1,589,251	7,628	*,1	Lordstown Motors	1,020,011	0, .00
*	Hovnanian		•		Corp. Class A	4,776,543	5,445
	Enterprises Inc.			*	Wheels Up		
	Class A	179,684	7,561		Experience Inc.	5,232,722	5,390
*	Universal Technical			1	Weber Inc. Class A	667,111	5,370
	Institute Inc.	1,117,753	7,511	*	Cardlytics Inc.	903,992	5,225
	Alta Equipment	E00.0EE	7.407	*	Angi Inc. Class A	2,202,894	5,177
	Group Inc.	568,355	7,497	*	Legacy Housing		
	Kimball International Inc.				Corp.	273,001	5,176
	Class B	1,148,596	7,466	*	Tile Shop	4 400 054	E 470
*	Full House	.,,	,, .00		Holdings Inc.	1,180,354	5,170
	Resorts Inc.	992,078	7,460		Cato Corp. Class A	551,742	5,148
	Hooker Furnishings			*	Rocky Brands Inc. Lincoln Educational	215,723	5,095
	Corp.	396,339	7,412		Services Corp.	863,609	5,000
*	American Public			*,1	Rent the Runway Inc.	000,000	3,000
	Education Inc.	579,083	7,117		Class A	1,617,196	4,932
*,1	Purple Innovation Inc.	1 470 001	7,000	*	American Outdoor		
*,1	Class A	1,478,691	7,083		Brands Inc.	479,165	4,801
*,1	Sonder Holdings Inc.	5,595,300	6,938	*,1	Dream Finders		
*	Vuzix Corp. Citi Trends Inc.	1,905,420	6,936		Homes Inc. Class A	550,933	4,771
*,1	Cricut Inc. Class A	260,469	6,897		Climb Global		
*		743,230	6,890 6,807	*	Solutions Inc.	149,047	4,699
*	Stitch Fix Inc. Class A		6,686	*	J. Jill Inc.	180,048	4,465
	Fossil Group Inc. Clarus Corp.	1,551,367 837,408	6,565		Superior Group of	405 504	4.000
*	WW	007,400	0,000	*,1	Cos. Inc. Genius Brands	435,584	4,382
	International Inc.	1,688,237	6,517	,,,	International Inc.	9,400,020	4,371
*	Noodles & Co.	.,000,207	5,5.7		Canterbury Park	0,400,020	4,571
	Class A	1,186,247	6,513		Holding Corp.	133,695	4,179
*	Eastman Kodak Co.	2,053,366	6,263	*,1	AMMO Inc.	2,389,053	4,133
*	Century Casinos Inc.	882,191	6,202	*,1	RealReal Inc.	3,282,434	4,103
*	Universal			*	Snap One Holdings		
	Electronics Inc.	293,728	6,113		Corp.	531,350	3,937

			Market				Market
		Shares	Value* (\$000)			Shares	Value* (\$000)
*	Cooper-Standard	400.070	0.004	*	Delta Apparel Inc.	238,958	2,535
	Holdings Inc.	428,370	3,881	*	Cumulus Media Inc.		0.544
	Vacasa Inc. Class A	3,077,400	3,878		Class A	404,771	2,514
	Nathan's Famous Inc.	56,557	3,801	*	Emerald Holding Inc.	690,955	2,446
*	Turtle Beach Corp.	525,515	3,768		Duluth Holdings Inc. Class B	394,810	2,440
*,1	Traeger Inc.	1,319,878	3,722	*	Townsquare	004,010	2,440
*	Potbelly Corp.	667,556	3,718		Media Inc. Class A	333,509	2,418
*	Holley Inc.	1,753,269	3,717	*,1	Express Inc.	2,253,471	2,299
*	Fiesta Restaurant	.,,	-,		Flexsteel		
	Group Inc.	503,077	3,698		Industries Inc.	141,758	2,183
*	Outbrain Inc.	998,139	3,613	*,1	Polished.com Inc.	3,683,713	2,128
1	Weyco Group Inc.	170,436	3,606	*	Liberty TripAdvisor		
*	BARK Inc.	2,379,098	3,545		Holdings Inc.	0.100 501	0.100
*	Vera Bradley Inc.	779,758	3,532	*	Class A Barnes & Noble	3,169,521	2,122
*	Superior Industries				Education Inc.	1,197,964	2,096
	International Inc.	834,385	3,521	*,1	Faraday Future	1,107,004	2,000
	Nerdy Inc.	1,554,944	3,499		Intelligent		
	Container Store Group Inc.	790,613	3,408		Electric Inc.	7,120,807	2,067
*	Latham Group Inc.	1,051,361	3,385		Acme United Corp.	85,287	1,868
*,1	Focus Universal Inc.	526,074	3,372	*,1	Cinedigm Corp.		
*	Lakeland	320,074	3,372		Class A	4,807,808	1,864
	Industries Inc.	252,393	3,357	*	Harte Hanks Inc.	154,100	1,801
*	Urban One Inc.	872,038	3,279	*,1	Regis Corp.	1,407,700	1,717
*	Red Robin Gourmet			*,1 *	Ondas Holdings Inc.	1,071,044	1,703
	Burgers Inc.	587,483	3,278	*	Mesa Air Group Inc.	1,109,713	1,698
	Saga				Brilliant Earth Group Inc. Class A	381,195	1,643
	Communications	104.070	0.104		Crown Crafts Inc.	302,838	1,617
*,1	Inc. Class A ThredUp Inc. Class A	134,076	3,164	*	Landsea Homes	302,030	1,017
*,1	Solo Brands Inc.	2,409,149	3,156		Corp.	310,401	1,617
, .	Class A	833,123	3,099	*,1	Kirkland's Inc.	458,478	1,513
	Escalade Inc.	303,339	3,088	*	Nautilus Inc.	987,578	1,511
	Lifetime Brands Inc.	401,793	3,050	*	Kewaunee Scientific		
*	VOXX International	,	,,,,,,		Corp.	96,393	1,499
	Corp. Class A	360,976	3,025	*,1	Lulu's Fashion		
	Marine Products				Lounge	571,382	1 424
	Corp.	255,346	3,005	*,1	Holdings Inc. Party City Holdco Inc.	•	1,434 1,399
*	Strattec Security	145 100	0.000	*,1	Chicken Soup For	3,020,093	1,399
*,1	Corp.	145,120	2,982		The Soul		
*	Reservoir Media Inc. Lands' End Inc.	489,336 383,020	2,921		Entertainment Inc.	271,340	1,389
*	Selectquote Inc.	4,324,874	2,907 2,906	*,1	Aterian Inc.	1,765,809	1,360
*	Conn's Inc.	4,324,674	2,834	*,1	Lazydays		
	Hamilton Beach	411,502	2,004		Holdings Inc.	113,037	1,350
	Brands Holding Co.			*	Live Ventures Inc.	42,626	1,334
	Class A	228,579	2,832	*,1	Inspirato Inc.	1,093,600	1,301
*,1	Spruce Power			*	Carrols Restaurant	045 470	1 206
	Holding Corp.	3,048,837	2,802	*	Group Inc. Travelzoo	945,470 274,335	1,286 1,221
*	Lee Enterprises Inc.	144,656	2,685	*	Biglari Holdings Inc.	274,333	1,221
*	RumbleON Inc.	404.000	0.014		Class A	1,747	1,219
*	Class B	404,083	2,614	*	Owlet Inc.	2,177,118	1,217
	Biglari Holdings Inc. Class B	18,772	2,606		CompX	, ,	.,,
*	F45 Training	10,772	2,000		International Inc.	64,007	1,183
	Holdings Inc.	910,984	2,596	*	Envela Corp.	224,050	1,179
*	JAKKS Pacific Inc.	147,124	2,573				

			Market				Market
		Shares	Value* (\$000)			Shares	Value* (\$000)
*,1	Bird Global Inc.			*	Dixie Group Inc.	359,932	288
	Class A	6,356,700	1,146	*	Reading	,	
*,1	XWELL Inc.	3,134,508	1,138		International Inc.		
*,1	CuriosityStream Inc.	986,623	1,125		Class A	100,050	277
*	Fluent Inc.	1,010,603	1,102	*	Auddia Inc.	274,072	263
*	Gaia Inc. Class A	447,999	1,066	*	AYRO Inc.	673,813	258
1	JOANN Inc.	360,480	1,027	*,1	EBET Inc.	351,169	221
	NL Industries Inc.	148,433	1,011	*,1	Digital Media	·	
*	LiveOne Inc.	1,540,686	991		Solutions Inc.	151,164	203
*	SRAX Inc. Class A	625,336	957	*,1	HyreCar Inc.	442,201	188
	Ark Restaurants	025,550	337	*,1	Arcimoto Inc.	54,305	179
	Corp.	55,702	922	*	Xcel Brands Inc.	251,214	176
*	Marchex Inc. Class B	546,577	858	*	Forward	201,211	.,,
*,2			801		Industries Inc.	144,468	155
*,1	Luby's Inc.	449,752		*	Moving Image	111,100	100
, '	Red Cat Holdings Inc.	849,136	798		Technologies Inc.	128,637	148
	Good Times	050.045	700	*,1	Lottery.com Inc.	819,456	143
1	Restaurants Inc.	350,945	783	*	PARTS iD Inc.	144,290	141
'	FAT Brands Inc.	150.004	750	*,1	Stran & Co. Inc.	97,248	125
*	Class A	153,984	750	*	EzFill Holdings Inc.		
	Audacy Inc. Class A	3,135,818	706		•	388,645	105
*,1	Hall of Fame Resort				FAT Brands Inc.	16.464	06
	& Entertainment	05.077	001	*,2	Class B	16,464	86
1	Co.	85,677	691	,∠ *	Zagg Inc. CVR	780,631	70
	DallasNews Corp.	176,590	678		Twin Vee PowerCats	24.022	64
	Vince Holding Corp.	85,410	669	* 1	Co.	34,923	64
*	Envirotech	040 755		*,1 *	Helbiz Inc.	386,127	50
	Vehicles Inc.	313,755	668		Amesite Inc.	246,652	45
	Educational			2	SRAX Inc.	590,641	41
	Development Corp.	207,019	654	*	IDW Media		
*	Koss Corp.	130,730	638		Holdings Inc.	40.000	
*,1	InterGroup Corp.	12,233	575		Class B	42,882	40
*,1	Shift			*,1	Applied UV Inc.	38,595	35
	Technologies Inc.	0 470 050		*	Rave Restaurant	04.000	
	Class A	3,473,050	517	*	Group Inc.	21,026	33
*	Charles & Colvard	040 040	407		Emerson Radio Corp.	6,500	3
	Ltd.	610,246	497	*,1	Tuesday Morning		
1	National	0.050.470	400		Corp.	1_	
	CineMedia Inc.	2,253,479	496				151,399,285
*	Urban One Inc.	400 404	400	Cons	sumer Staples (6.0%)		, , , , , , , , , , , , , , , , , , , ,
	Class A	109,101	496		Procter & Gamble		
*	Salem Media	440.047	440		Co.	72,068,942	10,922,769
	Group Inc. Class A	419,347	440		PepsiCo Inc.	41,895,734	7,568,883
*,1	Dolphin	000 040	445		Coca-Cola Co.	118,361,492	7,528,975
	Entertainment Inc.	229,216	415		Philip Morris	110,001,102	1,020,010
*	FlexShopper Inc.	425,184	397		International Inc.	47,149,120	4,771,962
*	BurgerFi				CVS Health Corp.	39,961,675	3,724,029
	International Inc.	310,543	391		Mondelez	33,301,073	3,724,023
*,1	Muscle Maker Inc.	417,746	380		International Inc.		
*,1	Volcon Inc.	362,634	366		Class A	41,523,102	2,767,515
*	Allied Gaming &				Altria Group Inc.	54,507,276	2,491,528
	Entertainment Inc.	342,015	359		Colgate-Palmolive	5-7,507,270	2,701,020
*,1	iMedia Brands Inc.	509,066	326		Co.	25,390,836	2,000,544
	Jerash Holdings				McKesson Corp.	4,300,394	1,613,164
	US Inc.	80,817	314		Archer-Daniels-	+,500,594	1,013,104
	Flanigan's				Midland Co.	16,707,183	1,551,262
	Enterprises Inc.	11,919	309		General Mills Inc.	18,043,273	
*	Beasley Broadcast				Kimberly-Clark Corp.		1,512,928
	Group Inc. Class A	314,502	289		KITIDETTY-CIAIR COIP.	10,256,311	1,392,294

		Shares	Market Value* (\$000)			Shares	Market Value• (\$000)
	Carta la a			*	Dantas Dans Callan		(4444)
	Corteva Inc. Sysco Corp.	21,851,907 15,407,075	1,284,455 1,177,871		Boston Beer Co. Inc. Class A	281,099	92,628
*	Monster Beverage Corp.	11,108,061	1,127,801		Hostess Brands Inc. Class A	4,061,813	91,147
	Constellation Brands Inc. Class A	4,769,163	1,105,254		TreeHouse Foods Inc.	1,708,885	84,385
	Hershey Co. Keurig Dr Pepper Inc.	4,466,673 27,991,330	1,034,347 998,171	*	Grocery Outlet Holding Corp.	2,660,814	77,669
	Kraft Heinz Co.	24,217,516	985,895		Spectrum Brands Holdings Inc.	1,245,664	75,886
	Kroger Co. AmerisourceBergen	19,586,569	873,169	*	Freshpet Inc.	1,387,609	73,224
	Corp. Walgreens Boots	4,998,939	828,374		Energizer Holdings Inc.	2,171,448	72,852
	Alliance Inc. McCormick & Co.	20,990,992	784,223		Primo Water Corp. Coca-Cola	4,638,793	72,087
	Inc. (Non-Voting) Brown-Forman Corp.	7,623,245	631,891	*	Consolidated Inc. United Natural	140,088	71,776
	Class B	9,415,520	618,411		Foods Inc. WD-40 Co.	1,844,593 419,038	71,404 67,553
	Church & Dwight Co. Inc.	7,412,840	597,549		Cal-Maine Foods Inc.	1,198,818	65,276
	Conagra Brands Inc.	14,568,253	563,791		Nu Skin	1,100,010	00,270
	Kellogg Co.	7,784,271	554,551		Enterprises Inc.		
	Tyson Foods Inc.				Class A Edgewell Personal	1,449,180	61,097
	Class A	8,803,785	548,036		Care Co.	1,571,886	60,581
	Clorox Co. J M Smucker Co.	3,747,700	525,915		J & J Snack Foods	1,071,000	00,00.
	Bunge Ltd.	3,081,342 4,556,389	488,269 454,591		Corp.	359,814	53,868
	Lamb Weston	4,330,303	454,551		Reynolds Consumer		
	Holdings Inc.	4,364,045	389,971		Products Inc.	1,615,555	48,434
	Hormel Foods Corp.	8,304,899	378,288		Vector Group Ltd.	4,078,716	48,374
*	Campbell Soup Co. Darling	5,926,935	336,354	*	MGP Ingredients Inc. Herbalife Nutrition	439,754	46,781
	Ingredients Inc. Molson Coors	4,867,718	304,670	*	Ltd. Hain Celestial	2,983,306	44,392
	Beverage Co. Class B	E 470 4E1	201 041		Group Inc. Ingles Markets Inc.	2,721,250	44,030
*	Performance Food	5,472,451	281,941		Class A	437,539	42,205
	Group Co.	4,731,087	276,248		Weis Markets Inc.	502,849	41,379
	Casey's General		,		Universal Corp.	727,321	38,410
*	Stores Inc. US Foods Holding	1,131,500	253,852	*	Medifast Inc. Chefs'	331,241	38,209
	Corp.	6,154,153	209,364		Warehouse Inc.	1,037,854	34,540
	Ingredion Inc.	1,892,088	185,292		Utz Brands Inc.	2,065,002	32,751
	Flowers Foods Inc.	6,084,188	174,860		National Beverage Corp.	702,496	22 607
*	Post Holdings Inc.	1,606,603	145,012		Andersons Inc.	912,484	32,687 31,928
*	Celsius Holdings Inc. Albertsons Cos. Inc.	, ,	132,234		SpartanNash Co.	1,018,834	30,810
	Class A	5,693,923	118,092		Fresh Del Monte Produce Inc.	1,142,545	29,923
	Lancaster Colony	E00 E0E	115 700	*	Beauty Health Co.	2,851,620	25,950
*	Corp. Simply Good Foods	586,565	115,729	*	Pilgrim's Pride Corp.	1,084,599	25,738
	Co.	3,017,120	114,741		Seaboard Corp.	6,803	25,683
*	Sprouts Farmers	0,017,120	,,,,,,	1	B&G Foods Inc.	2,213,676	24,683
	Market Inc.	3,246,499	105,089	*	Duckhorn		,
*	BellRing Brands Inc.	4,088,975	104,841		Portfolio Inc.	1,466,854	24,306
1	Brown-Forman Corp.		105	*,1	Beyond Meat Inc.	1,782,445	21,942
	Class A	1,558,761	102,504		John B Sanfilippo & Son Inc.	269,014	21,876

		Shares	Market Value• (\$000)			Shares	Market Value• (\$000)
-	Tootsie Roll Industries Inc.	505,643	21,525	*,1	Lifevantage Corp. Splash Beverage	253,547	943
*	USANA Health Sciences Inc.	340,345	18,106	*	Group Inc. Willamette Valley	950,644	914
*	Mission Produce Inc.	1,350,087	15,688		Vineyards Inc.	152,333	913
*	Sovos Brands Inc.	1,083,568	15,571	*	LifeMD Inc.	431,468	837
*	Olaplex Holdings Inc.	2,912,583	15,175	*	S&W Seed Co.	558,871	833
	ACCO Brands Corp.	2,700,003	15,093	*	Rocky Mountain	•	
	Calavo Growers Inc.	496,687	14,603		Chocolate		
	PetMed Express Inc.	640,080	11,329		Factory Inc.	128,662	733
*	Vital Farms Inc.	742,708	11,081	*	Lifeway Foods Inc.	115,467	641
*,1	Veru Inc.	1,923,707	10,157	*	Urban-Gro Inc.	227,616	619
*	Seneca Foods Corp.			*	MamaMancini's		
	Class A	162,229	9,888		Holdings Inc.	332,476	597
	Turning Point			*,1	Boxed Inc.	2,879,590	561
	Brands Inc.	434,620	9,401		Mannatech Inc.	30,953	554
*,1	Vita Coco Co. Inc.	654,853	9,050	_	Bridgford Foods	41 000	401
*,1	Benson Hill Inc.	3,328,592	8,488	*,1	Corp. Kaival Brands	41,022	491
*,1	BRC Inc. Class A	1,202,500	7,347	, '	Innovations		
*,1	GrowGeneration	1 700 754	0.700		Group Inc.	526,590	473
	Corp.	1,732,754	6,792		Coffee Holding Co.	,	
*,1	Limoneira Co.	551,292	6,731		Inc.	222,735	454
, '	22nd Century Group Inc.	6,085,365	5,602	*	Alkaline Water Co.		
*	Rite Aid Corp.	1,629,535	5,443		Inc.	2,273,743	397
*	Whole Earth	1,020,000	3,443	*	Barfresh Food		
	Brands Inc.	1,332,300	5,422		Group Inc.	233,784	306
	Oil-Dri Corp. of	.,,	-,	*	MedAvail		
	America	160,678	5,389	* 1	Holdings Inc.	967,300	290
	Village Super			*,1	Blue Apron Holdings Inc.		
	Market Inc. Class A	219,880	5,121		Class A	339,505	282
*	Lifecore			*	Better Choice Co.	000,000	202
	Biomedical Inc.	751,182	4,868		Inc.	413,653	223
*	Honest Co. Inc.	1,532,403	4,613	*	Zivo Bioscience Inc.	81,788	200
*	HF Foods Group Inc.	1,036,378	4,208	*,1	Reed's Inc.	2,105,891	147
	Alico Inc.	170,218	4,063	*	Laird Superfood Inc.	133,864	112
1	ProPhase Labs Inc.	394,258	3,797	*	Yield10		
	Natural Grocers by	407022	3,728		Bioscience Inc.	65,737	108
*	Vitamin Cottage Inc. Vintage Wine	407,823	3,720	*,1	RiceBran		
	Estates Inc.	1,027,600	3,350		Technologies	102,160	78
*,1	PLBY Group Inc.	969,862	2,667	*,1	Nuzee Inc.	7,321	63
*	Farmer Bros Co.	511,916	2,360	*	Stryve Foods Inc.	00.00=	
*	Nature's Sunshine	011,010	2,000		Class A	32,837	24
	Products Inc.	231,851	1,929		Fresh Vine Wine Inc.	15,451	15
*	AquaBounty		,		Blue Star Foods Corp.	28,420	11
	Technologies Inc.	1,988,764	1,519	*,2	Fresh Market Inc.	661,450	111
*	Natural Alternatives			*,1	PLBY Group Inc.	001,450	_
	International Inc.	162,521	1,364	,	Rights Exp. 1/17/23	969,862	_
*,1	Tattooed Chef Inc.	1,086,098	1,336		g 2p. 1/17/20		00.004.055
*,1	AppHarvest Inc.	2,353,345	1,335	F	m. /F 30/ \		68,894,655
*,1	Local Bounti Corp.	899,938	1,251	∟ner	gy (5.3%)	105 040 400	10.014.040
	AMCON Distributing	0.070	1 000		Exxon Mobil Corp.	125,243,406	13,814,348
*	Co.	6,676	1,208		Chevron Corp.	52,926,261	9,499,735
-	Real Good Food Co. Inc. Class A	175,743	1 165		ConocoPhillips EOG Resources Inc.	37,898,245	4,471,993
*,1	Zevia PBC Class A	271,418	1,165 1,110		Schlumberger Ltd.	17,868,757 43,121,202	2,314,361 2,305,259
, .	ZCVIG I DC CIG55 M	4/1,410	1,110		ocinamberger Ltd.	40,121,202	۷,۵0۵,۷۵۶

		Shares	Market Value• (\$000)			Shares	Market Value• (\$000)
	Marathon Petroleum			-	Patterson-UTI		
	Corp.	14,250,461	1,658,611		Energy Inc.	6,591,042	110,993
	Pioneer Natural			*	Weatherford		
	Resources Co.	6,866,594	1,568,261		International plc	2,155,571	109,762
	Phillips 66	14,372,941	1,495,936		Antero Midstream		
	Valero Energy Corp.	11,725,291	1,487,470		Corp.	9,428,663	101,735
	Occidental Petroleum				California Resources		07000
	Corp.	20,733,560	1,306,007		Corp.	2,230,264	97,039
	Devon Energy Corp.	19,874,669	1,222,491		Cactus Inc. Class A	1,842,509	92,605
	Williams Cos. Inc.	37,067,492	1,219,520		Peabody Energy	3,500,743	92,490
	Hess Corp.	8,442,488	1,197,314	*	Corp. Transocean Ltd.		,
	Cheniere Energy Inc.		1,134,297		Civitas	20,013,085	91,260
*	Enphase Energy Inc.		1,094,890		Resources Inc.	1,554,467	90,050
	Kinder Morgan Inc.	58,122,834	1,050,861	*	CNX Resources	1,004,407	30,030
	Halliburton Co.	24,865,430	978,455		Corp.	5,275,497	88,839
	Baker Hughes Co.	00 457500	000 410		Equitrans Midstream	-,	,
	Class A	30,457,583	899,412		Corp.	13,189,543	88,370
	ONEOK Inc. Diamondback	13,596,788	893,309	*	Array		
	Energy Inc.	5,353,233	732,215		Technologies Inc.	4,327,278	83,646
	Coterra Energy Inc.	22,783,688	559,795		New Fortress		
	Marathon Oil Corp.	19,325,617	523,144		Energy Inc.	1,898,884	80,551
	Targa Resources	10,020,017	323,144		Liberty Energy Inc.		
	Corp.	6,880,686	505,730		Class A	5,019,266	80,358
*	First Solar Inc.	3,077,758	461,017		Arcosa Inc.	1,478,795	80,358
	APA Corp.	9,770,688	456,096	*,1	ChargePoint	0.010.007	70.200
	Texas Pacific Land	.,	,	1	Holdings Inc. Arch Resources Inc.	8,319,837	79,288
	Corp.	187,526	439,604	*	Callon Petroleum Co.	547,803 1,867,075	78,221 69,250
	Ovintiv Inc.	7,554,657	383,097	*	Shoals Technologies	1,007,075	09,250
	Chesapeake Energy				Group Inc. Class A	2,623,041	64,710
	Corp.	3,872,604	365,458	1	Sitio Royalties Corp.	2,231,420	64,376
	EQT Corp.	10,035,063	339,486		Northern Oil &	2,201,120	01,070
	NOV Inc.	11,945,276	249,537		Gas Inc.	2,036,951	62,779
*	Antero Resources				Alpha Metallurgical	, ,	,
	Corp.	7,755,487	240,343		Resources Inc.	410,512	60,095
* 4	HF Sinclair Corp.	4,268,304	221,482	*	NexTier Oilfield		
*,1	Plug Power Inc.	17,771,382	219,832		Solutions Inc.	6,347,093	58,647
	Southwestern Energy Co.	22 577707	106 420		Delek US		
	Matador Resources	33,577,797	196,430		Holdings Inc.	2,145,572	57,930
	Co.	3,409,709	195,172		Ameresco Inc.	001 000	FC 004
	Murphy Oil Corp.	4,485,171	192,907		Class A	981,696	56,094
	PDC Energy Inc.	2,807,028	178,190		CONSOL Energy Inc.		54,897
	ChampionX Corp.	6,069,913	175,967	*	Warrior Met Coal Inc.	1,569,746	54,376
	Range Resources	0,000,010	1,0,00,		Oceaneering International Inc.	3,066,491	53,633
	Corp.	6,969,176	174,369	*	Green Plains Inc.	1,707,983	52,093
	Chord Energy Corp.	1,200,441	164,232	*	Tidewater Inc.	1,377,552	50,763
	DT Midstream Inc.	2,937,871	162,347		Permian Resources	1,077,002	30,700
	PBF Energy Inc.				Corp. Class A	5,262,498	49,467
	Class A	3,602,602	146,914		World Fuel Services	, , ,	-,
	Helmerich &				Corp.	1,785,198	48,789
	Payne Inc.	2,878,106	142,668		Enviva Inc.	917,657	48,608
	SM Energy Co.	3,730,957	129,949	*	SunPower Corp.	2,637,856	47,561
*	Denbury Inc.	1,438,037	125,138	*	NOW Inc.	3,361,286	42,688
	Magnolia Oil & Gas	E 4 4 E 4 * *	400.000		Archrock Inc.	4,702,223	42,226
*	Corp. Class A	5,145,411	120,660	*	Nabors Industries		
	Noble Corp. plc	3,191,731	120,360		Ltd.	270,995	41,969

		Shares	Market Value• (\$000)			Shares	Market Value• (\$000)
*	Stem Inc.	4,459,762	39,870	*	Centrus Energy Corp.		
	Comstock				Class A	342,567	11,127
	Resources Inc.	2,833,681	38,850	*	TPI Composites Inc.	1,071,321	10,863
*	Par Pacific			*	DMC Global Inc.	524,094	10,188
	Holdings Inc.	1,647,862	38,313	*	Newpark		
*	Talos Energy Inc.	2,019,211	38,123		Resources Inc.	2,449,089	10,164
*,1	FuelCell Energy Inc.	12,562,353	34,923	*,1	EVgo Inc. Class A	2,082,073	9,307
*	Helix Energy Solutions Group Inc.	4,472,007	33,003		Solaris Oilfield Infrastructure Inc.		
*	ProPetro Holding				Class A	935,530	9,290
	Corp.	3,076,283	31,901	*	Amplify Energy Corp.	1,044,290	9,179
*	Diamond Offshore	0.040.070	00.000	*	Solid Power Inc.	3,120,617	7,926
	Drilling Inc.	2,948,976	30,669	*,1	Nine Energy		7005
_	MRC Global Inc.	2,581,795	29,897		Service Inc.	508,263	7,385
	CVR Energy Inc.	915,238	28,684	_	Hallador Energy Co.	681,965	6,813
	Core Laboratories NV	1,379,086	27,954	_	SEACOR Marine	700 400	0.410
*,1	Earthstone	1 0 4 0 0 5 0	07.000	*	Holdings Inc.	700,466	6,416
*	Energy Inc. Class A Dril-Quip Inc.	1,946,058	27,692		Ring Energy Inc.	2,558,293	6,293
*,1	P	979,622	26,616		Evolution Petroleum Corp.	784,579	5,924
*	Tellurian Inc.	15,325,175	25,746		Ramaco	764,573	5,524
	Laredo Petroleum Inc.	484,900	24,934		Resources Inc.	673,015	5,916
*	Gulfport Energy	404,300	24,334	*	Forum Energy	070,010	0,010
	Corp.	331,810	24,435		Technologies Inc.	194,303	5,732
	RPC Inc.	2,713,940	24,127	*,1	KLX Energy Services	,	
	Ranger Oil Corp.	576,479	23,307		Holdings Inc.	328,707	5,690
	SunCoke Energy Inc.	2,524,635	21,788	*,1	Beam Global	296,377	5,178
*,1	Fluence Energy Inc.	_,,	,,	*,1,2	Next Bridge		
	Class A	1,257,061	21,559		Hydrocarbons Inc.	1,763,201	5,104
*,1	Montauk			*,1	374Water Inc.	1,698,615	4,977
	Renewables Inc.	1,737,042	19,160	*	Matrix Service Co.	785,548	4,886
*	Bristow Group Inc.				Epsilon Energy Ltd.	661,802	4,388
	Class A	693,278	18,809		NACCO		
	Select Energy				Industries Inc. Class A	111 605	1 2 1 1
	Services Inc. Class A	1 002 006	10 221	*	Ranger Energy	111,685	4,244
1	Kinetik Holdings Inc.	1,983,896	18,331		Services Inc.		
	Class A	529,122	17,503		Class A	357,073	3,931
*	ProFrac Holding	020,122	17,000	*,1	ESS Tech Inc.	1,593,000	3,871
	Corp. Class A	655,618	16,522		Riley Exploration	,,	.,.
*	SandRidge	•	,		Permian Inc.	125,900	3,705
	Energy Inc.	933,349	15,895	*	Aemetis Inc.	924,014	3,659
*	W&T Offshore Inc.	2,772,648	15,471	*,1	FTC Solar Inc.	1,323,352	3,547
	VAALCO Energy Inc.	3,343,681	15,247	*	Natural Gas Services		
*	REX American				Group Inc.	308,325	3,533
	Resources Corp.	477,153	15,202	*	Heliogen Inc.	4,874,100	3,403
	Berry Corp.	1,701,948	13,616		PHX Minerals Inc.	831,790	3,236
1	Crescent Energy Co.			*	Empire Petroleum		
	Class A	1,084,502	13,003		Corp.	234,700	2,887
*	Oil States	1 600 200	10.055	*	Mammoth Energy	200 504	0.000
* 1	International Inc.	1,696,380	12,655	*	Services Inc.	308,591	2,669
*,1 *,1	Gevo Inc.	6,638,561	12,613		American Superconductor		
, 1	SilverBow Resources Inc.	433,984	12,273		Corp.	684,748	2,520
*	TETRA	400,004	12,273	*,1	American Resources	551,710	2,020
	Technologies Inc.	3,494,648	12,091		Corp.	1,756,997	2,319
*	NextDecade Corp.	2,346,418	11,591	*,1	Sunworks Inc.	1,299,138	2,053
		,,	.,	*,1	Flotek Industries Inc.	1,811,795	2,029

		Shares	Market Value• (\$000)		Shares	Market Value• (\$000)
*	Battalion Oil Corp.	207,783	2,018	JPMorgan Chase &		
*	Gulf Island	,	,	Co.	89,204,681	11,962,348
	Fabrication Inc.	358,485	1,839	Bank of America		
*	Ideal Power Inc.	149,114	1,584	Corp.	207,377,454	6,868,341
*	PrimeEnergy			Wells Fargo & Co.	115,874,794	4,784,470
	Resources Corp.	17,932	1,558	Charles Schwab		0.000.407
*	Smart Sand Inc.	860,390	1,540	Corp.	46,942,437	3,908,427
*,1	Volta Inc.	3,973,258	1,412	S&P Global Inc.	9,907,985	3,318,580
*,1	Advent Technologies	700.010	1 077	Morgan Stanley	38,550,543	3,277,567
*,1	Holdings Inc.	760,618	1,377	Goldman Sachs Group Inc.	9,445,939	3,243,547
*	Stabilis Solutions Inc.	169,932	880 872	BlackRock Inc.	4,339,764	3,075,287
*	Profire Energy Inc. PEDEVCO Corp.	830,050 768,132	872 845	Chubb Ltd.	11,986,848	2,644,299
	Barnwell	700,132	040	Citigroup Inc.	55,948,963	2,530,572
	Industries Inc.	267,900	792	Marsh & McLennan	33,540,500	2,000,072
*,1	Houston American	207,000	702	Cos. Inc.	15,080,928	2,495,592
	Energy Corp.	199,104	685	Progressive Corp.	17,790,095	2,307,553
*	Geospace			PNC Financial		, ,
	Technologies Corp.	159,910	675	Services Group Inc.	12,265,546	1,937,220
*	Mexco Energy Corp.	44,605	557	US Bancorp	42,923,181	1,871,880
*,1	Dawson Geophysical			CME Group Inc.	10,939,180	1,839,532
	Co.	275,110	539	Aon plc Class A	5,973,491	1,792,884
*	Enservco Corp.	314,865	513	Intercontinental		
*,1	Camber Energy Inc.	226,702	458	Exchange Inc.	16,986,954	1,742,692
*,1	Ocean Power	4 004 470	454	Truist Financial Corp.		1,736,554
*,1	Technologies Inc.	1,001,472	451	Blackstone Inc.	21,341,523	1,583,328
-,1	Independence Contract Drilling Inc.	133,014	435	American		
*	Capstone Green	133,014	430	International Group Inc.	22,588,215	1,428,479
	Energy Corp.	297,760	432	Travelers Cos. Inc.	7,124,119	1,335,701
*	Pineapple			Moody's Corp.	4,734,908	1,319,240
	Energy Inc.	163,316	381	MetLife Inc.	17,885,447	1,294,370
*	iSun Inc.	242,226	322	Aflac Inc.	17,010,273	1,223,719
*	Energy Services of			Arthur J Gallagher &	17,010,270	1,220,710
	America Corp.	121,699	315	Co.	6,408,270	1,208,215
*	OPAL Fuels Inc.			Prudential		
	Class A	39,434	287	Financial Inc.	11,190,868	1,113,044
1	US Energy Corp.	108,748	250	Allstate Corp.	8,066,868	1,093,867
	Superior Drilling Products Inc.	250 620	238	MSCI Inc. Class A	2,310,092	1,074,585
	Adams Resources &	258,628	230	Ameriprise	0.005.004	4 007570
	Energy Inc.	4,305	168	Financial Inc.	3,235,931	1,007,572
*	Ecoark Holdings Inc.	250,250	58	Bank of New York	22 120 240	1 007272
*	NCS Multistage	200,200	00	Mellon Corp. KKR & Co. Inc.	22,130,348 19,650,982	1,007,373 912,199
	Holdings Inc.	800	20	Discover Financial	19,000,962	312,133
*	Tidewater Inc.			Services	8,304,648	812.444
	Class A Warrants			Willis Towers Watson		0.2,
	Exp. 7/31/23	8,839	10	plc	3,288,697	804,350
*,1	Tidewater Inc.			M&T Bank Corp.	5,246,963	761,124
	Class B Warrants	0.555	6	T. Rowe Price		
*,2	Exp. 7/31/23 Pineapple	9,555	6	Group Inc.	6,796,980	741,279
,-	Energy Inc. CVR	69,639	_	Nasdaq Inc.	11,952,508	733,286
	231gy 1110. OVII		04.445.455	Hartford Financial		
	(44.00()		61,115,427	Services Group Inc.		732,536
Finar	ncials (11.8%)			Fifth Third Bancorp	20,879,232	685,048
-	Berkshire Hathaway Inc.			First Republic Bank	5,564,541	678,262
	Class B	51,057,930	15,771,795			
	1.000 5	,00,,000	. 5, 1, 7 5 5			

		Shares	Market Value• (\$000)		Shares	Market Value• (\$000)
*	Arch Capital Group Ltd.	10,681,213	670,567	Invesco Ltd. RenaissanceRe	13,809,503	248,433
	Apollo Global Management Inc.	10,436,343	665,734	Holdings Ltd. 1 Franklin	1,329,563	244,945
	Raymond James Financial Inc.	5,884,697	628,780	Resources Inc. Cullen/Frost	9,102,204	240,116
	Principal Financial Group Inc.	7,433,396	623,811	Bankers Inc. Commerce	1,759,978	235,309
	Huntington Bancshares Inc.	43,843,500	618,193	Bancshares Inc. First Citizens	3,430,208	233,494
	Regions Financial Corp.	28,410,891	612,539	BancShares Inc. Class A	307,877	233,482
	State Street Corp. Citizens Financial	7,777,320	603,287	Carlyle Group Inc. Zions Bancorp NA	7,735,664 4,565,640	230,832 224,447
	Group Inc.	14,968,790	589,321	Signature Bank	1,916,098	220,773
	Northern Trust Corp.	6,023,995	533,063	Tradeweb		
*	Markel Corp.	388,914	512,390	Markets Inc. Class A	2 270 145	210 242
	LPL Financial Holdings Inc.	2,300,263	497,248	SEI Investments Co.	3,378,145 3,688,899	219,343 215,063
	KeyCorp	28,382,493	494,423	Interactive Brokers	3,000,033	213,003
*	Berkshire	20,002, .00	10 1, 120	Group Inc. Class A	2,969,760	214,862
	Hathaway Inc.			Unum Group	5,153,352	211,442
	Class A Cincinnati Financial	1,051	492,615	Assurant Inc. Old Republic	1,612,765	201,692
	Corp.	4,785,307	489,968	International Corp.	8,321,433	200,963
	Broadridge Financial			Ally Financial Inc.	8,139,142	199,002
	Solutions Inc.	3,582,232	480,485	Erie Indemnity Co.		
	FactSet Research Systems Inc.	1,158,569	464,829	Class A	772,461	192,126
	W R Berkley Corp.	6,052,917	439,260	Prosperity Bancshares Inc.	2,639,887	191,867
*	SVB Financial Group	1,796,181	413,373	Western Alliance	2,039,007	191,007
	Cboe Global	,,	-,-	Bancorp	3,153,482	187,821
	Markets Inc.	3,228,338	405,060	Voya Financial Inc.	2,969,373	182,587
	First Horizon Corp.	16,286,648	399,023	Affiliated Managers		
	Everest Re Group	1 101 226	204 654	Group Inc.	1,144,833	181,376
	Ltd. Brown & Brown Inc.	1,191,336 6,885,122	394,654 392,245	AGNC Investment Corp.	17,427,563	180,375
	Loews Corp.	6,138,809	358,077	Stifel Financial Corp.	3,063,871	178,838
	Ares Management	0,100,000	000,077	SouthState Corp.	2,304,106	175,942
	Corp. Class A	4,742,403	324,570	Kinsale Capital	, ,	-,-
	Equitable	44 007740	000 000	Group Inc.	668,405	174,801
	Holdings Inc. Globe Life Inc.	11,227,719	322,236	RLI Corp.	1,309,235	171,863
	MarketAxess	2,657,316	320,339	New York Community		
	Holdings Inc.	1,087,345	303,250	Bancorp Inc.	19,631,718	168,833
	American Financial Group Inc.	2,201,100	302,167	Morningstar Inc. Jefferies Financial	775,316	167,926
	Annaly Capital	_,,	,	Group Inc.	4,879,196	167,259
	Management Inc. Fidelity National	14,184,280	299,005	Glacier Bancorp Inc.	3,374,910	166,788
	Financial Inc.	7,873,046	296,184	United Bankshares Inc.	4,094,075	165,769
	Reinsurance Group of America Inc.	2,031,981	288,724	Starwood Property Trust Inc.	8,972,543	164,467
	East West	4 000 000	202 227	Pinnacle Financial		
	Bancorp Inc.	4,283,268	282,267	Partners Inc.	2,211,946	162,357
	Comerica Inc. Webster Financial	3,972,848	265,585	Selective Insurance	1 020 127	160 160
	Corp.	5,292,371	250,541	Group Inc. Old National Bancorp	1,830,137 8,906,245	162,168 160,134

		Shares	Market Value• (\$000)			Shares	Market Value• (\$000)
	Primerica Inc. Synovus Financial	1,124,655	159,499		White Mountains Insurance Group		
	Corp. First American	4,199,129	157,677		Ltd. Blackstone Mortgage	74,454	105,303
	Financial Corp. Wintrust Financial	2,988,251	156,405		Trust Inc. Class A CVB Financial Corp.	4,943,176 4,027,770	104,647 103,715
*,1	Corp. Coinbase Global Inc.	1,838,874	155,422	*,1	SoFi Technologies Inc.	22,472,273	103,597
*	Class A Robinhood	4,360,711	154,326		United Community Banks Inc.	3,051,762	103,150
	Markets Inc. Class A	18,452,450	150,203		Community Bank System Inc.	1,636,337	103,007
	Valley National Bancorp	13,119,136	148,377		Evercore Inc. Class A ServisFirst	943,438	102,910
	Popular Inc. Lincoln National	2,203,760	146,153		Bancshares Inc. First Hawaiian Inc.	1,491,694 3,893,734	102,793 101,393
	Corp. First Financial	4,649,089	142,820		Associated Banc-Corp	4,305,330	99,410
	Bankshares Inc. Blue Owl Capital Inc.	4,129,082	142,040		UMB Financial Corp. FirstCash	1,174,832	98,122
	Class A	13,322,573	141,219		Holdings Inc.	1,124,293	97,712
	FNB Corp.	10,718,747	139,880		Kemper Corp.	1,942,867	95,589
	Cadence Bank	5,553,402	136,947		Janus Henderson	4 000 050	04.060
	Bank OZK Home	3,401,373	136,259	1	Group plc	4,033,253	94,862
	BancShares Inc. Houlihan Lokey Inc.	5,900,339	134,469	*,1	Bank of Hawaii Corp. Ameris Bancorp	1,217,080 1,995,484	94,397 94,067
	Class A Hanover Insurance	1,513,977	131,958	, ,	Credit Acceptance Corp. Federated	197,447	93,669
	Group Inc.	976,472	131,951		Hermes Inc.		
	SLM Corp. Axis Capital Holdings	7,590,419	126,001		Class B First Interstate	2,565,789	93,164
	Ltd.	2,309,840	125,124		BancSystem Inc.		
	Essent Group Ltd.	3,100,396	120,543		Class A	2,386,629	92,243
	First Bancorp Hancock Whitney	6,808,902	120,070		Pacific Premier Bancorp Inc.	2,910,810	91,865
	Corp.	2,466,439	119,351	*	Texas Capital	4 540 004	04.040
	American Equity Investment Life				Bancshares Inc. Radian Group Inc.	1,512,994 4,732,509	91,249 90,249
	Holding Co. MGIC Investment	2,603,242	118,760		Cathay General Bancorp	2,143,690	87,441
	Corp.	9,070,299	117,914		Fulton Financial Corp.		86,451
	Umpqua Holdings Corp.	6,600,146	117,813		WSFS Financial Corp.	. 1,874,911	85,008
	Rithm Capital Corp.	14,342,033	117,174		Bankshares Inc.	4,863,291	83,892
	Independent Bank	,,	,		PacWest Bancorp	3,558,754	81,673
	Corp.	1,383,809	116,835		Atlantic Union	.,,	, , ,
	Lazard Ltd. Class A	3,256,575	112,905		Bankshares Corp.	2,303,456	80,943
	OneMain Holdings Inc.	3,367,156	112,160		Simmons First National Corp.		
	Assured Guaranty Ltd.	1,732,047	107,837		Class A CNO Financial	3,717,745	80,229
*	Brighthouse				Group Inc.	3,497,556	79,919
*	Financial Inc. Ryan Specialty	2,095,367	107,429	*	BankUnited Inc. Genworth	2,350,632	79,851
	Holdings Inc. Class A	2,559,328	106,238		Financial Inc. Class A	15,011,421	79,410

		Shares	Market Value• (\$000)			Shares	Market Value• (\$000)
		Silales	(\$000)			Silates	(\$000)
	International Bancshares Corp.	1,720,826	78,745		Heartland Financial USA Inc.	1,112,711	51,875
	Jackson Financial Inc.				StoneX Group Inc. Navient Corp.	535,748 3,081,533	51,057 50,691
*	Class A Mr Cooper	2,254,463	78,433		TPG Inc. Class A PJT Partners Inc.	1,821,085	50,681
	Group Inc.	1,932,515	77,552		Class A	664,599	48,974
	Walker & Dunlop Inc.	954,651	74,921		BancFirst Corp.	553,064	48,769
	BOK Financial Corp. First Merchants	721,178	74,851		Cohen & Steers Inc. National Bank	754,851	48,733
	Corp.	1,812,774	74,523		Holdings Corp.		
	Moelis & Co. Class A	1,933,749	74,198		Class A	1,152,150	48,471
*	Enstar Group Ltd. Columbia Banking	320,927	74,147		Horace Mann Educators Corp.	1,277,292	47,732
	System Inc.	2,393,519	72,117	*	Cannae Holdings Inc.		47,578
*	Axos Financial Inc. Washington	1,753,271	67,010	*	BRP Group Inc. Class A	1,883,589	47,353
	Federal Inc.	1,994,275	66,908		Provident Financial	, ,	,
	Piper Sandler Cos. First Financial	512,652	66,742		Services Inc. Westamerica	2,214,342	47,298
	Bancorp	2,722,391	65,964		Bancorp	792,627	46,773
	Banner Corp.	1,037,449	65,567		Apollo Commercial	,	,
	WesBanco Inc. Arbor Realty	1,737,774	64,263		Real Estate	4,320,289	46,486
	Trust Inc.	4,871,812	64,259		Sandy Spring		•
	Independent Bank				Bancorp Inc.	1,315,036	46,329
	Group Inc.	1,069,223	64,239		TriCo Bancshares	900,004	45,891
	Towne Bank	2,068,654	63,797		Veritex Holdings Inc.	1,585,797	44,529
	Seacoast Banking	0.000.504	00 500		Hope Bancorp Inc.	3,431,147	43,953
	Corp. of Florida	2,038,581	63,583	*	Eagle Bancorp Inc.	990,908	43,669
	Park National Corp. Hamilton Lane Inc.	447,598	62,999		Bancorp Inc. StepStone Group Inc.		43,553
	Class A	973,463	62,185		Class A	1,657,153	41,727
	Renasant Corp.	1,607,029	60,408		OFG Bancorp	1,490,715	41,084
	Trustmark Corp.	1,668,433	58,245		Two Harbors Investment Corp.	2,604,910	41,079
	Artisan Partners Asset				Hilltop Holdings Inc.	1,363,554	40,920
	Management Inc.				First Busey Corp.	1,637,374	40,476
	Class A	1,953,299	58,013		Virtus Investment	.,00,,07	.0, ., 0
	Virtu Financial Inc.				Partners Inc.	211,368	40,464
	Class A	2,801,846	57,186		City Holding Co.	428,546	39,893
*	Focus Financial				Stellar Bancorp Inc.	1,350,171	39,776
	Partners Inc. Class A	1,498,269	55,840		FB Financial Corp.	1,096,435	39,625
	NBT Bancorp Inc.	1,496,269	54,381	1	Corebridge		
	Northwest				Financial Inc. Chimera Investment	1,968,337	39,485
	Bancshares Inc. Lakeland Financial	3,887,354	54,345		Corp. Berkshire Hills	7,132,506	39,229
	Corp.	742,829	54,204		Bancorp Inc.	1,293,745	38,683
*,1 *	Trupanion Inc. NMI Holdings Inc.	1,127,536	53,592		PennyMac Financial Services Inc.	679,112	38,478
	Class A Enterprise Financial	2,557,232	53,446		Pathward		
1	Services Corp. Claros Mortgage	1,080,745	52,913		Financial Inc. BGC Partners Inc.	891,986	38,400
•	Trust Inc.	3,582,367	52,697		Class A	10,162,208	38,312
	Stock Yards	5,002,007	02,007		S&T Bancorp Inc. OceanFirst Financial	1,117,917	38,210
	Bancorp Inc.	802,577	52,151		Corp.	1,777,794	37,778

		Shares	Market Value• (\$000)			Shares	Market Value• (\$000)
	First Common any coalth		(4444)		Dramier Financial		(4000)
	First Commonwealth Financial Corp.	2,670,715	37,310		Premier Financial Corp.	1,060,618	28,605
*	Safety Insurance Group Inc.	439,712	37,050		MoneyGram International Inc. ConnectOne	2,624,418	28,580
*	PRA Group Inc. Enova	1,095,461	37,005		Bancorp Inc.	1,177,893	28,517
	International Inc. Ladder Capital Corp.	937,425	35,969	*,1	Upstart Holdings Inc. New York Mortgage	2,127,680	28,128
	Class A Employers	3,525,368	35,395		Trust Inc. TFS Financial Corp.	10,943,238 1,879,247	28,015 27,080
	Holdings Inc. Stewart Information	819,465	35,344	*	Customers Bancorp Inc.	939,524	26,626
	Services Corp.	818,852	34,990		Tompkins Financial	000,02 .	20,020
*	Blucora Inc.	1,359,668	34,712		Corp.	338,988	26,299
*	Triumph Financial Inc.	705,694	34,487		Amerant	,	,
	Ready Capital Corp.	3,072,836	34,231		Bancorp Inc.		
	PennyMac Mortgage				Class A	952,284	25,559
	Investment Trust Capitol Federal	2,733,208	33,864	1	QCR Holdings Inc. Rocket Cos. Inc.	507,006	25,168
	Financial Inc.	3,884,090	33,597		Class A	3,586,354	25,104
1	Compass Diversified	3,004,030	33,397	1	ARMOUR Residential		20,101
	Holdings	1,836,527	33,480		REIT Inc.	4,395,731	24,748
	Origin Bancorp Inc.	903,040	33,142		Banc of California Inc.	1,550,511	24,700
	Heritage Financial Corp.	1,080,734	33,114	*	Columbia	1,000,011	21,700
*	Palomar				Financial Inc. Argo Group	1,139,427	24,634
	Holdings Inc. Southside	731,115	33,017		International	007047	00.007
	Bancshares Inc. Lakeland	901,741	32,454		Holdings Ltd. Hanmi Financial	927,917	23,987
	Bancorp Inc.	1,842,324	32,443		Corp.	965,551	23,897
	Nelnet Inc. Class A	355,880	32,296		Enact Holdings Inc.	988,708	23,848
*	Encore Capital			*	First Bancshares Inc.	737,705	23,614
	Group Inc. Brookline	673,165	32,272		Ambac Financial Group Inc.	1,346,454	23,482
	Bancorp Inc.	2,252,520	31,873	1	Bank First Corp.	250,966	23,295
	Franklin BSP Realty				Redwood Trust Inc.	3,331,863	22,523
	Trust Inc. Dime Community	2,446,033	31,554		Washington Trust Bancorp Inc.	474,187	22,372
*	Bancshares Inc. Nicolet	988,547	31,465		Heritage Commerce Corp.	1,707,856	22,202
	Bankshares Inc.	391,726	31,256		Peoples Bancorp Inc.	779,671	22,202
	AMERISAFE Inc.	600,691	31,218		Old Second		
	German American Bancorp Inc.	829,939	30,957		Bancorp Inc. Univest Financial	1,367,594	21,936
	MFA Financial Inc.	3,066,836	30,208		Corp.	834,242	21,799
	Federal Agricultural	-,,			First Foundation Inc.	1,492,436	21,387
	Mortgage Corp.			*,1	Lemonade Inc.	1,517,226	20,756
	Class C Live Oak	267,523	30,153		TrustCo Bank Corp. KKR Real Estate	548,863	20,632
	Bancshares Inc.	994,781	30,042		Finance Trust Inc.	1,451,080	20,257
1	Cowen Inc. Class A	754,682	29,146		Brightsphere	,,	-,
	Preferred Bank	389,706	29,080		Investment		
*	LendingClub Corp. Mercury General	3,287,130	28,927		Group Inc. Northfield	982,773	20,225
	Corp.	843,998	28,865		Bancorp Inc.	1,279,070	20,120
	ProAssurance Corp.	1,649,086	28,810		WisdomTree Inc.	3,691,556	20,119

Second			Shares	Market Value• (\$000)			Shares	Market Value• (\$000)
Bancop Inc. 437,907 20,113 Byline Bancorp Inc. 644,601 14,806	-	Community Trust			*.1	Riot Blockchain Inc	4 579 007	15 523
Insurance Inc. Class A 570,227 19,582 HomeStreet Inc. 535,464 14,768 HomeStreet Inc. 535,464 14,768 HomeStreet Inc. 536,464 14,768 HomeStreet Inc. 546,000 14,694 Holdings Inc. Class A 721,738 19,364 Holdings Inc. Class A 721,738 19,364 Holdings Inc. Corp. 436,675 14,586 Equity Holdings Ltd. 921,185 19,262 HarborOne Bancorp Inc. 1,369,005 19,029 Hordings Inc. Class A 443,588 14,492 Corp. Holdings Inc. Corp. 1,871,083 18,991 Holdings Inc. 1,182,191 Holdings Inc. Corp. 1,871,083 18,991 Holdings Inc. 1,182,191	*	Bancorp Inc.	437,907	20,113		Byline Bancorp Inc.		
United Fire Group Inc. Group Inc. Group Inc. Financial Inc. Financial Inc. Victory Capital Holdings Inc. Class A 721,738 19,364 James River Group Holdings Ltd. HarborOne Bancorp Inc. Capital Corp. Class A 2,801,319 Corp. Class A 2,801,319 Corp. Class A 2,801,319 Corp. Class A 2,488,453 Cambridge Bancorp Peapack-Gladstone Financial Corp. Great Southern Bancorp Inc. Bancorp Inc. Bancorp Mercantile Bank Holdings Ltd. Grop. Class A 2,801,319 Corp. Class A 2,801,319 Elimpton Bancorp Inc. Bancorp						For Savings	53,653	14,806
Croup Inc. 714,514 19,549 Holdings Inc. Ellington Financial Inc. 1,573,479 19,464 Victory Capital Holdings Inc. Class A 721,738 19,364 Mercantile Bancorp 308,378 14,654 Corp. 435,675 14,586 Equity Bancshares Inc. Class A 443,588 14,492 CrossFirst Corp. 1,871,083 18,991 Sancshares Inc. 1,158,754 14,380 Inc. Corp. 2,2458,453 18,758 Combridge Bancorp 222,172 18,454 Corp. 233,735 14,002 First Mid Sancshares Inc. 302,804 18,014 Holding Corp. Great Southern Bancorp Inc. 302,804 18,014 Briley Financial Inc. 521,564 17,837 MBIA Inc. 1,382,103 17,760 First Mid Bancshares Inc. 544,930 17,481 Horizon Bancorp Inc. 1,382,103 17,760 Bancshares Inc. 2,875,652 16,966 Dynex Capital Inc. 2,875,652 16,966 Dynex Capital Inc. 2,875,652 16,966 Dynex Capital Inc. 2,875,652 16,964 Business First Bancshares Inc. 610,984 16,264 Midland States Bancorp Inc. 689,657 15,890 Marathon Digital Inclination 1,335 16,702 Marathon Digital Inclination 1,360,000 11,278 11,369 11,			570,227	19,582			535,464	14,768
Financial Inc. 1,573,479 19,464 Victory Capital Holdings Inc. Class A James River Group Holdings Itd. 921,185 19,262 Equity Bancshares Inc. Class A Corp. 1,871,083 18,991 Bancshares Inc. Class A 2,801,319 18,999 (Corp. Capital Inc. Class A 2,801,319 18,999 (Corp. Capital Inc. Capital Corp. 493,155 18,355 (Corp. Sanchares Inc. Capital Inc. 3,923,468 13,968 (Corp. Bancorp Inc. Arrow Financial Corp. 493,155 18,355 (Corp. Bancorp Inc. Arrow Financial Corp. Bancorp Inc. 302,804 18,014 Bancshares Inc. 1,158,754 14,330 (Corp. Great Southern Bancorp Inc. 302,804 18,304 (Corp. Bancshares Inc. Arrow Financial Corp. Bancorp Inc. 1,382,103 17,760 First Mid Bancshares Inc. 521,564 17,837 (Capital Inc. Class A Laya,3,205 13,239 (Corp. Bancorp Inc. Capital Inc. 1,382,103 17,760 First Mid Bancshares Inc. 521,564 17,837 (Capital Inc. Class A Laya,3,205 13,239 (Corp. Bancorp Inc. Capital Inc. Class A Laya,3,205 (Corp. Banchares Inc. Arrow Financial Corp. 407,777 13,824 (Corp. First Community Bankshares Inc. 407,777 13,824 (Corp. Banchares Inc. 521,564 17,837 (Corp. Bankshares Inc. 407,777 13,824 (Cor		Group Inc.	714,514	19,549	*	Holdings Inc.	640,865	14,740
Holdings Inc. Class A 721,738 19,364 Mercantile Bank Mercantile Bank Corp. 435,675 14,586 Leguity Bancshares Inc. Class A 443,588 14,492 Corp. Class A 443,588 14,492 Corp. Class A 443,588 14,492 Corp. Class A 2,801,319 18,909 Corp. Corp. 599,260 14,334 Corp.		Financial Inc.	1,573,479	19,464		Bancorp	446,902	14,694
James River Group Holdings Ltd. 921,185 19,262 Equity Bancshares Inc. Corp. 435,675 14,586 Equity Bancshares Inc. Class A 443,588 14,492 Cross-First Bancshares Inc. 1,158,754 14,380 Corp. Class A 2,801,319 18,909 Corp. 599,260 14,334 Corp. Corp. 599,260 14,334 Corp. Corp. Corp. 599,260 14,334 Corp.		Holdings Inc.	721 738	19.364	*	Corp.	308,378	14,654
HarborOne Bancorp Inc. 1,369,005 19,029 Sancshares Inc. Class A 443,588 14,492 Crop. 1,871,083 18,991 CrossFirst Bankshares Inc. 1,158,754 14,380 Independent Bank Corp. Class A 2,801,319 18,909 Corp. Class A 1,343,205 14,332 Cambridge Bancorp 222,172 18,454 First Financial Corp. 493,155 18,355 Cambridge Bancorp 493,155 18,355 Cambridge Bancorp 493,155 18,355 Cambridge Bancorp 10, 10, 10,000 14,000		James River Group		,			435,675	14,586
Kearny Financial Corp. 1,871,083 18,991		HarborOne	921,185	19,262				
Corp. 1,871,083 18,991 Bankshares Inc. 1,158,754 14,380 Open Lending Corp. Class A 2,801,319 18,909 iStar Inc. 2,458,453 18,758 Peapack-Gladstone Financial Corp. 493,155 18,355 Bancorp Inc. 302,804 18,014 Bancorp Inc. 1,382,103 17,760 Bancshares Inc. 521,564 17,331 17,481 Bancshares Inc. 1,382,103 17,600 Bancshares Inc. 1,391,101 17,012 SiriusPoint Ltd. 2,875,652 16,966 Dynex Capital Inc. 1,333,660 16,964 Business First Bancorp Inc. Class A 881,534 16,529 Midland States Bancorp Inc. 10 Jiamond Hill Investment Group Inc. Bancorp Inc. 10 Jiamond Hill Investment Group Inc. 10 Jiamond Hill Investment Group Inc. 1,382,310 16,072 Central Pacific Financial Corp. 784,064 15,901 National Western Life Group Inc. Class A 55,873 15,700 SiriusPoint Luc. Class A 55,873 15,700 SiriusPoint Luc. Group Inc. 1,383,600 15,890 Nidependent Bank Corp. 303,859 14,332 Corp. 599,260 14,334 14,334 11,219 Bankshares Inc. 1,158,754 14,334 Corp. 599,260 14,334 14,334 First Midend States Bancorp Inc. 302,804 18,045 First Financial Corp. 689,657 15,890 Nidependent Bank Corp. 303,859 14,002 Broadmark Realty Capital Inc. 3,923,468 13,968 Corp. 584,803 13,968 Corp. 584,803 13,912 First Financial Corp. 689,657 15,890 Nidependent Bank Corp. 14,033 Cambridge Bancorp Inc. 18,555 Ranchares Inc. 712,025 11,812 Ranchares Inc. 712,025 11,812 Ranchares Inc. 1,158,754 14,334 Ranchares Inc. 1,343,205 14,332 Ranchares Inc. 3,923,468 13,986 Ranchares Inc. 407,777 13,824 Ranchares Inc. 407,777			1,369,005	19,029	*		443,588	14,492
Class A 2,801,319 18,909 Corp. 599,260 14,334 Cambridge Bancorp 222,172 18,454 First Financial Corp. 303,559 14,002 Paepack-Gladstone Financial Corp. 493,155 18,355 First Financial Corp. 303,559 14,002 Broadmark Realty Capital Inc. 3,923,468 13,968 Corp. Great Southern Bancorp Inc. 302,804 18,014 Bancspares Inc. 521,564 17,837 First Mid Bancshares Inc. 524,930 17,760 Bancshares Inc. SiriusPoint Ltd. 2,875,652 16,966 Dynex Capital Inc. 1,303,3660 16,964 Business First Bancshares Inc. 759,121 16,807 Clearwater Analytics Holdings Inc. Class A 881,534 16,529 Midland States Bancorp Inc. 610,984 16,264 Midland States Bancorp Inc. Diamond Hill Investment Group Inc. 87,521 16,193 Right Sirius Group Inc. 610,984 16,072 Central Pacific Financial Corp. 784,064 15,901 National Western Life Group Inc. Class A 55,873 15,700 First Class A 11,244 11,249 11,249 11,249 11,260 Mid Penn Rancorp Inc. 1,360,772 11,260 Mid Penn Rancorp Inc. 1,360,773 13,800 13,912 13,902 13,912 13,902 13,912 13,902 13,912 13,902 13,912 13,902 13,912 13,902 13,912 13,902 13,912 13,902 13,912 13,902 13,912 13,902 13,912 13,902 13,912 13,902 13,912 13,902 13,912 13,902 13,912 13,902 13,902 13,902 13,902 13,902 13	*	'	1,871,083	18,991		Bankshares Inc.	1,158,754	14,380
ISTAIL		Class A	2,801,319	18,909			599,260	14,334
Cambridge Bancorp 222,172 18,454 First Financial Corp. 303,859 14,002 Peapack-Gladstone Financial Corp. 493,155 18,355 18,355 Capital Inc. 3,923,468 13,968 CNB Financial Corp. 584,803 13,912 First Community Sankshares Inc. 407,777 13,624 Arrow Financial Corp. 407,363 13,810 EZCORP Inc. Class A 1,624,375 13,239 Bar Harbor Sankshares Inc. 407,777 13,624 Arrow Financial Corp. 407,363 13,810 EZCORP Inc. Class A 1,624,375 13,239 Bar Harbor Sankshares Inc. 407,777 13,624 Arrow Financial Corp. 407,363 13,810 EZCORP Inc. Class A 1,624,375 13,239 Bar Harbor Sankshares 412,183 13,206 Bancshares Inc. 544,930 17,481 1 Invesco Mortgage Capital Inc. 1,023,676 Capital Inc. 1,023,676 Capital Inc. 1,023,676 Capital Inc. 393,835 12,800 Capital Inc. 393,835 12,800 Farmers National Sanc Corp. 895,587 12,646 Bancshares Inc. 759,121 16,807 Carwater Analytics Holdings Inc. Class A 881,534 16,529 Investment Group Inc. 87,521 16,193 First of Long Island Corp. 672,717 12,109 Central Pacific Financial Corp. 829,310 16,072 Central Pacific Financial Corp. 829,310 16,072 Central Pacific Financial Corp. 689,657 15,890 National Western Life Group Inc. Class A 55,873 15,700 Silvergate Capital Inc. 3,923,468 13,968 CNB Financial Corp. 407,777 13,624 Arrow Financial Corp. 407,777 13,624 Arrow Financial Corp. 407,363 13,810 EZCORP Inc. Class A 16,024 Trivet Inc. 1,023,676 Taylor Inc. 1,817,114 T		iStar Inc.	2,458,453	18,758				
Financial Corp. 493,155 18,355 Capital Inc. 3,923,468 13,968 CNB Financial Corp. 584,803 13,912 First Community Bankshares Inc. 407,777 13,824 Arrow Financial Corp. 407,363 13,810 Bancsorp Inc. 1,382,103 17,760 Banchares Inc. 544,930 17,481 BrightSpire Capital Inc. 1,333,660 16,964 Business First Bancshares Inc. 759,121 16,807 Clearwater Analytics Holdings Inc. Class A 881,534 16,529 Midland States Bancorp Inc. 610,984 16,264 Diamond Hill Investment Group Inc. 82,310 16,072 Central Pacific Financial Corp. 784,064 15,901 National Western Life Group Inc. Class A 55,873 15,700 Silvergate Capital Inc. 1,006,100 11,278 Inc. 1,006,100 Inc		0 1	222,172	18,454				
Metropolitan Bank Holding Corp. 311,071 18,251 Sale Southern Bancorp Inc. 302,804 18,014 Arrow Financial Corp. 407,777 13,824 Arrow Financial Corp. 407,363 13,912 First Community Bankshares Inc. 407,777 13,824 Arrow Financial Corp. 407,363 13,810 Arrow Financial Corp. 407,363 13,810 B. Riley Financial Inc. 521,564 17837 EZCORP Inc. Class A 1,624,375 13,239 Bar Harbor Bankshares Inc. 544,930 17,481 Invesco Mortgage Capital Inc. 1,023,676 13,031 Capital Inc. 1,033,660 16,964 Banc Corp. 393,835 12,800 Sale Sociates Sale Socia			102 155	10 255				
Holding Corp. Great Southern Bancorp Inc. 302,804 18,014 Bankshares Inc. 407,777 13,824 13,239 Barkshares Inc. 644,930 17,481 1 Investment Group Inc. 401,070 16,721 Great Southern Group Inc. 87,521 16,193 Investment Group Inc. 10,006,100 Investment Group Inc. 10,006,100 Investment Investment Group Inc. 10,006,100 Investment Investme	*	· ·	433,133	10,333		•		
Bankshares Inc. August Bankshares Inc. B			311,071	18,251			584,803	13,912
Bancorp Inc. 302,804 18,014 B. Riley Financial Inc. 521,564 17,837 MBIA Inc. 1,382,103 17,760 First Mid Bancshares Inc. 544,930 17,481 1 BrightSpire Capital Inc. Class A 2,788,244 17,371 Horizon Bancorp Inc. 1,130,130 17,042 Gapital Inc. 1,023,676 13,031 SiriusPoint Ltd. 2,875,652 16,966 Business First Bancshares Inc. 759,121 16,807 1st Source Corp. 233,785 12,412 Camden National Corp. 401,070 16,721 TPG RE Finance Class A 881,534 16,529 1 Clearwater Analytics Holdings Inc. Class A 881,534 16,529 1 CBL & Associates Bancorp Inc. 610,984 16,264 Diamond Hill Investment Group Inc. 87,521 16,193 Flushing Financial Corp. 829,310 16,072 Central Pacific Financial Corp. 784,064 15,901 National Western Life Group Inc. Class A 55,873 15,700 Silvergate Capital Inc. 1,006,100 11,278 Silvergate Capital Inc. 51,047,363 13,810 Arrow Financial Corp. 407,363 13,810 EZCORP Inc. Class A 1,624,375 13,239 Bar Harbor Bankshares		Great Southern				,	407.777	13.824
B. Riley Financial Inc. 521,564 17,837 * EZCORP Inc. Class A 1,624,375 13,239 Bar Harbor Barkshares Inc. 544,930 17,481 1 Invesco Mortgage Capital Inc. 1,023,676 13,031 (Capital Inc. Class A 2,788,244 17,371 Horizon Bancorp Inc. 1,130,130 17,042 Group Inc. 1,333,660 16,964 Business First Bancshares Inc. 759,121 16,807 Ist Source Corp. 401,070 16,721 TPG RE Finance Corp. 401,070 16,721 TPG RE Finance Financial Corp. 881,534 16,529 Investment Group Inc. 87,521 16,193 Financial Corp. 87,540 11,997 Carter Bancorp Inc. 610,984 16,264 Diamond Hill Investment Group Inc. 87,521 16,193 Financial Corp. 829,310 16,072 Central Pacific Financial Corp. 784,064 15,901 National Western Life Group Inc. Class A 55,873 15,700 St. Source Corp. 1,202,345 11,260 Inc. Narothologis Inc. National Western Life Group Inc. Class A 51,670 Mid Penn Rancorp Inc. Mid Penn Rancorp Inc. Analogameted Financial Corp. National Western Life Group Inc. Class A 55,873 15,700 St. Source Corp. 3,743,444 11,219		Bancorp Inc.	302,804	18,014		Arrow Financial Corp.		
MBIA Inc.		B. Riley Financial Inc.	521,564	17,837	*			
Bancshares Inc. BrightSpire Capital Inc. Class A 2,788,244 17,371 Capital Inc. 393,835 12,800	*		1,382,103	17,760		Bar Harbor	.,,	,
Capital Inc. Class A 2,788,244 17,371 Capital City Bank Group Inc. 393,835 12,800		Bancshares Inc.	544,930	17,481	1	Invesco Mortgage	412,183	13,206
Horizon Bancorp Inc. 1,130,130 17,042 Group Inc. 393,835 12,800			2 788 244	17371		•	1,023,676	13,031
* SiriusPoint Ltd. 2,875,652 16,966 Dynex Capital Inc. 1,333,660 16,964 Business First Bancshares Inc. 759,121 16,807 1st Source Corp. 233,785 12,412 TPG RE Finance Corp. 401,070 16,721 TPG RE Finance Trust Inc. 1,817,114 12,338 TPG RE Finance Trust Inc. 1,817,114 12,338 TPG RE Finance Trust Inc. First of Long Island Corp. 672,717 12,109 CBL & Associates Properties Inc. 522,774 12,066 Metrocity Bankshares Inc. 554,638 11,997 Test of Corp. Central Pacific Financial Corp. 829,310 16,072 Central Pacific Financial Corp. 784,064 15,901 National Western Life Group Inc. Class A 55,873 15,700 Silvergate Capital Pacific Financial Corp. Class A 55,873 15,700 Silvergate Capital Pacific Group Inc. Class A 55,873 15,700 Silvergate Capital Pacific Group Inc. Class A 55,873 15,700 Silvergate Capital Inc. 1,006,100 T1,278 Mid Penn Bancorp Inc. 374,344 11,219							202 025	10.000
Dynex Capital Inc.	*	'					393,835	12,800
Business First Bancshares Inc. 759,121 16,807 1st Source Corp. 233,785 12,412 TPG RE Finance Trust Inc. 1,817,114 12,338 Trust Inc. 1,019 Trust Inc.		Dynex Capital Inc.	1,333,660	16,964			895,587	12,646
Camden National Corp. 401,070 16,721 Trust Inc. 1,817,114 12,338		Business First				· ·		
Corp. 401,070 16,721 Trust Inc. 1,817,114 12,338 * Clearwater Analytics Holdings Inc. Class A 881,534 16,529 1 CBL & Associates Properties Inc. 522,774 12,066 Bancorp Inc. 610,984 16,264 Metrocity Bankshares Inc. 554,638 11,997 Investment Group Inc. 87,521 16,193 Eankshares Inc. 712,025 11,812 Flushing Financial Corp. 829,310 16,072 Central Pacific Financial Corp. 784,064 15,901 Amalgamated Financial Corp. National Western Life Group Inc. Class A 55,873 15,700 **1 Silvergate Capital Financial Corp. 374,344 11,219			759,121	16,807			233,785	12,412
* Clearwater Analytics Holdings Inc. Class A 881,534 16,529 1 CBL & Associates Midland States Bancorp Inc. 610,984 16,264 Diamond Hill Investment Group Inc. 87,521 16,193 8ankshares Inc. 554,638 11,997 Flushing Financial Corp. 829,310 16,072 SmartFinancial Inc. 416,988 11,467 Central Pacific Financial Corp. 784,064 15,901 Amalgamated Financial Corp. 689,657 15,890 National Western Life Group Inc. Class A 55,873 15,700 **1 Silvergate Capital			401,070	16,721			1 81711/	12 338
Class A 881,534 16,529 1 CBL & Associates Midland States Bancorp Inc. 610,984 16,264 Diamond Hill Investment Group Inc. 87,521 16,193 Flushing Financial Corp. 829,310 16,072 Central Pacific Financial Corp. 784,064 15,901 Amalgamated Financial Corp. 689,657 15,890 National Western Life Group Inc. Class A 55,873 15,700 **1 Silvergate Capital	*	Clearwater Analytics		,			1,017,114	12,000
Midland States Properties Inc. 522,774 12,066 Bancorp Inc. 610,984 16,264 Metrocity Bankshares Inc. 554,638 11,997 Investment Group Inc. 87,521 16,193 **Carter Bankshares Inc. 712,025 11,812 Flushing Financial Corp. 829,310 16,072 SmartFinancial Inc. 416,988 11,467 Central Pacific Financial Corp. 784,064 15,901 NexPoint Diversified Real Estate Trust 1,081,779 11,359 Amalgamated Financial Corp. 689,657 15,890 *.1 Marathon Digital Holdings Inc. 1,006,100 11,278 National Western Life Group Inc. Class A 55,873 15,700 Mid Penn Bancorn Inc. 3,292,345 11,260 *.1 Silvergate Capital 8ankshares Inc. 712,025 11,812			881,534	16,529	1		672,717	12,109
Diamond Hill Bankshares Inc. 554,638 11,997						Properties Inc.	522,774	12,066
Group Inc. 87,521 16,193 Bankshares Inc. 712,025 11,812		Diamond Hill	010,001	10,201		Bankshares Inc.	554,638	11,997
Corp. 829,310 16,072 1 Orchid Island Capital Inc. 1,081,779 11,359		Group Inc.	87,521	16,193	*	Bankshares Inc.		
Financial Corp. 784,064 15,901 NexPoint Diversified Amalgamated Financial Corp. 689,657 15,890 National Western Life Group Inc. Class A 55,873 15,700 *.1 Silvergate Capital NexPoint Diversified Real Estate Trust 1,006,100 11,278 *.1 Marathon Digital Holdings Inc. 3,292,345 11,260 Mid Penn Barcorn Inc. 1,001,779 11,339		Corp.	829,310	16,072	1	Orchid Island	416,988	11,467
Financial Corp. 689,657 15,890 *.1 Marathon Digital National Western Life Group Inc. Class A 55,873 15,700 Mid Penn *.1 Silvergate Capital Range of the state of		Financial Corp.	784,064	15,901		NexPoint Diversified		
Group Inc. Class A 55,873 15,700 Mid Penn *.1 Silvergate Capital Bancorn Inc. 3,292,349 11,200		Financial Corp.	689,657	15,890	*,1	Marathon Digital	1,006,100	11,278
Bancorn Inc 3/43/44 11 719		Group Inc. Class A	55,873	15,700		•	3,292,345	11,260
	*,1		901,737	15,690		Bancorp Inc.	374,344	11,219

		Shares	Market Value• (\$000)			Shares	Market Value* (\$000)
	Financial				Shore		
	Institutions Inc. American National	450,573	10,976		Bancshares Inc. Capstar Financial	509,859	8,887
4	Bankshares Inc.	296,822	10,962		Holdings Inc.	501,635	8,859
1	GCM Grosvenor Inc. Class A	1,437,229	10,937		Universal Insurance Holdings Inc.	826,787	8,756
	Civista Bancshares Inc.	496,781	10,934		Northeast Bank Granite Point	206,474	8,693
*	F&G Annuities & Life Inc.	539,190	10,789		Mortgage Trust Inc. Guaranty	1,592,579	8,536
	West Bancorp Inc.	414,261	10,584		Bancshares Inc.	245,483	8,504
	Merchants Bancorp	434,604	10,570		Sierra Bancorp	394,292	8,375
	Republic	404,004	10,570		Colony Bankcorp Inc.	655,847	8,323
	'						
	Bancorp Inc. Class A	253,793	10,385		AFC Gamma Inc.	528,841	8,319
*	Southern First Bancshares Inc.				Home Bancorp Inc. Central Valley	205,685	8,234
		226,710	10,372		Community		
	Waterstone Financial Inc.	600 219	10 240		Bancorp	383,357	8,119
	Macatawa Bank	600,218	10,348		Primis Financial Corp. South Plains	682,667	8,090
	Corp.	925,613	10,210		Financial Inc.	292,506	8,053
*	Professional Holding Corp. Class A	367,867	10,205		Five Star Bancorp Codorus Vallev	293,908	8,006
*	Bridgewater				Bancorp Inc.	327,515	7,795
	Bancshares Inc. HomeTrust	573,719	10,178		BCB Bancorp Inc. National	430,285	7,741
*	Bancshares Inc. Blue Foundry	419,370	10,136		Bankshares Inc.	190,358	7,671
	Bancorp Southern Missouri	782,802	10,059	1	PCSB Financial Corp. UWM Holdings Corp.	400,428	7,624
	Bancorp Inc.	217,810	9,982		Class A Summit Financial	2,300,429	7,614
	John Marshall Bancorp Inc.	346,600	9,975		Group Inc.	304,535	7,580
*	Oscar Health Inc.	,	5,515		Northeast		
	Class A Northrim	3,936,237	9,683		Community Bancorp Inc.	503,961	7,519
	Bancorp Inc.	176,916	9,654		First Business Financial		
	MidWestOne Financial Group Inc.	297,943	9,460		Services Inc.	205,340	7,505
1	'				Donegal Group Inc.		
1	ACNB Corp. HCl Group Inc.	236,741 237,701	9,425 9,411		Class A	524,280	7,445
	Citizens & Northern	201,701	0,111		Chicago Atlantic Real Estate Finance Inc.	491,800	7,411
	Corp. Peoples Financial	409,413	9,359		BayCom Corp.	386,727	7,340
	Services Corp.	179,285	9,294		Timberland	212 024	7064
	RBB Bancorp	435,114	9,072		Bancorp Inc.	212,824	7,264
	Farmers &	433,114	9,072		FS Bancorp Inc. Investar Holding	214,292	7,166
	Merchants Bancorp Inc.	333,453	9,063		Corp. Orrstown Financial	331,586	7,139
	First Bancorp Inc.	302,521	9,057		Services Inc.	307,627	7,125
*,1	World Acceptance				First Bank	511,381	7,037
	Corp. Enterprise	137,028	9,036		HBT Financial Inc.	349,190	6,834
	Bancorp Inc.	255,668	9,025		Chemung Financial	440.004	0.015
	Tiptree Inc. Class A	651,681	9,025		Corp.	148,664	6,819
	Esquire Financial	001,001	3,013		Oppenheimer		
	Holdings Inc.	206,705	8,942		Holdings Inc. Class A	158,975	6,729

		Shares	Market Value• (\$000)			Shares	Market Value• (\$000)
	Norwood Financial			*	Kingsway Financial		
	Corp.	199,708	6,678		Services Inc.	679,437	5,388
	MVB Financial Corp.	302,098	6,652		ESSA Bancorp Inc.	257,669	5,378
*				*	Oportun Financial	257,003	5,576
*	FVCBankcorp Inc.	348,752	6,651		Corp.	960,206	5,291
	Third Coast Bancshares Inc.	250 052	6,614		Partners Bancorp	596,295	5,283
	Red River	358,852	0,014	*	· ·		
	Bancshares Inc.	107746	6 500		Maiden Holdings Ltd.	2,459,113	5,189
*	First Western	127,746	6,523		Western New		
	Financial Inc.	230,318	6,483		England Bancorp Inc.	541,360	5,121
	MainStreet	230,310	0,400		Evans Bancorp Inc.	135,370	5,061
	Bancshares Inc.	233,617	6,422		Penns Woods	130,370	5,001
*	LendingTree Inc.	299,471	6,388		Bancorp Inc.	190,029	5,059
*	Greenlight Capital Re	233,471	0,300		Salisbury	190,029	5,059
	Ltd. Class A	776,574	6,329		Bancorp Inc.	159,453	5,007
	Regional	770,074	0,020		Orange County	100,400	3,007
	Management Corp.	224,220	6,296		Bancorp Inc.	107,232	4,995
	PCB Bancorp	355,560	6,290		Medallion Financial	107,202	4,000
*	Ocwen Financial	333,300	0,230		Corp.	698,986	4,991
	Corp.	204,363	6,249		Meridian Corp.	164,242	4,975
	Community Financial	204,000	0,240	*,1	Hippo Holdings Inc.	361,460	4,916
	Corp.	156,422	6,241	,	Great Ajax Corp.	672,741	4,877
	Ames National Corp.	263,155	6,213		Silvercrest Asset	072,741	4,077
1	Fidelity D&D	200,100	0,210		Management		
	Bancorp Inc.	129,702	6,114		Group Inc. Class A	249,318	4,680
*	California Bancorp	254,329	6,048		First Community	240,010	4,000
	LCNB Corp.	335,831	6,045		Corp.	210,458	4,607
1	Greene County	333,031	0,043		OP Bancorp	409,054	4,565
	Bancorp Inc.	105,184	6,040	*	ECB Bancorp Inc.	283,246	4,546
	Parke Bancorp Inc.	290,867	6,033	*	Trean Insurance	203,240	4,540
	First Internet	230,007	0,033		Group Inc.	749,232	4,495
	Bancorp	247,933	6,020		Peoples Bancorp of	710,202	1, 100
	William Penn	2-1,000	0,020		North Carolina Inc.	137,293	4,470
	Bancorp	489,511	5,933		Riverview	.07,200	., ., 0
	Unity Bancorp Inc.	216,027	5,904		Bancorp Inc.	571,750	4,391
	Middlefield Banc	210,027	3,304	*	Pioneer Bancorp Inc.	382,436	4,360
	Corp.	214,014	5,864		Richmond Mutual	002,.00	.,000
	C&F Financial Corp.	99,227	5,782		Bancorp Inc.	330,188	4,296
	Blue Ridge	00,227	0,702		Seven Hills Realty	,	.,
	Bankshares Inc.	462,864	5,781		Trust	469,696	4,270
	Bankwell Financial	102,001	0,701		Eagle Bancorp	•	•
	Group Inc.	195,733	5,760		Montana Inc.	257,546	4,162
	Capital Bancorp Inc.	244,670	5,760		FNCB Bancorp Inc.	498,310	4,091
	Southern States	2,0 , 0	0,700	1	Ellington Residential	•	•
	Bancshares Inc.	197,192	5,709		Mortgage REIT	591,253	4,056
	ChoiceOne Financial	,	27: 22		Sculptor Capital	•	•
	Services Inc.	192,470	5,582		Management Inc.		
	Investors Title Co.	37,598	5,548		Class A	462,486	4,005
*	Ponce Financial	,	2,2 .2		Greenhill & Co. Inc.	387,823	3,975
	Group Inc.	594,372	5,540		Crawford & Co.		
	Plumas Bancorp	149,103	5,524		Class B	746,601	3,964
*	Hagerty Inc. Class A	651,800	5,482	*	eHealth Inc.	816,369	3,951
	Territorial	,000	5,102	1	First Guaranty		
	Bancorp Inc.	226,146	5,430		Bancshares Inc.	167,977	3,939
	Bank of Princeton	170,560	5,410	*	Malvern Bancorp Inc.	221,900	3,939
*,1	Forge Global	2,000	-,		First Northwest		
	Holdings Inc.	3,118,181	5,394		Bancorp	246,872	3,792
	<u> </u>	. , -	,		HMN Financial Inc.	174,893	3,725

		Shares	Market Value• (\$000)			Shares	Market Value• (\$000)
	First United Corp.	188,849	3,711		TC Bancshares Inc.	151,263	2,248
	Finward Bancorp	101,400	3,671	*	Velocity Financial Inc.	225,504	2,176
*	Sterling Bancorp Inc.	590,269	3,595		Sound Financial		_,
	Limestone		2,000		Bancorp Inc.	53,437	2,163
	Bancorp Inc.	146,744	3,583	1	Union		
	Bank7 Corp.	137,673	3,524		Bankshares Inc.	92,353	2,162
	BankFinancial Corp.	328,418	3,458	*,1	Rigetti		
	First Financial				Computing Inc.	2,946,700	2,149
	Northwest Inc.	230,131	3,447	*,1	Bakkt Holdings Inc.	1,805,265	2,148
	Hawthorn			*	Security National		
	Bancshares Inc.	157,894	3,437		Financial Corp.	000.050	0.445
	Provident				Class A	293,859	2,145
	Bancorp Inc.	470,772	3,427		Broadway Financial	0 114 100	0.105
	Nexpoint Real Estate	040.007		*,1	Corp. USCB Financial	2,114,129	2,135
	Finance Inc.	213,897	3,399	, '	Holdings Inc.	173,225	2,113
	Luther Burbank Corp.	300,288	3,336		Western Asset	173,223	2,113
	AG Mortgage				Mortgage Capital		
	Investment Trust Inc.	622,463	3,305		Corp.	228,767	2,084
*,1	1895 Bancorp of	022,403	3,305		Associated Capital	, -	,
, .	Wisconsin Inc.	327,037	3,283		Group Inc. Class A	48,920	2,054
	SB Financial	027,007	0,200	*	ACRES Commercial		
	Group Inc.	195,052	3,269		Realty Corp.	245,355	2,027
1	Old Point Financial	,	-,	*	Bogota Financial		
	Corp.	119,700	3,227		Corp.	175,708	1,964
*	NI Holdings Inc.	240,510	3,192	*,1	Sunlight Financial		
1	Cherry Hill Mortgage				Holdings Inc.	1,506,790	1,944
	Investment Corp.	540,434	3,135	*	Catalyst Bancorp Inc.	151,200	1,935
	First Savings			*	NSTS Bancorp Inc.	186,636	1,891
	Financial Group Inc.	152,355	3,047	*,1	Finance of America	4 404 000	4 000
1	Hanover Bancorp Inc.	145,775	2,972	*	Cos. Inc. Class A	1,481,602	1,882
	CB Financial				Finwise Bancorp	196,982	1,824
	Services Inc.	137,767	2,952	*,1	Dave Inc.	6,160,800	1,787
*,1	Citizens Inc. Class A	1,357,628	2,892	*	Doma Holdings Inc.	3,765,455	1,705
	Summit State Bank	181,477	2,867		Elevate Credit Inc.	957,460	1,676
	Sachem Capital Corp.	868,554	2,866		CF Bankshares Inc.	77,960	1,651
_	Arlington Asset				Bayfirst Financial Corp.	95,510	1,597
	Investment Corp. Class A	964,778	2,827		Heritage Insurance	33,310	1,557
	Westwood Holdings	304,776	2,027		Holdings Inc.	864,537	1,556
	Group Inc.	253,091	2,818	1	Hennessy	001,007	1,000
	Federal Agricultural	200,00.	2,0.0		Advisors Inc.	182,750	1,535
	Mortgage Corp.				loanDepot Inc.	,	•
	Class A	29,131	2,792		Class A	927,893	1,531
*,1	BM Technologies Inc.	531,936	2,771		IF Bancorp Inc.	85,645	1,476
*	SWK Holdings Corp.	156,426	2,759		Auburn National		
*,1	Guild Holdings Co.				Bancorp Inc.	63,021	1,461
	Class A	271,900	2,743		Lument Finance		
*	Heritage Global Inc.	1,122,609	2,638		Trust Inc.	736,731	1,400
1	LINKBANCORP Inc.	279,587	2,614		AmeriServ		
	Curo Group Holdings				Financial Inc.	351,198	1,380
	Corp.	735,347	2,610		Manhattan Bridge	050.040	4 007
*	Republic First		0		Capital Inc.	253,648	1,367
	Bancorp Inc.	1,174,692	2,526		Great Elm Group Inc.	643,568	1,300
	Provident Financial	170.040	0.404	-	Safeguard Scientifics Inc.	417270	1 204
* 1	Holdings Inc.	178,916	2,464	*,1	Root Inc. Class A	417,279	1,294
*,1	Consumer Portfolio	276 672	2.440	, '	HOUL IIIC. Class A	270,892	1,216
	Services Inc.	276,673	2,449				

		Shares	Market Value• (\$000)			Shares	Market Value• (\$000)
	US Global Investors Inc.			1	Cincinnati Bancorp Inc.	3,324	51
*.1	Class A	375,986	1,087	*	Siebert Financial	,	
^,1	GoHealth Inc. Class A	103,498	1,082	*	Corp. Vericity Inc.	23,651 2,636	32 18
*	Patriot National	100, 100	1,002	1	Cohen & Co. Inc.	446	4
	Bancorp Inc.	101,605	1,077	*	CFSB Bancorp Inc.	546	4
1	Angel Oak Mortgage Inc.	216,627	1,025	*,1,2	Cogent Biosciences Inc.		
*	Affinity				CVR	400,874	_
	Bancshares Inc.	62,333	941			=	135,589,572
	Nicholas Financial Inc.	148.305	936	Healtl	h Care (14.8%)		
*	Ashford Inc.	63,617	883		UnitedHealth		
*,1	OppFi Inc.	405,300	831		Group Inc.	28,415,783	15,065,480
*	FFBW Inc.	,			Johnson & Johnson	79,515,153	14,046,352
*		70,764	824		Eli Lilly & Co.	26,009,578	9,515,344
	Generations Bancorp	07005	700		,	170,728,317	8,748,119
* 1	NY Inc.	67,225	726		AbbVie Inc.	53,784,710	8,692,147
*,1	Midwest Holding Inc.	54,287	692		Merck & Co. Inc.	77,112,203	8,555,599
	Lake Shore	40.070			Thermo Fisher	77,112,200	0,000,000
	Bancorp Inc.	49,379	596		Scientific Inc.	11,928,276	6,568,782
*	Carver Bancorp Inc.	133,111	547				
*,1	MarketWise Inc.	304,854	512		Abbott Laboratories Danaher Corp.	53,029,301	5,822,087
	Mid-Southern					19,927,821	5,289,242
	Bancorp Inc.	33,699	443		Bristol-Myers Squibb	64 660 470	4 652 060
	United Insurance				Co.	64,669,470	4,652,968
	Holdings Corp.	346,040	367		Amgen Inc.	16,226,652	4,261,768
*	Biorestorative				Elevance Health Inc.	7,263,234	3,725,821
	Therapies Inc.	121,046	333		Gilead Sciences Inc.	38,145,447	3,274,787
	Oconee Federal				Medtronic plc	40,458,637	3,144,445
	Financial Corp.	13,734	325		Cigna Corp.	9,297,488	3,080,630
*	PB Bankshares Inc.	22,618	307	*	Intuitive Surgical Inc.	10,749,250	2,852,314
	Kentucky First				Stryker Corp.	10,360,849	2,533,124
	Federal Bancorp	44,526	302	*	Vertex		
	Village Bank & Trust				Pharmaceuticals Inc	. 7,807,473	2,254,642
	Financial Corp.	5,510	299	*	Regeneron		
	Kingstone Cos. Inc.	193,591	261		Pharmaceuticals Inc	. 3,094,021	2,232,305
*,1,2	Palisade Bio Inc. CVR	204,224	196		Becton Dickinson &		
*	OptimumBank				Co.	8,619,067	2,191,829
	Holdings Inc.	48,881	195	*	Boston Scientific		
*	Hallmark Financial				Corp.	43,559,138	2,015,481
	Services Inc.	308,158	180		Humana Inc.	3,849,566	1,971,709
*	First Seacoast				Zoetis Inc. Class A	12,762,557	1,870,353
	Bancorp	18,095	174	*	Moderna Inc.	9,932,159	1,784,014
*	Oxbridge Re				HCA Healthcare Inc.	6,449,762	1,547,685
	Holdings Ltd.	132,133	155	*	Centene Corp.	17,222,448	1,412,413
*	LM Funding			*	Edwards	17,222,440	1,412,410
	America Inc.	214,624	118		Lifesciences Corp.	18,809,167	1,403,352
*	Texas Community	,			Agilent	10,000,107	1,400,002
	Bancshares Inc.	7,372	113		Technologies Inc.	8,970,368	1,342,416
*,1	FG Financial	,-		*	Dexcom Inc.	11,745,487	1,330,059
	Group Inc.	35,157	100	*			
*,1	NeuroOne Medical	,,		*	Biogen Inc.	4,379,712	1,212,830
	Technologies Corp.	73,065	88	*	IQVIA Holdings Inc.	5,647,498	1,157,116
	Atlantic American	-,3		*	IDEXX	0.510.000	1 007700
	Corp.	36,081	83	*	Laboratories Inc.	2,519,323	1,027,783
*	Reliance Global	/ /		*	Illumina Inc.	4,785,825	967,694
	Group Inc.	109,418	62		ResMed Inc.	4,456,660	927,565
		, .	· ·				

		Shares	Market Value• (\$000)			Shares	Market Value• (\$000)
*	Alnylam			*	Halozyme		
	Pharmaceuticals Inc.	. 3,743,830	889,721		Therapeutics Inc.	4,107,739	233,730
	Zimmer Biomet				Chemed Corp.	451,874	230,650
	Holdings Inc.	6,381,776	813,676	*	Acadia Healthcare	•	•
*	Horizon Therapeutics				Co. Inc.	2,764,127	227,543
	plc	6,893,035	784,427	*	Shockwave		•
	Baxter				Medical Inc.	1,099,027	225,971
	International Inc.	15,342,053	781,984	*	Masimo Corp.	1,519,029	224,740
*	Veeva Systems Inc.			*	Inspire Medical	.,,	,
	Class Á	4,273,209	689,610		Systems Inc.	880,085	221,676
	Laboratory Corp. of				Organon & Co.	7,732,294	215,963
	America Holdings	2,694,389	634,475		Bruker Corp.	3,138,805	214,537
*	Insulet Corp.	2,112,710	621,961		DENTSPLY	0,100,000	211,007
	Cardinal Health Inc.	7,962,622	612,087		SIRONA Inc.	6,550,242	208,560
*	Molina	,,-	,		Encompass Health	0,000,2 .2	200,000
	Healthcare Inc.	1,775,735	586,383		Corp.	3,026,887	181,038
*	BioMarin	, -,	,	*	Elanco Animal	0,020,007	.0.,000
	Pharmaceutical Inc.	5,648,372	584,550		Health Inc.	14,457,656	176,673
	STERIS plc	3,038,531	561,186	*	Globus Medical Inc.	11,107,000	170,070
*	Hologic Inc.	7,477,778	559,413		Class A	2,358,288	175,150
*	Seagen Inc.	4,237,243	544,528	*	Envista Holdings	2,000,200	170,100
	Quest	4,207,240	344,320		Corp.	4,950,104	166,670
	Diagnostics Inc.	3,460,879	541,420	*	Karuna	.,000,.0.	.00,070
	PerkinElmer Inc.	3,844,726	539,108		Therapeutics Inc.	839,916	165,044
	West Pharmaceutical	3,044,720	333,100	*	Tenet Healthcare	000,010	100,011
	Services Inc.	2,250,237	529,593		Corp.	3,291,327	160,584
	Cooper Cos. Inc.	1,500,512	496,174	*	HealthEquity Inc.	2,574,770	158,709
*	Align Technology Inc.	2,255,883		*	Exelixis Inc.	9,844,888	157,912
*			475,766	*	lonis	3,044,000	157,512
	Incyte Corp.	5,749,995	461,840		Pharmaceuticals Inc.	A 123 610	155,749
	Royalty Pharma plc	44 404 070	450 574		Ensign Group Inc.	1,604,049	151,759
	Class A	11,401,079	450,571	*		1,004,049	151,759
_	Avantor Inc.	19,502,276	411,303		Medpace Holdings Inc.	707,299	150,237
	Viatris Inc.	36,903,458	410,736	*	•	707,233	150,257
	Bio-Techne Corp.	4,771,662	395,475		Apellis Pharmaceuticals Inc.	2 052 120	147525
*	United Therapeutics			*			147,535
	Corp.	1,386,283	385,511		LHC Group Inc.	892,848	144,365
	Teleflex Inc.	1,427,266	356,288		Option Care	4 710 E74	141 001
*	Neurocrine				Health Inc.	4,713,574	141,831
	Biosciences Inc.	2,926,666	349,561		Perrigo Co. plc	4,088,690	139,383
*	Charles River			_	Intra-Cellular	0.500.500	107000
	Laboratories				Therapies Inc.	2,590,508	137,090
	International Inc.	1,546,417	336,964	Ĵ	Azenta Inc.	2,275,885	132,502
*	Henry Schein Inc.	4,124,341	329,411	*	Alkermes plc	5,008,697	130,877
*	Sarepta			*	QuidelOrtho Corp.	1,505,204	128,951
	Therapeutics Inc.	2,538,178	328,897	*	Natera Inc.	3,155,165	126,743
*	Jazz Pharmaceuticals				Premier Inc. Class A	3,618,402	126,572
	plc	1,819,163	289,811	*	Cytokinetics Inc.	2,728,906	125,038
*	Repligen Corp.	1,687,930	285,783	*	Arrowhead		
*	Bio-Rad				Pharmaceuticals Inc.	3,055,993	123,951
	Laboratories Inc.			*	Merit Medical		
	Class A	641,825	269,881		Systems Inc.	1,725,090	121,826
*	Exact Sciences Corp.	5,409,124	267,806	*	Haemonetics Corp.	1,548,506	121,790
	Universal Health			*	Integra LifeSciences		,
	Services Inc.				Holdings Corp.	2,168,260	121,574
	Class B	1,853,760	261,176	*	Prometheus	,,	,
*	Penumbra Inc.	1,096,066	243,831		Biosciences Inc.	1,060,660	116,673
*	Catalent Inc.	5,207,680	234,398	*	Syneos Health Inc.	3,120,064	114,444
*	Novocure Ltd.	3,187,723	233,820	*	DaVita Inc.	1,520,050	113,502
			,		_ 3 * * * * * * * * * * * * * * * * * *	.,020,000	,

		Shares	Market Value• (\$000)			Shares	Market Value• (\$000)
*		Silales	(\$000)	*			
	Madrigal Pharmacouticals Inc.	200 270	110 076	*	Omnicell Inc.	1,356,587	68,399
*	Pharmaceuticals Inc. ICU Medical Inc.	390,270 691,543	113,276 108,904	*	NuVasive Inc.	1,578,063	65,079
*	Lantheus	031,043	100,304		BioCryst Pharmaceuticals Inc.	5 651 958	64,884
	Holdings Inc.	2,089,822	106,497	*	Celldex	0,001,000	04,004
*	Teladoc Health Inc.	4,462,216	105,531		Therapeutics Inc.	1,434,388	63,931
*	Vaxcyte Inc.	2,174,250	104,255	*	Signify Health Inc.		
*	Amicus				Class A	2,158,525	61,863
	Therapeutics Inc.	8,522,463	104,059	*	Glaukos Corp.	1,377,745	60,180
*	agilon health Inc.	6,291,482	101,545	*	Cerevel Therapeutics	4 005 770	00.400
*	10X Genomics Inc.	0.754.500	400.075	*	Holdings Inc.	1,905,773	60,108
*	Class A	2,754,526	100,375	*,1	AtriCure Inc.	1,349,439	59,888
*	Doximity Inc. Class A	2,936,329	98,543	, '	Ginkgo Bioworks Holdings Inc.		
	Prestige Consumer Healthcare Inc.	1,515,823	94,891			35,303,793	59,663
*	Axonics Inc.	1,513,435	94,635	*	REVOLUTION	,,	,
*	Ultragenyx	1,010,100	01,000		Medicines Inc.	2,487,653	59,256
	Pharmaceutical Inc.	2,025,106	93,823	*	ACADIA		
*	1Life Healthcare Inc.	5,580,123	93,244		Pharmaceuticals Inc.	3,719,591	59,216
*	Tandem Diabetes			*	Sage		
	Care Inc.	1,958,242	88,023		Therapeutics Inc.	1,551,751	59,184
*	Oak Street			*	Certara Inc.	3,675,092	59,059
	Health Inc.	4,071,745	87,583	*	Silk Road	1 005 550	E7000
*	Denali	0.100.000	07004	*	Medical Inc. TransMedics	1,095,550	57,900
*	Therapeutics Inc. IVERIC bio Inc.	3,139,302	87,304		Group Inc.	925,736	57,136
*	Intellia	4,060,026	86,925	*	Corcept	020,700	37,100
	Therapeutics Inc.	2,453,538	85,604		Therapeutics Inc.	2,787,567	56,616
*	PTC Therapeutics Inc.		83,290	*	Catalyst		
*	Inari Medical Inc.	1,298,597	82,539		Pharmaceuticals Inc.	3,020,411	56,180
	CONMED Corp.	931,087	82,532	*	Amylyx		
*	Amedisys Inc.	984,374	82,235		Pharmaceuticals Inc.	1,506,333	55,659
*	Insmed Inc.	4,113,502	82,188	*	Supernus	4 555 040	FF F00
*	iRhythm		,	*	Pharmaceuticals Inc.		55,500
	Technologies Inc.	872,382	81,716	*	Krystal Biotech Inc.	684,424	54,220
*,1	Axsome				Relay Therapeutics Inc.	3,540,393	52,893
	Therapeutics Inc.	1,056,977	81,525	*	Veracyte Inc.	2,187,978	51,921
*	Guardant Health Inc.	2,945,329	80,113	*	Surgery Partners Inc.	1,850,820	51,564
*	Blueprint Medicines	1 001 007	70.000	*	Pacira	.,000,020	0.,00.
*	Corp. Beam	1,821,967	79,820		BioSciences Inc.	1,320,139	50,971
	Therapeutics Inc.	2,025,500	79,217	*	Pacific Biosciences		
*	Evolent Health Inc.	2,020,000	70,217		of California Inc.	6,173,678	50,501
	Class A	2,781,234	78,097	*	Rhythm		
*	Vir Biotechnology Inc.	3,036,900	76,864		Pharmaceuticals Inc.	1,719,237	50,064
	Select Medical				Harmony Biosciences		
	Holdings Corp.	3,078,278	76,434		Holdings Inc.	906,037	49,923
*	Enovis Corp.	1,404,607	75,175	*	Ironwood	000,007	10,020
	Patterson Cos. Inc.	2,676,814	75,031		Pharmaceuticals Inc.		
*	Akero	4 050 004	74 507		Class A	3,969,615	49,184
*	Therapeutics Inc.	1,359,624	74,507	*	Syndax		
*	Neogen Corp. Mirati	4,790,433	72,958		Pharmaceuticals Inc.		49,035
	Therapeutics Inc.	1,597,297	72,374	*	Phreesia Inc.	1,514,768	49,018
*	STAAR Surgical Co.	1,461,345	72,374	*	Xencor Inc.	1,872,695	48,765
*	Progyny Inc.	2,272,416	70,334	*	Addus HomeCare	406 207	40.000
*	Integer Holdings	_,_,_,	, 5, 700		Corp.	486,397	48,392
	Corp.	1,012,842	69,339				

Maravai LifeSciences			Shares	Market Value• (\$000)			Shares	Market Value• (\$000)
Class A 3,378,339 48,344 Payer Pharmaceuticals Inc. 1,677,825 32,835 Pharmaceuticals Inc. 1,708,008 47,961 1. Day One Biopharmaceuticals Inc. 1,677,825 32,835 Pharmaceuticals Inc. 1,396,926 47,789 Inchespeutics Inc. 2,492,680 46,908 Inchespeutics Inc. 2,492,680 46,015 Therapeutics Inc. 2,492,680 46,015 Therapeutics Inc. 1,709,444 47,787 Pharmaceuticals Inc. 1,120,042 31,384 Pharmaceuticals Inc. 1,120,043 31,384 Pharmaceuticals Inc. 1,120,043 31,384 Pharmaceuticals Inc. 1,120,043 31,8	*	Maravai LifeSciences			*			
Pharmaceuticals Inc. 1,708,008			2 270 220	10 211	*		496,070	33,137
** Arvinas Inc. 1,396,926 47,789	*	Agios		•			1,677,825	32,835
** TG Therapeutics Inc. 3,965,159	*				*,1			
Revance Therapeutics Inc. 2,492,680 46,015 Therapy Inc. 390,135 31,615 Amphastar Therapy Inc. 31,615 Amphastar Amphastar Amphastar Therapy Inc. 31,615 Amphastar Amphastar Therapy Inc. 31,615 Amphastar Amphastar Amphastar Amphastar Amphastar Amphastar Amphastar Amphastar Amphastar Amp	*						1.482.586	31,905
PROCEPT	*		0,000,100	10,000				
BioRobotics Corp. 1,094,681 45,473 Pharmaceuticals Inc. 1,120,042 31,382 Chinook Therapeutics Inc. 1,709,444 44,787 Pharmaceuticals Inc. 1,120,042 31,382 Reata Pharmaceuticals Inc. 1,618,246 30,391 Alignment Healthcare Inc. 1,618,246 30,391 Alignment Healthcare Inc. 2,571,193 30,237 Alignment Align			2,492,680	46,015	*		390,135	31,613
Chinook Therapeutics Inc. 1,709,444 44,787 Class A 822,629 31,252	*,1		1 094 681	45 473			1.120.042	31,384
Avidity	*	·	1,00 1,00 1	.0, ., 0	*	Reata		. ,
Biosciences Inc. 2,014,502 44,702 Embecta Corp. 1,753,507 44,346 Healthcare Inc. 1,618,246 30,391 Meridian Bioscience Inc. 1,326,187 44,043 Healthcare Inc. 2,571,193 30,233 Mignare Inc. 2,571,193 30,233 Mignare Inc. 2,187,613 42,724 Adaptive Biotechnologies Corp. 1,025,242 40,600 MannKind Corp. 7,586,771 39,982 Biotechnologies Corp. 1,025,242 40,600 MannKind Corp. 7,586,771 39,982 Biotechnologies Corp. 1,667,735 39,709 Privia Health Group Inc. 1,728,903 39,263 Mayrox Grebologies Corp. 1,667,735 39,709 Privia Health Group Inc. 1,728,903 39,263 Mayrox Grebologies Corp. 269,513 39,168 Avanos Medical Inc. 1,437,070 38,887 Geron Corp. 1,428,955 37639 Avanos Medical Inc. 1,459,000 37,949 Nerrapeutics Inc. 1,459,000 37,949 Nerra			1,709,444	44,787				21 252
Embecta Corp. 1,753,507 44,346 Healthcare Inc. 1,618,246 30,391 Meridian Bioscience Inc. 1,326,187 44,043 Healthcare Inc. 2,571,193 30,237 Kymera Therapeutics Inc. 2,187,613 42,724 Adaptive Biotechnologies Corp. 1,025,242 40,600 Arcus Bioscience Inc. 1,197,647 29,893 Therapeutics Inc. 1,282,513 39,982 Torvita Health Group Inc. 1,728,903 39,263 Eightheaptiles Inc. 1,419,782 Biosciences Inc. 1,594,573 28,304 Aclaris Therapeutics Inc. 1,437,070 38,887 Therapeutics Inc. 1,459,000 37,949 Therapeutics Inc. 1,468,445 37,915 Vericel Corp. 1,428,955 37,639 Cutset Medical Inc. 1,468,445 37,915 Vericel Corp. 1,428,955 37,639 Sciences Inc. 1,233,334 36,433 Replimune Group Inc. 1,335,904 36,337 Replimune Group Inc. 2,426,012 36,051 Holdings Inc. 1,197,565 35,436 RI RCM Inc. 3,193,070 34,964 Therapeutics Inc. 1,112,917 34,723 ModivCare Inc. 386,099 34,645 Therapeutics Inc. 1,112,917 34,723 ModivCare Inc. 386,099 34,645 Therapeutics Inc. 1,112,917 34,723 ModivCare Inc. 386,099 34,645 Therapeutics Inc. 1,112,917 34,723 Biosciences Inc. 1,438,344 26,135 Pharmaceuticals Inc. 2,562,686 25,856 Fate Therapeutics Inc. 1,112,917 34,723 Biosciences Inc. 1,438,344 26,135 Pharmaceuticals Inc. 1,282,651 25,856 Inago Biosciences Inc. 1,438,344 26,135 Pharmaceuticals Inc. 1,282,651 25,856 Inago Biosciences Inc. 1,438,344 26,135 Pharmaceuticals Inc. 1,282,651 25,856 Inago Biosciences Inc. 1,438,344 26,135 Pharmaceuticals Inc. 1,282,651 25,856 Inago Biosciences Inc. 1,438,344 26,135 Pharmaceuticals Inc. 1,282,651 25,856 Inago Biosciences Inc. 1,438,344 26,135 Pharmaceuticals Inc. 1,282,651 25,856 Inago Biosciences Inc	*		2 014 502	44 702	*		022,023	31,232
Bioscience Inc. 1,326,187 44,043 Healthcare Inc. 2,571,193 30,237							1,618,246	30,391
AdaptHealth Corp. Class A 2,267917 43,588 Therapeutics Inc. 1,197,647 29,893	*				*		0 571 100	20.227
Class A 2,267,917 43,589 Class A 2,267,917 43,589 Covens & Minor Inc. 2,187613 42,724 Adaptive Biotechnologies Corp. 3,882,344 29,661 Corp. Corp. 1,025,242 40,600 Arcus Bioscience Corp. 1,667,735 39,822 Therapeutics Inc. 1,419,782 29,361 Corp. Corp. 1,667,735 39,709 Frivia Health Group Inc. 1,728,903 39,263 Technologies Corp. 2,69513 39,168 Corlvel Corp. 2,69513 39,168 Avanos Medical Inc. 1,443,7070 38,887 SpringWorks Therapeutics Inc. 1,443,7070 38,887 Corvel Corp. 1,428,955 37,639 Classava Cassava Cassa	*		1,326,187	44,043	*		2,071,193	30,237
Travere			2,267,917	43,589		Therapeutics Inc.	1,197,647	29,893
Therapeutics Inc. 1,975,007 41,534 FibroGen Inc. 2,558,266 40,983 Nevro Corp. 1,025,242 40,600 MannKind Corp. 7,586,771 39,982 Twist Bioscience Corp. 1,667,735 39,709 Privia Health Group Inc. 1,728,903 39,263 Dynawax Technologies Corp. 269,513 39,168 Avanos Medical Inc. 1,437,070 38,887 SpringWorks Therapeutics Inc. 1,459,000 37,949 Outset Medical Inc. 1,468,445 37,915 Vericel Corp. 1,428,955 37,639 Replimune Group Inc. 1,335,904 36,337 Replimune Group Inc. 1,335,904 36,337 Replimune Group Inc. 2,426,012 36,051 Apollo Medical Holdings Inc. 1,197,565 35,436 R1 RCM Inc. 3,193,070 34,964 Therapeutics Inc. 1,112,917 34,723 ModivCare Inc. 386,099 34,645 Myriad Genetics Inc. 1,181,587 34,514 Myriad Genetics Inc. 1,232,306 33,842 Warby Parker Inc. Class A 2,461,174 Warby Parker Inc. Class A 2,461,174 Myrian Genetics Inc. 3,640,498 Medical Inc. 6,685,222 33,159 ModivCare Inc. 6,685,222 33,	*		2,187,613	42,724	*			
* FibroGen Inc. 2,558,266	*		1 075 007	/1 F2/			3,882,344	29,661
* Nevro Corp. 1,025,242	*				*			
Twist Bioscience	*				*		612,068	29,392
Invist Bioscience	*	· ·	7,586,771	39,982			1,419,782	29,361
Privia Health Group Inc. 1,728,903 39,263 Dynavax Technologies Corp. 269,513 Avanos Medical Inc. 1,437,070 SpringWorks Therapeutics Inc. 1,459,000 Outset Medical Inc. 1,459,000 Outset Medical Inc. 1,428,955 Corp. 1,428,955	*		1 667735	39 709	*			
Policy Properties Propert	*		1,007,700	00,700	*		4,582,219	29,280
Technologies Corp. 3,686,504 39,224 CorVel Corp. 269,513 39,168 Avanos Medical Inc. 1,437,070 38,887 SpringWorks Therapeutics Inc. 1,459,000 37,949 Outset Medical Inc. 1,468,445 37,915 Vericel Corp. 1,428,955 37,639 Cassava Sciences Inc. 1,233,334 36,433 Replimune Group Inc. 1,335,904 36,337 Pediatrix Medical Group Inc. 2,426,012 36,051 Apollo Medical Holdings Inc. 1,197,565 35,436 R1 RCM Inc. 3,193,070 34,964 Novavax Inc. 2,572,931 26,450 ModivCare Inc. 386,099 34,645 Viridian Therapeutics Inc. 1,181,587 34,514 Myriad Genetics Inc. 2,332,306 33,842 NeoGenomics Inc. 1,181,587 34,514 ImmunoGen Inc. 6,685,222 33,159 Immunovant Inc. 1,594,5/3 28,302 Aclaris Therapeutics Inc. 1,786,979 28,144 Aclaris Therapeutics Inc. 1,786,979 28,144 Aclaris Therapeutics Inc. 1,786,979 28,144 Aclaris Therapeutics Inc. 1,459,000 37,949 Geron Corp. 11,611,470 28,100 Fanata Pharmaceuticals Inc. 588,655 27,382 Arcellx Inc. 877,147 27,172 Arcellx Inc. 877,147 27,172 Arcellx Inc. 587,008 27,014 Provention Bio Inc. 2,553,871 26,994 RadNet Inc. 1,415,800 26,666 Altimmune Inc. 1,617,739 26,612 Healthcare Services Group Inc. 2,212,503 26,556 REGENXBIO Inc. 1,167,740 26,484 Novavax Inc. 2,572,931 26,450 Ideaya Biosciences Inc. 1,438,344 26,135 Pharmaceuticals Inc. 1,282,651 25,836 Aclaris Therapeutics Inc. 1,786,979 28,144 Pharmaceuticals Inc. 1,786,979 28,144 Aclaris Therapeutics Inc. 1,786,979 28,144 Pharmaceuticals Inc. 1,786,979 28,144 Aclaris Therapeutics Inc. 1,786,979 28,144 Pharmaceuticals Inc. 1,786,979 28,144 Aclaris Therapeutics Inc. 1,786,979 28,144 Pharmaceuticals Inc. 1,786,979 28,144 Aclaris Therapeutics Inc. 1,786,979 28,144 Pharmaceuticals Inc. 1,787,570 26,676 Arcellx Inc. 877,147 27,172 Arcellx Inc. 877,147 27,172 Arcellx Inc. 877,147 27,172 Arcellx Inc. 1,415,800 26,666 Arcellx Inc. 1,415,800 26,666 Arcellx Inc. 1,415,800 26,666 Altimmunole Inc. 1,617,739 26,612 Altimmunole Inc. 1,617,73			1,728,903	39,263			868,284	28,471
CorVel Corp. 269,513 39,168 Avanos Medical Inc. 1,437,070 38,887 SpringWorks Therapeutics Inc. 1,459,000 37,949 Outset Medical Inc. 1,468,445 37,915 Vericel Corp. 1,428,955 37,639 Cassava Sciences Inc. 1,233,334 36,433 Replimune Group Inc. 1,335,904 36,337 Pediatrix Medical Group Inc. 2,426,012 36,051 Apollo Medical Holdings Inc. 1,197,565 35,436 R1 RCM Inc. 3,193,070 34,964 DICE Therapeutics Inc. 1,112,917 34,723 ModivCare Inc. 386,099 34,645 Viridian Therapeutics Inc. 1,181,587 34,514 Myriad Genetics Inc. 2,332,306 33,842 NeoGenomics Inc. 3,640,498 33,638 ImmunoGen Inc. C 6,685,222 33,159 Aclaris Therapeutics Inc. 1,786,979 28,145 Geron Corp. 11,611,470 28,100 Finanta Pharmaceuticals Inc. 587,008 27,014 Vascular Inc. 587,008 27,014 Vascular Inc. 587,008 27,014 Arcellx Inc. 877,147 27,172 Vascular Inc. 587,008 27,014 Arcellx Inc. 587,008 27,014 Arcellx Inc. 877,147 27,172 Vascular Inc. 587,008 27,014 Arcellx Inc. 1,415,800 26,666 Arcellx Inc. 587,008 27,014 Arcellx Inc. 1,415,800 26,666 Arcellx Inc. 587,008 27,014 Arcellx Inc. 1,415,800 26,666 Arcellx Inc. 1,415	*		3 686 504	39 224	*	Immunovant Inc.	1,594,573	28,304
Avanos Medical Inc.	*				*		1 706 070	20.145
SpringWorks Therapeutics Inc. 1,459,000 37,949 Vericel Corp. 1,428,955 37,639 LeMaitre Vascular Inc. 588,655 27,384 Arcellx Inc. 877,147 27,174 LeMaitre Vascular Inc. 587,008 27,014 LeMaitre Vascular Inc. 1,415,800 26,666 LeMaitre Vascular Inc. 1,415,800 26,666 LeMaitre Vascular Inc. 1,617,739 26,612 LeMaitre Vas	*		1,437,070	38,887	*			
* Outset Medical Inc. 1,468,445 37,915	*		1 450 000	27040	*	· ·	,,	
* Vericel Corp.	*			•				27,384
Vascular Inc. 587,008 27,014	*	Vericel Corp.			_		8//,14/	27,174
Replimune Group Inc. 1,335,904 36,337 RadNet Inc. 1,415,800 26,660 Pediatrix Medical Group Inc. 2,426,012 36,051 Healthcare Services Group Inc. 2,426,012 36,051 Healthcare Services Group Inc. 2,212,503 26,550 REGENXBIO Inc. 1,167,740 26,484 Holdings Inc. 3,193,070 34,964 Novavax Inc. 2,572,931 26,450 Therapeutics Inc. 1,112,917 34,723 Biosciences Inc. 1,438,344 26,138 ModivCare Inc. 386,099 34,645 Fate Therapeutics Inc. 1,181,587 34,514 Therapeutics Inc. 2,332,306 33,842 NeoGenomics Inc. 3,640,498 33,638 Myriad Genetics Inc. 2,461,174 33,201 Warby Parker Inc. Class A 2,461,174 33,201 ImmunoGen Inc. 6,685,222 33,159 RadNet Inc. 1,415,800 26,666	*,1		1 000 004	26.422			587,008	27,014
Group Inc. 1,335,904 36,337 HadNet Inc. 1,415,800 26,660 Group Inc. 2,426,012 36,051 Healthcare Services Group Inc. 2,212,503 26,550 Healthcare Services Group Inc. 2,212,503 26,550 Group Inc. 1,167,740 26,482 Group Inc. 2,572,931 26,450 Inc. 1,167,740 26,482 Inc. 2,572,931 26,450 Inc. 1,167,740 Inc. 2,572,931 26,450 Inc. 1,112,917 34,723 Inc. 2,572,931 26,450 Inc. 2,572,931 Inc. 2,572,931 26,450 Inc. 2,572,931 Inc. 2,572,931 Inc. 2,572,	*		1,233,334	36,433				26,994
Pediatrix Medical Group Inc. 2,426,012 36,051 Apollo Medical Holdings Inc. 1,197,565 35,436 R1 RCM Inc. 3,193,070 34,964 **Il DICE Therapeutics Inc. 1,112,917 34,723 ModivCare Inc. 386,099 34,645 **Viridian Therapeutics Inc. 1,181,587 34,514 Myriad Genetics Inc. 2,332,306 33,842 NeoGenomics Inc. 3,640,498 33,638 **Warby Parker Inc. Class A 2,461,174 33,201 **ImmunoGen Inc. 6,685,222 33,159 **Healthcare Services Group Inc. 2,212,503 26,550 REGENXBIO Inc. 1,167,740 26,484 **Novavax Inc. 2,572,931 26,450 Ideaya Biosciences Inc. 1,438,344 26,138 **Therapeutics Inc. 2,562,686 25,858 Zentalis Pharmaceuticals Inc. 1,282,651 25,833 Avid Bioservices Inc. 1,873,520 25,798 Imago Biosciences Inc. 714,290 25,678 Innoviva Inc. 1,926,684 25,528			1,335,904	36,337				26,660
** Apollo Medical Holdings Inc. 1,197,565 35,436 REGENXBIO Inc. 1,167,740 26,484 10 Holdings Inc. 1,197,565 35,436 REGENXBIO Inc. 1,167,740 26,484 10 Holdings Inc. 1,112,917 34,723 Biosciences Inc. 1,438,344 26,138 10 Holdings Inc. 1,112,917 34,723 Biosciences Inc. 1,438,344 26,138 10 Holdings Inc. 1,112,917 34,723 Biosciences Inc. 1,438,344 26,138 10 Holdings Inc. 1,181,587 34,645 Therapeutics Inc. 2,332,306 33,842 Pharmaceuticals Inc. 1,282,651 25,833 10 Holdings Inc. 1,282,6	*		0.406.010	26 0F1	,.		1,017,733	20,012
Holdings Inc. 1,197,565 35,436 R1 RCM Inc. 3,193,070 34,964 Inc. 3,193,070 34,964 Inc. 1,167,740 26,482 Inc. 2,572,931 26,450 Ideaya Biosciences Inc. 1,438,344 26,138 Inc. 1,112,917 34,723 ModivCare Inc. 386,099 34,645 Viridian Therapeutics Inc. 1,181,587 34,514 Myriad Genetics Inc. 2,332,306 33,842 NeoGenomics Inc. 3,640,498 33,638 Inc. Varby Parker Inc. Class A 2,461,174 33,201 ImmunoGen Inc. 6,685,222 33,159 HEGENXBIO Inc. 1,167,740 26,482 REGENXBIO Inc. 1,167,740 26,482 Ideaya Biosciences Inc. 1,438,344 26,138 Fate Therapeutics Inc. 2,562,686 25,858 Zentalis Pharmaceuticals Inc. 1,282,651 25,833 Avid Bioservices Inc. 1,873,520 25,798 Imago Biosciences Inc. 714,290 25,678 Innoviva Inc. 1,926,684 25,528	*		2,426,012	36,051			2,212,503	26,550
*.1 DICE Therapeutics Inc.			1,197,565	35,436	*			26,484
Therapeutics Inc. 1,112,917 34,723 ModivCare Inc. 386,099 34,645 Viridian Therapeutics Inc. 1,181,587 34,514 Myriad Genetics Inc. 2,332,306 33,842 NeoGenomics Inc. 3,640,498 33,638 Varby Parker Inc. Class A 2,461,174 33,201 ImmunoGen Inc. 6,685,222 33,159 Biosciences Inc. 1,438,344 26,138 Fate Therapeutics Inc. 2,562,686 25,858 Zentalis Pharmaceuticals Inc. 1,282,651 25,833 Avid Bioservices Inc. 1,873,520 25,798 Imago Biosciences Inc. 714,290 25,678 Innoviva Inc. 1,926,684 25,528	*		3,193,070	34,964			2,5/2,931	26,450
* ModivCare Inc. 386,099 34,645 * Fate Therapeutics Inc. 2,562,686 25,858 * Viridian Therapeutics Inc. 1,181,587 34,514 * Myriad Genetics Inc. 2,332,306 33,842 * NeoGenomics Inc. 3,640,498 33,638 * Warby Parker Inc. Class A 2,461,174 33,201 * ImmunoGen Inc. 6,685,222 33,159 * ImmunoGen Inc. 6,685,222 33,159 * Innoviva Inc. 1,926,684 25,525	*,1		1 112 917	34 723			1,438,344	26,135
Viridian Therapeutics Inc. 1,181,587 34,514 Zentalis Pharmaceuticals Inc. 1,282,651 25,833 25,798	*				*	Fate		05.050
* Myriad Genetics Inc. 2,332,306 33,842 Pharmaceuticals Inc. 1,282,651 25,833 Avid Bioservices Inc. 1,873,520 25,798 Imago * Warby Parker Inc. Class A 2,461,174 33,201 ImmunoGen Inc. 6,685,222 33,159 Innoviva Inc. 1,926,684 25,529	*	Viridian			*		2,562,686	25,858
* NeoGenomics Inc. 3,640,498 33,638 * Avid Bioservices Inc. 1,873,520 25,798	*						1,282,651	25,833
* Imago * Imago Class A 2,461,174 33,201 Biosciences Inc. 714,290 25,679 * ImmunoGen Inc. 6,685,222 33,159 Innoviva Inc. 1,926,684 25,529	*	,			*		1,873,520	25,798
* ImmunoGen Inc. 6.685.222 33.159 * Innoviva Inc. 1,926,684 25,529	*,1	Warby Parker Inc.			*		71/1 200	25 670
Immunogen inc. 6,685,222 33,159	*				*			25,529
		minunoden inc.	0,000,222	JJ, 159	*	Sotera Health Co.		25,093

		Shares	Market Value* (\$000)			Shares	Market Value• (\$000)
*	Nuvalent Inc. Class A	838,651	24,975	*,1	Theravance	0110100	(\$000)
*	Inhibrx Inc.	1,008,455	24,975	, .	Biopharma Inc.	1,701,393	19,090
*	Morphic Holding Inc.	928.813	24,846	*	Alector Inc.	2,043,595	18,862
*	Crinetics	920,013	24,040	*	Cerus Corp.	5,068,933	18,502
	Pharmaceuticals Inc.	1 351 /69	24,732	*	Bluebird Bio Inc.	2,663,630	18,432
*	Cytek	1,001,400	24,702	*,1	23andMe Holding	2,000,000	10,402
	Biosciences Inc.	2,421,555	24,724		Co.	8,501,758	18,364
*	Treace Medical	_,,	,	*	CareDx Inc.	1,607,708	18,344
	Concepts Inc.	1,063,312	24,446	*	Coherus	.,00,,,00	10,011
*	Kura Oncology Inc.	1,969,608	24,443		Biosciences Inc.	2,298,127	18,201
	National HealthCare	.,,	,	*,1	Point Biopharma	_,,	,
	Corp.	410,079	24,400		Global Inc.	2,479,082	18,073
*	Pliant			*	HealthStream Inc.	721,873	17,931
	Therapeutics Inc.	1,256,914	24,296	*	Fulgent Genetics Inc.	586,434	17,464
*	ADMA Biologics Inc.	6,244,828	24,230	*	OrthoPediatrics Corp.	436,239	17,332
*	Cutera Inc.	543,164	24,019	*	Health Catalyst Inc.	1,626,169	17,286
*	Recursion			*	RAPT		
	Pharmaceuticals Inc.				Therapeutics Inc.	869,450	17,215
	Class A	3,109,298	23,973	*	Community Health		
*	Bridgebio				Systems Inc.	3,983,855	17,210
	Pharma Inc.	3,145,370	23,968	*	AnaptysBio Inc.	544,680	16,880
	UFP	202.000	00.040	*	Accolade Inc.	2,117,310	16,494
	Technologies Inc.	203,088	23,942	*,1	Agiliti Inc.	1,009,959	16,472
	Varex Imaging Corp.	1,173,432	23,821	*	4D Molecular		
	Alphatec Holdings Inc.	1 012 501	23,633		Therapeutics Inc.	733,244	16,285
*	Deciphera	1,913,581	23,033	*	Paragon 28 Inc.	849,890	16,241
	Pharmaceuticals Inc.	1 //39 56/	23,594	*	Emergent		
*	Verve	1,400,004	20,004		BioSolutions Inc.	1,352,002	15,967
	Therapeutics Inc.	1,210,541	23,424	Ţ	OPKO Health Inc.	12,728,537	15,911
*	Cogent	.,,	, :	*	Seres	0.005.000	15.070
	Biosciences Inc.	2,026,040	23,421	*	Therapeutics Inc.	2,835,302	15,878
*	Hims & Hers				Cardiovascular Systems Inc.	1,154,654	15,726
	Health Inc.	3,571,326	22,892	*	ANI	1,154,054	15,720
*	Arcutis				Pharmaceuticals Inc.	389,590	15,673
	Biotherapeutics Inc.	1,539,117	22,779	*	AVEO	000,000	10,070
*	ViewRay Inc.	5,066,099	22,696		Pharmaceuticals Inc.	1.039.472	15,540
	Atrion Corp.	39,886	22,314	*	DocGo Inc.	2,195,997	15,526
*,1	EQRx Inc.	8,997,500	22,134	*	Mersana		•
*	Collegium				Therapeutics Inc.	2,637,451	15,455
	Pharmaceutical Inc.	934,245	21,675	*	AngioDynamics Inc.	1,113,842	15,338
*	Agenus Inc.	8,886,270	21,327	*	MaxCyte Inc.	2,801,647	15,297
	BioLife Solutions Inc.	1,153,686	20,997	*	Allakos Inc.	1,814,261	15,276
*,1	Anavex Life Sciences	0.000.070	20.001	*	Protagonist		
*	Corp.	2,266,872	20,991		Therapeutics Inc.	1,393,645	15,205
	Viking Therapeutics Inc.	2 221 261	20.074	*	Mirum		
*	CTI BioPharma Corp.	2,231,261 3,484,904	20,974 20,944		Pharmaceuticals Inc.	777,288	15,157
	National Research	3,404,304	20,344	*	Cymabay		
	Corp.	545,986	20,365		Therapeutics Inc.	2,398,201	15,037
*	Enhabit Inc.	1,501,468	19,759	*,1	Zymeworks Inc.	1,911,300	15,023
*	American Well Corp.	1,501,400	10,700		Ardelyx Inc.	5,265,872	15,008
	Class A	6,917,282	19,576	*	iTeos	750 000	44.00:
*	Castle	3,0.,,202	.5,575	*	Therapeutics Inc.	750,688	14,661
	Biosciences Inc.	819,406	19,289	_	Brookdale Senior	E 330 336	14 540
*	Heska Corp.	309,784	19,256	*	Living Inc. Cara	5,329,226	14,549
*	Editas Medicine Inc.		•		Therapeutics Inc.	1,354,313	14,545
	Class A	2,161,413	19,172	*	Quanterix Corp.	1,026,087	14,211
					additional corp.	.,020,007	17,411

		Shares	Market Value• (\$000)			Shares	Market Value• (\$000)
*,1	Chanaga la c			*,1	Life Channel Health	0110100	(\$000)
*	Sharecare Inc.	8,867,300	14,188	^,1	LifeStance Health Group Inc.	2,276,264	11,245
	Lyell Immunopharma Inc.	4,077,466	14,149	*	NanoString	2,270,204	11,243
*,1	89bio Inc.	1,102,700	14,037		Technologies Inc.	1,409,732	11,236
*	Intercept	1,102,700	14,007	*	Orthofix Medical Inc.	547,257	11,235
	Pharmaceuticals Inc.	1.123.441	13,897	*	Computer Programs	,	,
*,1	Invitae Corp.	7,454,414	13,865		& Systems Inc.	407,736	11,099
*,1	Bioxcel	., ,	,	*,1	Compass	,	•
	Therapeutics Inc.	645,295	13,861		Therapeutics Inc.	2,187,972	11,006
*	Sorrento			*	Tarsus		
	Therapeutics Inc.	15,624,325	13,843		Pharmaceuticals Inc.	748,349	10,971
*,1	Esperion			*	GoodRx		
	Therapeutics Inc.	2,216,547	13,809		Holdings Inc.		
*	Sutro Biopharma Inc.	1,708,596	13,805		Class A	2,333,432	10,874
*,1	Allogene			*	Atea	0.050.000	10.041
	Therapeutics Inc.	2,181,839	13,724		Pharmaceuticals Inc.		10,841
*	Artivion Inc.	1,123,317	13,615		BioAtla Inc.	1,302,896	10,749
*	Kiniksa				Edgewise Therapeutics Inc.	1 100 200	10.600
	Pharmaceuticals	000 740	40.000		'	1,189,398	10,633
* 4	Ltd. Class A	893,713	13,388		Sight Sciences Inc.	863,824	10,547
*,1	Senseonics	10.047.005	10.000	*	SomaLogic Inc.	4,157,015	10,434
*	Holdings Inc.	12,947,685	13,336		OraSure	0 157546	10 200
	Nurix	1 014 146	10 001	*	Technologies Inc. 2seventy bio Inc.	2,157,546	10,399
*	Therapeutics Inc. Surmodics Inc.	1,214,146	13,331	*	PMV	1,108,531	10,387
*	Kezar Life	388,090	13,242		Pharmaceuticals Inc.	1,192,114	10,371
	Sciences Inc.	1,877,555	13,218	1	Zynex Inc.	732,906	10,371
*	Nektar Therapeutics	1,077,000	13,210	*,1	PDS Biotechnology	732,300	10,133
	Class A	5,846,571	13,213	,.	Corp.	754,695	9,962
*	Sangamo	3,040,371	10,210	*	Axogen Inc.	990,595	9,886
	Therapeutics Inc.	4,164,900	13,078	*	Liquidia Corp.	1,531,173	9,754
*,1	Bionano	, . ,	.,.		Utah Medical	1,001,170	0,701
	Genomics Inc.	8,898,523	12,992		Products Inc.	96,930	9,744
*	Anika			*	Cullinan	,	-,
	Therapeutics Inc.	438,739	12,987		Oncology Inc.	922,529	9,733
*	Inovio			*,1	ARS		
	Pharmaceuticals Inc.	8,260,428	12,886		Pharmaceuticals Inc.	1,134,600	9,678
*	Albireo Pharma Inc.	593,770	12,831	*	CareMax Inc.	2,648,343	9,666
*	Inogen Inc.	642,617	12,666	*	SeaSpine Holdings		
*	MacroGenics Inc.	1,875,612	12,585		Corp.	1,143,457	9,548
*	Dyne			*	Apollo		
	Therapeutics Inc.	1,079,732	12,514		Endosurgery Inc.	948,117	9,453
*	Tango	4 700 000	40.000	*	MiMedx Group Inc.	3,362,582	9,348
	Therapeutics Inc.	1,700,696	12,330	*	Caribou		
_	Arcturus Therapeutics	710 007	10 100		Biosciences Inc.	1,479,875	9,294
*,1	Holdings Inc.	716,967	12,160	*	Eagle	014 010	0.005
*	ImmunityBio Inc.	2,397,295	12,154	* 1	Pharmaceuticals Inc.	314,910	9,205
*	SI-BONE Inc.	885,948	12,049	*,1	Clover Health		
*,1	Multiplan Corp.	10,447,112	12,014		Investments Corp. Class A	9,752,612	9,065
, !	Sana Biotechnology Inc.	2,968,610	11,726	*,1	Butterfly	0,702,012	5,005
*	Vanda	2,300,010	11,/20		Network Inc.	3,615,330	8,894
	Pharmaceuticals Inc.	1 581 120	11,684	*	Atara	_,0.0,000	0,004
*	Aldeyra	1,001,120	11,004		Biotherapeutics Inc.	2,710,236	8,890
	Therapeutics Inc.	1,678,186	11,680	*	Adicet Bio Inc.	983,730	8,795
*,1	Harrow Health Inc.	783,528	11,565		SIGA	,	-,
*	Scholar Rock Holding	. 55,020	,000		Technologies Inc.	1,189,862	8,757
	Corp.	1,264,195	11,441		-		
	- P	, - ,	,				

			Market				Market
		Shares	Value* (\$000)			Shares	Value* (\$000)
*	Fulcrum		(4222)	*,1	Vor BioPharma Inc.	990,141	6,584
	Therapeutics Inc.	1,199,920	8,735	*	Allovir Inc.	1,272,621	6,529
*	Seer Inc. Class A	1,499,055	8,695	*	Ocular	1,272,021	0,525
*	OmniAb Inc.	2,406,909	8,665		Therapeutix Inc.	2,307,462	6,484
*	Codexis Inc.	1,820,160	8,482	*,1	HilleVax Inc.	385,505	6,450
*,1	Ocugen Inc.	6,504,099	8,455	*	NGM	000,000	0,100
*	Heron	0,001,000	0,100		Biopharmaceuticals		
	Therapeutics Inc.	3,357,971	8,395		Inc.	1,269,403	6,372
*,1	Aerovate	-,,	-,	*	Tela Bio Inc.	544,647	6,263
	Therapeutics Inc.	284,834	8.346	*,1	Alpine Immune	,	-,
*	Pennant Group Inc.	758,088	8,324		Sciences Inc.	851,829	6,261
*	Evolus Inc.	1,102,093	8,277	*,1	Assertio		
*	Terns	.,,	-,		Holdings Inc.	1,450,548	6,237
	Pharmaceuticals Inc.	800,066	8,145	*,1	ORIC		
*,1	Entrada	•	,		Pharmaceuticals Inc.	. 1,058,147	6,233
	Therapeutics Inc.	600,633	8,121	*	ALX Oncology		
*	Actinium				Holdings Inc.	544,979	6,142
	Pharmaceuticals Inc.	760,573	8,100	*,1	ClearPoint Neuro Inc.	725,080	6,141
*	Nuvation Bio Inc.	4,178,976	8,024	*	RxSight Inc.	468,338	5,934
*	PetIQ Inc. Class A	867,296	7,996	*,1	Monte Rosa		
*	Poseida				Therapeutics Inc.	776,911	5,912
	Therapeutics Inc.			*	Voyager		
	Class A	1,506,603	7,985		Therapeutics Inc.	965,356	5,889
*	Amneal			*	CVRx Inc.	316,816	5,814
	Pharmaceuticals Inc.	3,989,978	7,940	*,1	Marinus	== 0.=	- TOO
*,1	Vera				Pharmaceuticals Inc.		5,792
	Therapeutics Inc.	400 705	7000		iRadimed Corp.	204,005	5,771
* 1	Class A	409,785	7,929	*	Accuray Inc.	2,748,522	5,744
*,1	Erasca Inc.	1,830,279	7,889	*	Aadi Bioscience Inc.	445,926	5,721
_	Tactile Systems	606 007	7005	*	Aura Biosciences Inc.	543,093	5,702
*	Technology Inc.	686,887	7,885	*	Stoke		
*	Zimvie Inc.	838,745	7,834		Therapeutics Inc.	615,840	5,684
	Rigel Pharmaceuticals Inc.	E 156 462	7,735		Y-mAbs	1 150 170	E 0E7
	Phibro Animal Health	5,150,405	7,735	*,1	Therapeutics Inc.	1,159,178	5,657
	Corp. Class A	574,011	7,698	*,1	IGM Biosciences Inc.	331,533	5,639
*	Arbutus Biopharma	374,011	7,030	*,1	Cabaletta Bio Inc.	601,842	5,567
	Corp.	3,300,543	7,690	*	908 Devices Inc.	727,330	5,542
*	Pulmonx Corp.	892,990	7,528		Akoya	E7701E	E E01
*	Gritstone bio Inc.	2,168,030	7,480	*	Biosciences Inc.	577,915	5,531
*	Karyopharm	2,100,000	7, 100	*,1	Berkeley Lights Inc.	2,057,763	5,515
	Therapeutics Inc.	2,183,595	7,424	*,1	Zomedica Corp.	33,520,591	5,464
*,1	CinCor Pharma Inc.	603,738	7,420	, '	Xeris Biopharma Holdings Inc.	4,106,991	5,462
*	C4 Therapeutics Inc.	1,244,099	7,340	*,1	Quantum-Si Inc.	2,938,592	5,402
*	OptimizeRx Corp.	430,224	7,228	*,1	Prime Medicine Inc.		5,336
*	Concert	.00,22.	7,220	*	Generation Bio Co.	287,205	
	Pharmaceuticals Inc.	1.222.223	7,138	*		1,356,025	5,329
*	G1 Therapeutics Inc.		7,035	*,1	Semler Scientific Inc.	160,229	5,288
*	Cano Health Inc.	5,128,280	7,026	*	Gossamer Bio Inc.	2,417,239	5,245
*	Kodiak Sciences Inc.	980,492	7,020		Lexicon Pharmaceuticals Inc.	. 2,717,874	5,191
*	Viemed	,.02	,,020	*,1			5,191
	Healthcare Inc.	907,059	6,857	*	Cue Health Inc.	2,505,948	5,187
*	Phathom		-,		InfuSystem Holdings Inc.	596,955	5,182
	Pharmaceuticals Inc.	608,134	6,823	*,1	scPharmaceuticals	550,555	5,162
*,1	Vigil		-,	, '	Inc.	718,034	5,148
	Neuroscience Inc.	531,740	6,647	*	Organogenesis	7 10,004	5,140
*	Astria				Holdings Inc.		
	Therapeutics Inc.	445,544	6,634		Class A	1,884,061	5,068

		Shares	Market Value• (\$000)			Shares	Market Value• (\$000)
*	Savara Inc.	3,255,385	5,046	*	Sensus		
*,1	CorMedix Inc.	1,193,591	5,037		Healthcare Inc.	518,680	3,849
*	Avita Medical Inc.	755,807	4,988	*	Celcuity Inc.	273,679	3,834
*	Chimerix Inc.	2,670,560	4,967	*,1	Outlook		
*	KalVista	_,	.,		Therapeutics Inc.	3,489,864	3,769
	Pharmaceuticals Inc.	733,821	4,961	*,1	Alaunos		
*	Neuronetics Inc.	718,657	4,937		Therapeutics Inc.	5,807,002	3,769
*	Janux	.,	,	*	Athira Pharma Inc.	1,183,657	3,752
	Therapeutics Inc.	374,211	4,928	*	Larimar		
*	Joint Corp.	352,141	4,923		Therapeutics Inc.	853,025	3,523
*	Beyond Air Inc.	749,067	4,861	*,1	Mallinckrodt plc	454,500	3,522
*	Biomea Fusion Inc.	575,055	4.848	*	Foghorn		
*	Puma		.,		Therapeutics Inc.	550,850	3,514
	Biotechnology Inc.	1,141,707	4,829	*	FONAR Corp.	206,318	3,456
*,1	Lineage Cell		,	*	Ovid therapeutics		
	Therapeutics Inc.	4,125,846	4,827		Inc.	1,851,578	3,444
*	Frequency			*,1	Omega		
	Therapeutics Inc.	1,246,700	4,800		Therapeutics Inc.	602,610	3,441
*	Nkarta Inc.	793,900	4,755	*,1	Evelo		
*,1	Annexon Inc.	915,149	4,731		Biosciences Inc.	2,090,967	3,366
*,1	Innovage Holding		, -	*,1	Standard		
	Corp.	630,750	4,529		BioTools Inc.	2,856,696	3,342
*,1	Bright Health			*,1	Co-Diagnostics Inc.	1,279,125	3,223
	Group Inc.	6,885,777	4,475	*	Graphite Bio Inc.	969,009	3,217
*,1	AN2			*	Century		
	Therapeutics Inc.	466,278	4,444		Therapeutics Inc.	625,729	3,210
*	Precigen Inc.	2,901,233	4,410	*	Inotiv Inc.	647,206	3,197
*,1	Greenwich			*,1	Sanara Medtech Inc.	69,768	3,174
	Lifesciences Inc.	282,263	4,290	*	Relmada		
*,1	Optinose Inc.	2,317,428	4,287		Therapeutics Inc.	904,705	3,157
*	GlycoMimetics Inc.	1,406,037	4,260	*,1	Citius		
*	Prelude				Pharmaceuticals Inc.		3,128
	Therapeutics Inc.	704,828	4,257	*,1	Humacyte Inc.	1,480,153	3,123
*	Icosavax Inc.	535,192	4,249	*	EyePoint		0.440
*	Merrimack				Pharmaceuticals Inc.	890,209	3,116
	Pharmaceuticals Inc.	369,998	4,240	*,1	Rani Therapeutics		
*,1	KemPharm Inc.	920,269	4,224		Holdings Inc.	E00 1EE	2.001
*,1	Design			*,1	Class A	522,155	3,081
	Therapeutics Inc.	411,201	4,219	*,1	Societal CDMO Inc.	2,064,292	3,076
*	Rallybio Corp.	636,414	4,181	*	Absci Corp.	1,453,297	3,052
*	Sonendo Inc.	1,470,409	4,161		KORU Medical Systems Inc.	042 210	3.007
*,1	Omeros Corp.	1,822,044	4,118	*,1	Immuneering Corp.	842,318	3,007
*	Tabula Rasa			, '	Class A	614,133	2,979
	HealthCare Inc.	826,607	4,092	*	Capricor	014,133	2,373
*	XOMA Corp.	221,997	4,085		Therapeutics Inc.	767.235	2,962
*,1	PepGen Inc.	304,943	4,077	*	ChromaDex Corp.	1,762,037	2,960
*	Summit			*	Matinas BioPharma	1,702,037	2,500
	Therapeutics Inc.	929,216	3,949		Holdings Inc.	5,866,959	2,934
*	Anixa			*,1	Tyra Biosciences Inc.	384,648	2,923
	Biosciences Inc.	927,841	3,943	*	X4	504,040	2,323
*,1	Vaxart Inc.	4,069,328	3,910		Pharmaceuticals Inc.	2 903 141	2,883
*,1	Selecta			*	Stereotaxis Inc.	1,388,482	2,874
	Biosciences Inc.	3,446,145	3,894	*,1	CEL - SCI Corp.	1,220,994	
*	Kinnate			*,2	PDL BioPharma Inc.	2,258,201	2,869
	Biopharma Inc.	637,863	3,891	*	Cue Biopharma Inc.	975,866	2,845 2,781
*,1	Sesen Bio Inc.	6,362,488	3,878	*,1	Vicarious	373,000	2,/01
				,.	Surgical Inc. Class A	1 352 238	2,732
					54. g. 64. 110. 01465 A	.,002,200	2,702

		Shares	Market Value• (\$000)			Shares	Market Value• (\$000)
*	Personalis Inc.	1,370,373	2,713	*	Xilio Therapeutics Inc.	739,563	1,989
*	Paratek	1,370,373	2,713	*	Spectrum	739,503	1,303
	Pharmaceuticals Inc.	1 443 552	2.699		Pharmaceuticals Inc.	5 348 837	1,971
*,1	Asensus Surgical Inc.	.,,	2,000	*	Dare Bioscience Inc.	2,375,133	1,971
	Class A	7,734,650	2,685	*	Thorne	2,070,100	1,071
*,1	Rain Oncology Inc.	333,919	2,671		HealthTech Inc.	540,104	1,961
*,1	Acumen	, .	, -	*	Harvard	,	,
	Pharmaceuticals Inc.	491,029	2,652		Bioscience Inc.	682,174	1,890
*	Electromed Inc.	249,774	2,620	*,1	Talkspace Inc.	3,039,403	1,855
*	Taysha Gene			*	Cardiff Oncology Inc.	1,285,846	1,800
	Therapies Inc.	1,157,514	2,616	*	Assembly		
*	Precision				Biosciences Inc.	1,377,385	1,791
	BioSciences Inc.	2,188,905	2,605	*	Homology		
*	Tenaya				Medicines Inc.	1,395,301	1,758
	Therapeutics Inc.	1,283,462	2,580	*,1	Bioventus Inc.		
*	Praxis Precision				Class A	673,435	1,758
	Medicines Inc.	1,071,276	2,550	*	Rezolute Inc.	841,974	1,743
*	Olema	4 000 504	0.400	*	Ikena Oncology Inc.	654,658	1,741
	Pharmaceuticals Inc.	1,006,591	2,466	*	PharmaCyte		
	Opiant Pharmaceuticals Inc.	100.000	2.420		Biotech Inc.	590,900	1,725
*,1		-,	2,439	*	Shattuck Labs Inc.	731,691	1,683
*	Invivyd Inc.	1,620,200	2,430	*,1	Genprex Inc.	1,127,694	1,635
*,1	Vapotherm Inc.	882,373	2,382	*	aTyr Pharma Inc.	737,935	1,616
-,1	Singular Genomics	1 100 122	2 272	*,1	Eton		
*	Systems Inc. CytomX	1,180,133	2,372		Pharmaceuticals Inc.	575,285	1,611
	Therapeutics Inc.	1,468,702	2,350	*,1	P3 Health	000 004	1 505
*,1	Biodesix Inc.	1,017,561	2,340	*	Partners Inc.	866,984	1,595
*	Durect Corp.	663,463	2,296		Ocuphire Pharma Inc.	451,409	1,593
*,1	Inmune Bio Inc.	361,452	2,292	*,1	Accelerate	431,403	1,555
*	Verastem Inc.	5,682,571	2,287	, .	Diagnostics Inc.	2,234,561	1,578
*,1	Seelos	0,002,071	2,207	*,1	BrainStorm Cell	2,201,001	1,070
	Therapeutics Inc.	3,356,797	2,279		Therapeutics Inc.	951,371	1,560
*	Verrica	.,,	, -	*	Clearside	,,	,
	Pharmaceuticals Inc.	814,672	2,240		Biomedical Inc.	1,383,654	1,550
*	Apyx Medical Corp.	945,007	2,211	*	Lantern Pharma Inc.	256,113	1,547
*	XBiotech Inc.	622,546	2,185	*	Adverum		
*,1	Annovis Bio Inc.	161,007	2,162		Biotechnologies Inc.	2,661,554	1,542
*	Oncternal			*,1	SCYNEXIS Inc.	985,620	1,538
	Therapeutics Inc.	2,159,797	2,160	*	Lyra Therapeutics Inc.	476,157	1,495
*,1	Oncology			*	Eiger		
	Institute Inc.	1,273,384	2,101		BioPharmaceuticals		
*	Celularity Inc. Class A		2,096		Inc.	1,261,824	1,489
*,1	Vaxxinity Inc. Class A	1,489,274	2,085	*	Enzo Biochem Inc.	1,040,908	1,489
*	Akumin Inc.	2,890,700	2,078	*,1	Impel	000 000	4 400
*	Passage Bio Inc.	1,496,581	2,065	*	Pharmaceuticals Inc.	396,809	1,488
*	Nautilus				Infinity	2 556 200	1 410
	Biotechnology Inc.	4 407 400	0.040	*	Pharmaceuticals Inc.		1,419
*	Class A	1,137,499	2,048	*	Fortress Biotech Inc.	2,146,747	1,406
	Trevi	1 040 601	2.026		Surface Oncology Inc.	1,709,153	1,402
*,1	Therapeutics Inc.	1,049,601	2,026	*,1	SELLAS Life	1,700,100	1,402
, 1	Theseus Pharmaceuticals Inc.	405,973	2 022	,.	Sciences Group Inc.	592,271	1,398
*	CytoSorbents Corp.		2,022	*,1	TherapeuticsMD Inc.	249,657	1,396
*,1	Third Harmonic	1,302,216	2,018	*	Akebia	270,007	1,550
, 1	Bio Inc.	467,005	2,008		Therapeutics Inc.	2,410,502	1,391
*,1	Atossa	+07,000	2,000	*,1	Forian Inc.	507,760	1,386
,	Therapeutics Inc.	3,779,376	1,997	*,1	Nuvectis Pharma Inc.	181,040	1,360
		.,,	.,00,			, 0 . 0	.,000

			Market				Market
		Shares	Value• (\$000)			Shares	Value* (\$000)
*	Cidara Therapeutics Inc.	1,796,543	1,359	*,1 *,1	Immunic Inc.	710,074	994
*,1	Reviva	1,730,543	1,333	, '	Decibel Therepouties Inc	100 050	991
,.	Pharmaceuticals			*	Therapeutics Inc.	483,353	
	Holdings Inc.	319,823	1,359	*,1	Oncocyte Corp.	3,079,720	988
*,1	Galectin	010,020	1,000	, '	Science 37 Holdings Inc.	2,379,691	988
	Therapeutics Inc.	1,189,409	1,344	*,1	MEI Pharma Inc.		980
*	IMARA Inc.	326,756	1,336	*	TCR2	4,022,132	980
*	Pro-Dex Inc.	83,413	1,305		Therapeutics Inc.	981,016	980
*	iCAD Inc.	695,170	1,272	*	UNITY	901,010	900
*,1	SmileDirectClub Inc.	033,170	1,272		Biotechnology Inc.	357,567	980
, .	Class A	3,592,430	1,265	*,1	Bolt	337,307	360
1	AirSculpt	0,002,100	1,200	, .	Biotherapeutics Inc.	747,881	972
	Technologies Inc.	341,234	1,263	*,1	Pulse	7-7,001	372
*	Biomerica Inc.	374,536	1,255	•	Biosciences Inc.	350,609	971
*,1	PAVmed Inc.	2,495,928	1,198	*,1	Acutus Medical Inc.	835,044	960
*	Alpha Teknova Inc.	210,918	1,190	*	BioCardia Inc.	457,496	956
*	Viracta	210,310	1,150	*,1	DermTech Inc.	534,767	947
	Therapeutics Inc.	813,922	1,188	*	Lipocine Inc.	2,398,282	921
*,1	Miromatrix	010,022	1,100	*,1	Delcath Systems Inc.	255,213	919
•	Medical Inc.	391,565	1,171	*,1,2	Tobira	200,213	919
*	Kronos Bio Inc.	715,054	1,158	,1,2	Therapeutics Inc.		
*	Synlogic Inc.	1,521,748	1,157		CVR Exp. 12/31/28	201,001	911
*	Pear	1,021,740	1,107	*,1	IsoRay Inc.	3,609,244	892
	Therapeutics Inc.	977,960	1,154	*	Inozyme Pharma Inc.	842,985	885
*	MvMD	077,000	1,101	*	Longboard	042,300	000
	Pharmaceuticals Inc.	986,327	1,134		Pharmaceuticals Inc.	278,227	879
*	Hookipa Pharma Inc.	1,396,133	1,131	*,1	Black Diamond	270,227	070
*	Sema4 Holdings	.,000,.00	.,		Therapeutics Inc.	481,157	866
	Corp.	4,245,465	1,120	*	ImmuCell Corp.	139,968	857
*,1	enVVeno Medical	.,,	.,	*,1	Solid	100,000	007
	Corp.	216,998	1,107		Biosciences Inc.	159,271	857
*	Orgenesis Inc.	566,688	1,105	*	Xtant Medical	100,271	007
*,1	NRX	,	,		Holdings Inc.	1,278,952	844
	Pharmaceuticals Inc.	978,921	1,087	*	LENSAR Inc.	282,930	837
*	Aveanna Healthcare			*	Aziyo Biologics Inc.	,	
	Holdings Inc.	1,391,988	1,086		Class A	195,766	832
*	Instil Bio Inc.	1,718,076	1,082	*	Cvteir	,	
*,1	Spero				Therapeutics Inc.	498,303	822
	Therapeutics Inc.	617,531	1,068		Psychemedics Corp.	165,415	817
*	Eledon			*,1	Zynerba		
	Pharmaceuticals Inc.	459,998	1,067		Pharmaceuticals Inc.	1,521,801	807
*	Jounce			*	DiaMedica		
	Therapeutics Inc.	950,782	1,055		Therapeutics Inc.	506,271	800
*,1	Syros			*	Alzamend Neuro Inc.	1,412,695	798
	Pharmaceuticals Inc.	292,279	1,049	*,1	Novan Inc.	545,361	796
*	Pardes			*	Exagen Inc.	326,266	783
	Biosciences Inc.			*	Talaris		
	Class A	615,600	1,040		Therapeutics Inc.	764,850	780
*	Leap	0.000.544	4 000	*	Protara		
	Therapeutics Inc.	2,289,511	1,030		Therapeutics Inc.	284,301	762
*	Curis Inc.	1,852,559	1,019	*,1	ATI Physical		
*,1	Cognition	405 400			Therapy Inc.	2,485,615	758
	Therapeutics Inc.	485,183	1,019	*	IRIDEX Corp.	373,047	750
*,1	Checkpoint	107700	1 010	*	CareCloud Inc.	266,292	748
	Therapeutics Inc.	197,736	1,010	*	Cyclerion		
* 1	Eyenovia Inc.	617,303	1,006		Therapeutics Inc.	1,138,259	747
*,1	Pyxis Oncology Inc.	748,923	1,004	*	NextCure Inc.	530,127	747

		Shares	Market Value• (\$000)			Shares	Market Value• (\$000)
*,1	ARCA biopharma Inc.	312,166	737	*	Galera		
*	Dyadic				Therapeutics Inc.	381,675	569
	International Inc.	596,383	734	*,1	NightHawk		
*	Movano Inc.	562,483	731		Biosciences Inc.	705,534	568
*	Corvus			*	Magenta		
	Pharmaceuticals Inc.	853,716	726		Therapeutics Inc.	1,432,921	566
*,1	Atreca Inc. Class A	905,470	725	*,1	Aspira Women's	4 700 505	500
*,1	Abeona			*	Health Inc. 9 Meters	1,702,595	566
	Therapeutics Inc.	235,366	725		Biopharma Inc.	445,647	562
*,1	Gelesis Holdings Inc.	2,478,100	720	*,1	Soligenix Inc.	1,217,959	551
* .	GT Biopharma Inc.	804,500	719	*,1	Disc Medicine Inc.	1,217,959	551
*,1	Acer	270 624	600	, .	Class A	27,515	547
*	Therapeutics Inc.	278,634	699 696	*,1	Immunome Inc.	233,400	514
*,1	IsoPlexis Corp. Milestone	449,112	090	*	Biora	200,100	011
,.	Scientific Inc.	1,447,898	695		Therapeutics Inc.	3,875,866	510
*,1	Adamis	1,447,000	000	*,1	Harpoon		
	Pharmaceuticals				Therapeutics Inc.	691,063	502
	Corp.	4,096,010	693	*	Reneo		
*	Aligos				Pharmaceuticals Inc.	,	501
	Therapeutics Inc.	712,990	679	*	Athenex Inc.	3,316,592	489
*,1	Eliem			*	Sio Gene		
	Therapeutics Inc.	189,734	679		Therapies Inc.	1,124,834	489
*	Aquestive			*	Forte	407.400	407
	Therapeutics Inc.	751,948	678	*,1	Biosciences Inc.	487,429	487
	Lumos Pharma Inc.	187,322	676	, '	SQZ Biotechnologies Co.	657,886	487
	Geron Corp. Warrants Exp. 12/31/25	1 202 410	673	*	Candel	007,000	407
*,1	Rapid Micro	1,202,419	6/3		Therapeutics Inc.	269,900	483
,.	Biosystems Inc.			*,1	Invacare Corp.	1,122,314	471
	Class A	594,568	672	*	Satsuma	, ,-	
*	Sensei				Pharmaceuticals Inc.	522,516	470
	Biotherapeutics Inc.	441,585	658	*	Strata Skin		
*,1	Moleculin				Sciences Inc.	593,248	469
	Biotech Inc.	616,108	653	*,1	Bright Green Corp.	992,772	466
*	Werewolf			*,1	Microbot		
	Therapeutics Inc.	314,965	646		Medical Inc.	153,549	462
*	Retractable	000 000	044	*,1	Aridis	000.050	450
*	Technologies Inc. Cumberland	392,689	644	*	Pharmaceuticals Inc. Applied Molecular	388,959	459
	Pharmaceuticals Inc.	280,820	632		Transport Inc.	1,089,900	458
*,1	Palatin	200,020	002	*	Tracon	1,000,000	400
	Technologies Inc.	246,703	632		Pharmaceuticals Inc.	306,490	457
*	Equillium Inc.	570,835	628	*	Avrobio Inc.	630,579	450
*	Hepion			*	Daxor Corp.	47,328	437
	Pharmaceuticals Inc.	2,070,833	621		Catalyst	,	
*	Mustang Bio Inc.	1,562,523	617		Biosciences Inc.	826,502	436
*	Avalo			*,1	Enochian		
	Therapeutics Inc.	119,822	610		Biosciences Inc.	416,683	429
*,1	Clene Inc.	592,311	592	*	Five Star Senior		
*	TFF				Living Inc.	775,241	426
	Pharmaceuticals Inc.	,	591	*	Predictive	1 00E 001	405
*,1	Conformis Inc.	177,088	588	*	Oncology Inc. Sonida Senior	1,385,931	425
*	Aeglea PioThoropoutico Inc	1 202 021	E77		Sonida Senior Living Inc.	33,836	423
*,1	BioTherapeutics Inc. Achieve Life	1,282,021	577	*	Angion Biomedica	55,050	423
, !	Sciences Inc.	230,562	570		Corp.	515,996	419
	301011000 1110.	200,002	370			7000	

			Market Value•				Market Value•
		Shares	(\$000)			Shares	(\$000)
*	Finch Therapeutics			*,1	NeuroPace Inc.	180,700	269
	Group Inc.	855,860	411	*	Jupiter Wellness Inc.	355,834	267
*,1	AIM _			*	Venus Concept Inc.	824,933	264
*	ImmunoTech Inc.	1,311,599	409	*,1	AcelRx		
*	Applied	F00 400	400		Pharmaceuticals Inc.	112,873	255
*	Therapeutics Inc.	536,460	408	*,2	Strongbridge		050
	vTv Therapeutics Inc. Class A	625,032	408	*	Biopharma plc CVR	1,399,363	253
*	Upexi Inc.	134,054	400	*	Elevation	005 550	050
*,1	Senti	134,034	402	*	Oncology Inc.	265,550	252
, .	Biosciences Inc.				Neoleukin Therapeutics Inc.	493,540	251
	Class A	282,432	398	*,1	Cyclo	493,540	251
*,1	Lucid	,		, .	Therapeutics Inc.	176,807	251
	Diagnostics Inc.	286,266	389	*,1	Organovo	170,007	201
*,1	Quince	•			Holdings Inc.	175,314	249
	Therapeutics Inc.	606,618	387	*,1	Corbus		
*,1	Codex DNA Inc.	307,523	384		Pharmaceuticals		
*,1	Longeveron Inc.	118,115	380		Holdings Inc.	2,188,069	242
*	Context	,		*	Ontrak Inc.	657,410	242
	Therapeutics Inc.	573,400	379	*,1	Eargo Inc.	418,952	241
*,1	Sientra Inc.	1,852,556	376	*	Inhibikase	1.0,002	
*,1	Oragenics Inc.	3,556,869	374		Therapeutics Inc.	475,753	238
*,1	NeuroMetrix Inc.	252,738	372	*,1	BioSig	,	
*	Augmedix Inc.	237,719	371		Technologies Inc.	564,517	237
*	Cocrystal	207,710	0, .	*	Alimera Sciences Inc.	87,148	236
	Pharma Inc.	191,359	369	*	AgeX	,	
*,1	Aptevo	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			Therapeutics Inc.	426,190	235
	Therapeutics Inc.	158,476	368	*	Onconova		
*	Aptinyx Inc. Class A	1,251,830	367		Therapeutics Inc.	365,661	235
*	Precipio Inc.	662,055	367	*	ABVC BioPharma Inc.	375,142	235
*	Better	,		*,1	Chembio		
	Therapeutics Inc.	326,043	365		Diagnostics Inc.	1,058,315	233
*	TScan	,-		*,1	Modular Medical Inc.	106,826	229
	Therapeutics Inc.	220,934	360	*	Sera Prognostics Inc.		
*,1	Vaccinex Inc.	534,485	352		Class A	183,767	226
*	ElectroCore Inc.	1,341,498	345	*,1	Tonix		
*	Vincerx Pharma Inc.	334,111	341		Pharmaceuticals		
*	Aravive Inc.	257,022	339		Holding Corp.	580,543	226
*,1	Molecular	,		*,1	Regulus		
	Templates Inc.	1,030,942	338		Therapeutics Inc.	162,509	223
*,1	NanoViricides Inc.	300,189	333	*,1	Tricida Inc.	1,439,241	220
*	Processa	,		*	Codiak		
	Pharmaceuticals Inc.	299,657	330		Biosciences Inc.	552,448	220
*,1	Indaptus			*,1	NantHealth Inc.	59,606	218
	Therapeutics Inc.	229,197	330	*	Surgalign		
*,1	Trevena Inc.	217,018	310		Holdings Inc.	110,253	216
	Cryo-Cell			*,1	Marpai Inc. Class A	293,017	211
	International Inc.	72,236	306	*,1	Biocept Inc.	394,514	209
*	IN8bio Inc.	132,077	305	*,1	Diffusion		
*	HCW Biologics Inc.	153,473	295		Pharmaceuticals Inc.	41,002	209
*	Lisata			1	Kineta Inc.	32,976	209
	Therapeutics Inc.	118,336	295	*,1	Minerva	100.00-	0
*	Ekso Bionics				Neurosciences Inc.	128,899	205
	Holdings Inc.	243,385	290	*,1	Idera		0
*	Plus				Pharmaceuticals Inc.	576,093	202
	Therapeutics Inc.	897,484	285	*	Marker	750 500	202
*	GeoVax Labs Inc.	439,870	277		Therapeutics Inc.	759,500	200
*,1	UpHealth Inc.	166,349	271				

		Shares	Market Value* (\$000)			Shares	Market Value* (\$000)
*,1	SAB			*	NeuBase		
	Biotherapeutics Inc.	338,972	200		Therapeutics Inc.	543,821	103
*,1	Synaptogenix Inc.	171,031	198	*	Imac Holdings Inc.	508,049	102
*,1	T2 Biosystems Inc.	130,994	186	*,1	Rockwell	,-	
*,1	Athersys Inc.	220,627	185		Medical Inc.	98,674	100
*,1	Rubius	220,027	100	*,1	Lannett Co. Inc.	185,256	97
	Therapeutics Inc.	1,066,867	184	*	ENDRA Life	.00,200	0,
*,1	Bio-Path	1,000,007	101		Sciences Inc.	23,331	95
	Holdings Inc.	121,084	183	*,1	Biofrontera Inc.	98,114	90
*	CASI	121,001	100	*,1	NanoVibronix Inc.	347,433	87
	Pharmaceuticals Inc.	102,469	179	*,1	NexImmune Inc.	344,561	84
*,2	Ocera	102, 100	170	*	Nutriband Inc.	22,490	81
	Therapeutics Inc.			*	Navidea	22,430	01
	CVR	653,477	176		Biopharmaceuticals		
*	iSpecimen Inc.	126,917	175		Inc.	381,102	80
*	cbdMD Inc.	759,341	172	*,1	Metacrine Inc.	179,530	80
*	Vivos	700,011	172	*	Imunon Inc.	57,488	78
	Therapeutics Inc.	426,060	171	*,2		37,400	70
*	Tempest	420,000	17.1	, 2	Aduro Biotech Inc. CVR	41E 2EE	76
	Therapeutics Inc.	147,142	171	*,1		415,255	70
*	Cellectar	177,172	17.1	-,1	Qualigen	EC 774	74
	Biosciences Inc.	99,704	171	*	Therapeutics Inc.	56,774	74
*	Aileron	33,704	17.1	*,2	Vyant Bio Inc.	101,063	71
	Therapeutics Inc.	70,526	167	^,2	OncoMed		
*,1	Graybug Vision Inc.	318,437	159		Pharmaceuticals Inc. CVR	055 777	67
*,1	Jasper	310,437	155	*,1		255,777	
, .	Therapeutics Inc.	325,773	155	*	Oncorus Inc.	264,842	67
*,1	Axcella Health Inc.	,	152	*	Pulmatrix Inc.	17,004	66
*,2		462,695	152	*	Sigilon	404 700	
, 2	Adamas Pharmaceuticals Inc.				Therapeutics Inc.	181,760	64
	CVR	2,522,158	152	*	Avinger Inc.	58,389	63
*,1			151	*	Virpax		
*,1	Theriva Biologics Inc.	330,873			Pharmaceuticals Inc.	96,777	60
	iBio Inc.	336,211	149	*,1	Bellicum		
*,1	Vivani Medical Inc.	173,362	147		Pharmaceuticals Inc.	82,034	59
*,1	VYNE	000 400	40.4	*,1	Adial		
	Therapeutics Inc.	893,188	134		Pharmaceuticals Inc.	275,517	59
*	eFFECTOR		100	*	Lucira Health Inc.	464,745	52
	Therapeutics Inc.	300,033	128	*,1	Kintara		
*,1	180 Life Sciences	07500	407		Therapeutics Inc.	7,268	50
	Corp.	37,583	127	*	MiNK		
_	Monopar	E0 000	10.4		Therapeutics Inc.	18,490	48
	Therapeutics Inc.	52,392	124	*	TRxADE		
*,1	VistaGen	4 400 044	400		HEALTH Inc.	119,112	46
	Therapeutics Inc.	1,183,241	122	*	Star Equity		
*	Talis Biomedical	074.000	100		Holdings Inc.	53,681	46
	Corp.	274,003	122	*	Protagenic		
*	Immix	E0 070	404		Therapeutics Inc.	104,510	44
	Biopharma Inc.	52,979	121	*,1	Jaguar Health Inc.	448,409	39
*,1	Aytu BioPharma Inc.	634,538	120	*	Cohbar Inc.	23,045	39
*,1	Artelo			*,1,2	Miragen		
	Biosciences Inc.	40,554	117		Therapeutics Inc.		
*,1	Surrozen Inc.	199,181	116		CVR	1,753,041	35
*	Femasys Inc.	128,310	115	*	Novo Integrated		
*	Nephros Inc.	102,105	114		Sciences Inc.	174,830	35
*	INVO BioScience Inc.	259,122	113	*	Salarius		
*,1	Biolase Inc.	167,042	109		Pharmaceuticals Inc.	21,884	34
*	American Shared			*	Aprea		
	Hospital Services	36,338	106		Therapeutics Inc.	99,800	32

		01	Market Value•			01	Market Value•
		Shares	(\$000)			Shares	(\$000)
*,1	Eterna Therapeutics Inc.	10,000	32	*,1	SiNtx Technologies Inc.	1	_
*,1	Virios Therapeutics Inc.	127,853	30	*	Disc Medicine Inc. CVR	275,152	_
*	Journey Medical Corp.	15,723	30			_	171,027,041
*	Eloxx			Indu	strials (13.6%) Visa Inc. Class A	49,292,699	10,241,051
*	Pharmaceuticals Inc. Pasithea Therapeutics	16,840	30		Mastercard Inc. Class A	26,107,377	9,078,318
	Corp.	39,188	25		Accenture plc	20,107,377	9,070,310
*,1	RenovoRx Inc. Acurx	10,815	25		Class A	19,128,358	5,104,211
*	Pharmaceuticals Inc. Xenetic	6,127	24		Raytheon Technologies Corp.	44,697,254	4,510,847
*	Biosciences Inc.	61,641	18		Honeywell International Inc.	20,445,124	4,381,390
* 1	Lixte Biotechnology Holdings Inc.	32,745	17		Union Pacific Corp. United Parcel	18,698,697	3,871,939
*,1	Unicycive Therapeutics Inc.	22,695	12		Service Inc. Class B		3,858,375
*,2	Alexza Pharmaceuticals Inc.				Caterpillar Inc. Lockheed Martin	15,827,377	3,791,606
	CVR	327,391	11		Corp.	7,793,644	3,791,530
*,1	Spruce	0.050	10	*	Deere & Co. Boeina Co.	8,260,842 18,126,460	3,541,919 3,452,909
*,1,2	Biosciences Inc. Oncternal	8,958	10		Automatic Data		
	Therapeutics Inc.		_		Processing Inc.	12,617,999	3,013,935
*,1	CVR CNS	8,933	9		General Electric Co. American Express	33,237,288	2,784,952
	Pharmaceuticals Inc.	3,360	8		Co.	17,042,755	2,518,067
*,2	F-star Therapeutics Inc.			*	PayPal Holdings Inc. Northrop Grumman	34,600,429	2,464,243
	CVR	61,021	4		Corp.	4,212,417	2,298,337
*	Aethlon Medical Inc.	5,764	2		3M Co.	17,033,443	2,042,650
*,2	Ambit Biosciences				CSX Corp.	63,942,562	1,980,941
*,2	Corp. CVR Biosante	201,330	_		Eaton Corp. plc General Dynamics	12,099,061	1,898,948
	Pharmaceuticals Inc. CVR	253,823	_		Corp.	7,511,656	1,863,717
*,1	Synergy				Illinois Tool Works Inc.	8,404,325	1,851,473
*	Pharmaceuticals LLC Advaxis Inc. Warrants	5,148,145	_	*	Fiserv Inc.	17,386,068	1,757,210
	Exp. 9/11/24	157,660	_		Norfolk Southern Corp.	7,042,389	1,735,385
*,2	Lantheus				Emerson Electric Co.		1,728,145
*	Holdings Inc. CVR SELLAS Life	2,319,511	_		Sherwin-Williams Co. Johnson Controls	7,093,432	1,683,484
	Sciences Group Inc.				International plc	20,885,890	1,336,697
	Warrants Exp. 4/5/27	40,000	_		FedEx Corp.	7,123,562	1,233,801
*	Athenex Inc.				Fidelity National Information		
* 0	Warrants Exp. 8/15/27	535,168	_		Services Inc. L3Harris	18,003,010	1,221,504
*,2	OmniAb Inc. (Earnout Shares)	372,534	_		Technologies Inc.	5,790,126	1,205,562
*,2	ABIOMED Inc. CVR	264	_		Cintas Corp. Trane Technologies	2,623,291	1,184,731
					plc	7,004,750	1,177,428
					Paychex Inc.	9,868,426	1,140,395
					Parker-Hannifin Corp.	3,903,417	1,135,894

		Shares	Market Value• (\$000)			Shares	Market Value• (\$000)
	Capital One Financial			*	Zebra Technologies		
	Corp.	11,601,225	1,078,450		Corp. Class A	1,570,456	402,681
	Carrier Global Corp.	25,427,634	1,048,890	*	FleetCor	.,0,0,100	102,001
	Cummins Inc.	4,287,767	1,038,883		Technologies Inc.	2,133,790	391,935
*	Block Inc. Class A	16,348,606	1,027,346		Jack Henry &	2,100,700	001,000
	Otis Worldwide Corp.		992,279		Associates Inc.	2,219,752	389,700
	TransDigm Group Inc.				RPM	_,,	,
*	Mettler-Toledo	1,570,004	988,969		International Inc.	3,931,747	383,149
	International Inc.	678,023	980,048		Hubbell Inc. Class B	1,631,883	382,970
	AMETEK Inc.	6,987,799	976,335	*	Trimble Inc.	7,501,631	379,282
	PACCAR Inc.	9,514,982	941,698		Nordson Corp.	1,565,794	372,221
	DuPont de	3,314,362	341,030		Carlisle Cos. Inc.	1,570,664	370,127
	Nemours Inc.	13,597,978	933,229		Snap-on Inc.	1,616,533	369,362
*	Keysight	13,337,370	333,223		Packaging Corp. of	1,010,000	000,002
	Technologies Inc.	5,430,166	928,938		America	2,812,093	359,695
	Rockwell	0,100,100	020,000		Toro Co.	3,169,508	358,788
	Automation Inc.	3,495,082	900,228		AECOM	4,221,908	358,567
	PPG Industries Inc.	7,147,932	898,781		HEICO Corp. Class A	2,984,460	357,688
	Old Dominion Freight		000,701		Stanley Black &	2,00 ., .00	007,000
	Line Inc.	3,025,000	858,434		Decker Inc.	4,646,624	349,054
	Verisk Analytics Inc.	-,,			Graco Inc.	5,122,535	344,542
	Class A	4,753,413	838,597	*	Axon Enterprise Inc.	2,056,127	341,173
	Ferguson plc	6,379,009	809,943		TransUnion	5,864,039	332,784
	Global Payments Inc.	7,853,195	779,979	*	Bill.com	0,001,000	002,701
	WW Grainger Inc.	1,382,754	769,157		Holdings Inc.	3,051,875	332,532
*	United Rentals Inc.	2,107,479	749,040		CH Robinson	-,	,
	Equifax Inc.	3,724,193	723,834		Worldwide Inc.	3,580,841	327,862
	Fortive Corp.	10,757,488	691,169		Masco Corp.	6,851,765	319,772
	Vulcan Materials Co.	3,839,775	672,383		Crown Holdings Inc.	3,651,096	300,157
	Ingersoll Rand Inc.	12,317,486	643,589	*	Builders	-,	
	Martin Marietta	12,017,100	0 10,000		FirstSource Inc.	4,470,939	290,075
	Materials Inc.	1,887,811	638,023	*	WillScot Mobile Mini		
	Quanta Services Inc.	4,346,235	619,338		Holdings Corp.	6,344,301	286,572
*	Waters Corp.	1,806,424	618,845		Allegion plc	2,667,416	280,772
	Xylem Inc.	5,482,567	606,207		Huntington Ingalls		
	Dover Corp.	4,267,658	577,884		Industries Inc.	1,211,994	279,583
*	Teledyne	.,20,,000	07.7,00		Westrock Co.	7,743,883	272,275
	Technologies Inc.	1,426,497	570,470		AGCO Corp.	1,926,875	267,238
	Westinghouse Air	, -, -			Genpact Ltd.	5,586,945	258,787
	Brake Technologies				Lincoln Electric		
	Corp.	5,255,168	524,518		Holdings Inc.	1,754,749	253,544
	IDEX Corp.	2,292,913	523,541		Watsco Inc.	1,012,343	252,478
	Expeditors			*	Paylocity Holding		
	International of				Corp.	1,268,222	246,365
	Washington Inc.	4,833,473	502,294		Knight-Swift		
	Ball Corp.	9,544,364	488,099		Transportation		
	Jacobs Solutions Inc.	3,842,541	461,374		Holdings Inc.	4 000 544	040.450
*	Fair Isaac Corp.	759,405	454,565		Class A	4,639,544	243,158
	Textron Inc.	6,363,811	450,558		Owens Corning	2,837,516	242,040
	Synchrony Financial	13,677,419	449,440		Regal Rexnord Corp.	2,016,333	241,920
	Howmet				Cognex Corp.	4,998,324	235,471
	Aerospace Inc.	11,301,525	445,393		Tetra Tech Inc.	1,615,671	234,579
	JB Hunt Transport				Lennox	007005	004 574
	Services Inc.	2,520,605	439,493		International Inc.	967,985	231,571
	Booz Allen Hamilton				Robert Half	2 122 402	221 272
	Holding Corp.	4 040 060	400.00=		International Inc.	3,132,492	231,272
	Class A	4,019,282	420,095		Berry Global Group Inc.	3,774,930	228,119
					Group inc.	3,774,330	220,119

		Shares	Market Value• (\$000)			Shares	Market Value• (\$000)
	Dontoir pla				Crana Haldinga Ca		,,,,,,
	Pentair plc	4,998,843	224,848	*	Crane Holdings Co.	1,449,337	145,586
	Fortune Brands Innovations Inc.	3,894,987	222,443	*	Trex Co. Inc. Atkore Inc.	3,349,411	141,781
						1,209,213	137,149
	A O Smith Corp.	3,853,715	220,587		Maximus Inc.	1,850,954	135,730
	Sealed Air Corp.	4,408,270	219,884		Euronet	4 407050	405 744
	Donaldson Co. Inc.	3,729,429	219,551		Worldwide Inc.	1,437,952	135,714
*	Middleby Corp.	1,637,048	219,201		AMN Healthcare	4 040 740	405.000
	AptarGroup Inc.	1,988,372	218,681		Services Inc.	1,319,713	135,693
*	WEX Inc.	1,325,240	216,876		Silgan Holdings Inc.	2,509,906	130,114
	EMCOR Group Inc.	1,450,258	214,798	-	Aerojet Rocketdyne	2 222 040	120 017
	Valmont	0.40.004	044.040		Holdings Inc. ManpowerGroup Inc.	2,322,849	129,917 127,981
	Industries Inc.	649,021	214,612		Comfort Systems	1,538,044	127,901
	Graphic Packaging	0.210.117	207250		USA Inc.	1,085,800	124,954
	Holding Co.	9,319,117	207,350		Insperity Inc.	1,083,500	124,334
*	ITT Inc.	2,512,878	203,794		Air Lease Corp.	1,093,509	124,223
	Generac	1 000 540	104 000		Class A	3,209,146	123,295
	Holdings Inc.	1,936,542	194,932		Triton International	3,203,140	125,255
	nVent Electric plc	5,066,955	194,926		Ltd.	1,790,495	123,150
*	Curtiss-Wright Corp.	1,164,395	194,442		Watts Water	1,700,400	120,100
	WESCO	1 540 000	104.056		Technologies Inc.		
	International Inc. MDU Resources	1,549,968	194,056		Class A	832,694	121,765
	Group Inc.	6,200,700	188,129		Ryder System Inc.	1,454,613	121,562
	Sensata Technologies	0,200,700	100,123		Flowserve Corp.	3,958,413	121,444
	Holding plc	4,650,619	187,792		Altra Industrial	-,,	,
	Advanced Drainage	4,000,010	107,702		Motion Corp.	1,979,106	118,252
	Systems Inc.	2,269,857	186,060	*	ASGN Inc.	1,445,757	117,800
	Sonoco Products Co.	2,969,044	180,251	*	ATI Inc.	3,938,044	117,590
	Landstar System Inc.	1.092.215	177,922	*	Kirby Corp.	1,823,180	117,322
	Woodward Inc.	1,823,545	176,173		Allison Transmission	.,020,.00	,022
	Oshkosh Corp.	1,992,675	175,734		Holdings Inc.	2,802,501	116,584
	MKS	1,002,070	173,734		Louisiana-Pacific	, ,	.,
	Instruments Inc.	2,019,698	171,129		Corp.	1,963,421	116,235
*	Axalta Coating	2,010,000	171,120		Simpson		
	Systems Ltd.	6,692,790	170,465		Manufacturing Co.		
*	Saia Inc.	802,877	168,347		Inc.	1,309,768	116,124
*	Mohawk	002,077	100,017		HB Fuller Co.	1,613,318	115,546
	Industries Inc.	1,640,489	167,691		GATX Corp.	1,079,432	114,787
	Littelfuse Inc.	755,836	166,435		Maxar		
	MSA Safety Inc.	1,132,179	163,249		Technologies Inc.	2,156,303	111,567
*,1	MasTec Inc.	1,904,436	162,506		MSC Industrial Direct		
*	ExIService	.,,	,		Co. Inc. Class A	1,360,822	111,179
	Holdings Inc.	955,736	161,930	*	XPO Inc.	3,313,070	110,292
	Acuity Brands Inc.	977,223	161,838	*	API Group Corp.	5,748,963	108,138
	Western Union Co.	11,742,087	161,689	*	Summit		
	BWX	,,	,		Materials Inc.		
	Technologies Inc.	2,768,562	160,798		Class A	3,611,326	102,526
	Brunswick Corp.	2,200,964	158,645		HEICO Corp.	654,552	100,565
*	FTI Consulting Inc.	993,842	157,822		Herc Holdings Inc.	752,794	99,045
*	GXO Logistics Inc.	3,603,587	153,837		AAON Inc.	1,307,527	98,483
	Exponent Inc.	1,545,077	153,102		Badger Meter Inc.	890,027	97,040
*	TopBuild Corp.	973,317	152,314		Armstrong World		0
*	Fluor Corp.	4,319,943	149,729		Industries Inc.	1,399,052	95,961
*	Chart Industries Inc.	1,295,904	149,327		Franklin Electric Co.	1 100 010	05 400
	Eagle Materials Inc.	1,119,233	148,690		Inc.	1,196,312	95,406
	Applied Industrial	.,110,200	1 10,000		Spirit AeroSystems		
	Technologies Inc.	1,174,382	148,007		Holdings Inc. Class A	3,200,138	94,724
		, ,,	-,		CIBSS M	5,200,130	34,724

		Shares	Market Value* (\$000)			Shares	Market Value• (\$000)
1	ADT Inc.	10,394,832	94,281		EVERTEC Inc.	1,995,334	64,609
	Belden Inc.	1,309,757	94,172	*	GMS Inc.	1,290,138	64,249
*	Bloom Energy Corp.			*	Verra Mobility Corp.		
	Class A	4,925,234	94,170		Class A	4,637,206	64,133
	Vontier Corp.	4,823,331	93,235		Kadant Inc.	355,221	63,098
	Albany International Corp. Class A	944,218	93,090	*	Brady Corp. Class A	1,335,210	62,888
	EnerSvs	1,242,476	91,744		AeroVironment Inc.	721,498	61,804
*	Margeta Inc. Class A		91,300		Installed Building Products Inc.	704,655	60,318
	Zurn Elkav Water	11,012,720	01,000		Kennametal Inc.	2,504,105	60,249
	Solutions Corp.	4,315,875	91,281	*	RXO Inc.	3,494,991	60,114
	ABM Industries Inc.	2,025,405	89,968		Barnes Group Inc.	1,459,573	59,624
	UniFirst Corp.	459,727	88,723	*	Air Transport Services		
	John Bean				Group Inc.	2,220,026	57,676
	Technologies Corp.	965,300	88,161	*,1	Affirm Holdings Inc.		
•	Atlas Air Worldwide Holdings Inc.	962 104	86,909		Class A	5,962,437	57,657
*	SPX Technologies Inc.	862,194 1,311,548	86,103		ICF International Inc. Bread Financial	576,291	57,082
	Federal Signal Corp.	1,852,223	86,073		Holdings Inc.	1,505,564	56,700
	Forward Air Corp.	819,494	85,957		CSW Industrials Inc.	483,294	56,028
*	Shift4 Payments Inc.	0.0,.0.	00,007		Griffon Corp.	1,559,314	55,808
	Class A	1,532,163	85,694	*	Masonite	.,,.	
	Terex Corp.	1,954,860	83,512		International Corp.	684,892	55,209
	Korn Ferry	1,641,858	83,111		Lindsay Corp.	336,731	54,837
	Esab Corp.	1,740,280	81,654		Helios		
	Hillenbrand Inc.	1,885,758	80,465		Technologies Inc.	989,120	53,848
*	Dycom	052.206	70.070		NV5 Global Inc.	405,637	53,674
*	Industries Inc. Beacon Roofing	853,396	79,878		Greif Inc. Class A Mueller Water	791,276	53,063
	Supply Inc.	1,480,209	78,140		Products Inc.		
*	O-I Glass Inc.	4,708,486	78,020		Class A	4,768,560	51,310
*,1	TriNet Group Inc.	1,132,617	76,791		International		
	Moog Inc. Class A	872,834	76,600		Seaways Inc.	1,341,283	49,654
*	ACI Worldwide Inc.	3,263,940	75,071		ArcBest Corp.	702,329	49,191
*	Mercury			*	Evo Payments Inc.	1 450 706	40.160
	Systems Inc.	1,674,353	74,911		Class A Veritiv Corp.	1,452,726 387,255	49,160 47,133
*	Hub Group Inc.	041 707	74.056	*	MYR Group Inc.	509,211	46,883
	Class A Otter Tail Corp.	941,707 1,269,746	74,856 74,547		Granite	509,211	40,003
	Trinity Industries Inc.	2,470,445	73,051		Construction Inc.	1,322,561	46,382
	McGrath RentCorp	739,349	73,003	*	AAR Corp.	1,013,774	45,518
*	Resideo	700,010	70,000		Enerpac Tool Group		
	Technologies Inc.	4,432,712	72,918		Corp. Class A	1,770,748	45,066
	Encore Wire Corp.	528,462	72,695	*	Gibraltar	070 004	44.544
	Brink's Co.	1,335,739	71,743		Industries Inc.	970,231	44,514
	Matson Inc.	1,144,914	71,569	*	FTAI Aviation Ltd.	2,596,900	44,459
*	Alight Inc. Class A	8,498,896	71,051		Huron Consulting Group Inc.	604,616	43,895
*	Itron Inc.	1,383,037	70,051		Alamo Group Inc.	309,690	43,852
	Werner Enterprises Inc	1 726 202	60,000		H&E Equipment	,000	.0,002
	Enterprises Inc. EnPro Industries Inc.	1,736,203	69,900		Services Inc.	933,448	42,379
	ESCO	642,484	69,832	*	CoreCivic Inc.	3,584,068	41,432
	Technologies Inc.	788,440	69,020	*	Enovix Corp.	3,326,542	41,382
*	CBIZ Inc.	1,466,418	68,702	*	Core & Main Inc.	0.400	,
*	Flywire Corp.	2,718,322	66,517	*	Class A	2,120,695	40,951
*	AZEK Co. Inc.			-	Payoneer Global Inc.	7,439,917	40,696
	Class A	3,221,271	65,456				

		Shares	Market Value• (\$000)			Shares	Market Value• (\$000)
*	Varta - Dafara - 0	Ondres	(ψοσο)	-	Calmalana Makinaan	Ondres	(4000)
	Kratos Defense & Security				Columbus McKinnon Corp.	792,747	25,740
	Solutions Inc.	3,873,242	39,972	*,1	Joby Aviation Inc.	7,648,252	25,740
	Patrick Industries Inc.	651,206	39,463	, .	TTEC Holdings Inc.		25,022
	Standex International	031,200	33,403			567,356	25,037
	Corp.	370,891	37,983		Quanex Building Products Corp.	1,048,900	24,838
*	OSI Systems Inc.	474,159	37,705	*	International Money	1,040,300	24,030
*	Vicor Corp.	687.153	36,934		Express Inc.	1,007,480	24,552
	TriMas Corp.	,	,	*	'		
*		1,317,739	36,554	*	Titan Machinery Inc.	612,978	24,354
	AvidXchange Holdings Inc.	3,641,244	36,194	*	CryoPort Inc.	1,396,316	24,226
*	Gates Industrial	3,041,244	30,134		Mirion Technologies Inc.	2 655 260	24 162
	Corp. plc	3,055,726	34,866		Douglas	3,655,360	24,162
	Primoris Services	0,000,720	04,000		Dynamics Inc.	666,232	24,091
	Corp.	1,587,771	34,836	*	American Woodmark	000,232	24,001
	Marten Transport Ltd.	1,741,453	34,446		Corp.	487,299	23,809
	Kforce Inc.	622,514	34,132	*	JELD-WEN	107,200	20,000
	Tennant Co.	548,199	33,753		Holding Inc.	2,453,900	23,680
*	Montrose	546,133	33,733		Myers Industries Inc.	1,064,615	23,666
	Environmental			*	Titan	1,004,013	23,000
	Group Inc.	753,788	33,461		International Inc.	1,526,933	23,393
	Greenbrier Cos. Inc.	948,862	31,815		Shyft Group Inc.	929,754	23,114
*	Energy Recovery Inc.	1,542,662	31,609	*	Proterra Inc.	6,100,871	23,000
*	PGT Innovations Inc.	1,744,942	31,339	*,1	Nikola Corp.	10,513,601	22,709
*	Construction	1,744,942	31,339	*,1	'		22,709
	Partners Inc.			*,1	Legalzoom.com Inc. Virgin Galactic	2,932,007	22,094
	Class A	1,171,251	31,261	, '	Holdings Inc.	6,498,979	22,616
	Wabash National	1,171,201	01,201	*	Conduent Inc.	5,553,255	
	Corp.	1,364,206	30,831	*			22,491
*	Hillman Solutions	1,001,200	00,001		Aspen Aerogels Inc.	1,894,081	22,331
	Corp.	4,261,443	30,725		Deluxe Corp.	1,314,727	22,324
*,1	Rocket Lab USA Inc.	8,071,932	30,431		Heartland	1 401 064	21 700
*	Masterbrand Inc.	3,912,619	29,540	*	Express Inc.	1,421,064	21,799
*	Modine	0,012,010	20,040		Green Dot Corp. Class A	1 277254	21 700
	Manufacturing Co.	1,483,829	29,469	*,1	PureCycle	1,377,254	21,788
	Apogee	1,100,020	20,100	, '	Technologies Inc.	3,186,067	21,538
	Enterprises Inc.	656,760	29,200	*	Paya Holdings Inc.		21,336
	AZZ Inc.	726,124	29,190	*	Proto Labs Inc.	2,690,758	
*	Remitly Global Inc.	2,545,529	29,146	*		822,107	20,988
*	Sterling	2,010,020	20,110	*	SP Plus Corp.	601,630	20,889
	Infrastructure Inc.	873,382	28,647	*	First Advantage Corp.	1,578,966	20,527
*	Cross Country	0,0,002	20,0		ZipRecruiter Inc. Class A	1 044 010	20 420
	Healthcare Inc.	1,065,059	28,299	*		1,244,212	20,430
*	Hayward	.,,	,	*	Leonardo DRS Inc.	1,588,300	20,298
	Holdings Inc.	3,008,475	28,280		Thermon Group	005 677	10.000
*	Donnelley Financial	-,,	,		Holdings Inc.	995,677	19,993
	Solutions Inc.	703,483	27,190		Barrett Business Services Inc.	011 051	10 715
	Astec Industries Inc.	668,601	27,185			211,351	19,715
	Schneider	,	,	*	Chase Corp.	228,012	19,668
	National Inc.				Vivint Smart	1 500 057	10.000
	Class B	1,144,186	26,774	*	Home Inc.	1,596,857	19,003
*	Napco Security		-,	-	Triumph Group Inc.	1,794,321	18,876
	Technologies Inc.	972,857	26,734		Cass Information	100 100	10 701
	CRA	•	•	*	Systems Inc.	408,138	18,701
	International Inc.	210,751	25,802	-	Repay Holdings Corp.	0 000 704	10.600
	Mesa	•	•	*	Class A	2,322,791	18,698
	Laboratories Inc.	154,969	25,757		Janus International Group Inc.	1,950,110	18,565
				*		942,024	
					TrueBlue Inc.	542,024	18,445

		Shares	Market Value• (\$000)			Shares	Market Value• (\$000)
*	BlueLinx			*	AarCala Carn	COE 262	0.017
	Holdings Inc.	258,113	18,354		AerSale Corp.	605,262	9,817
	-		18,184		Powell Industries Inc.	271,733	9,560
	Kaman Corp.	815,429		* 1	LSI Industries Inc.	777,330	9,515
*	Pitney Bowes Inc.	4,751,486	18,056	*,1	Desktop Metal Inc.	0.000.405	0.515
	I3 Verticals Inc. Class A	707,059	17,210		Class A	6,996,405	9,515
	Ennis Inc.				FTAI Infrastructure Inc.	2 100 200	0.405
		770,417	17,072	*		3,188,200	9,405
	Gorman-Rupp Co.	665,592	17,052	*	Tutor Perini Corp.	1,210,073	9,136
	Resources Connection Inc.	002.024	16 F06	*	ShotSpotter Inc.	260,978	8,829
*		902,924	16,596		Sterling Check Corp.	566,975	8,771
	Franklin Covey Co.	349,702	16,356	*,1	Hyliion Holdings	0.700.047	0.707
	Heidrick & Struggles	E00 E00	10 007		Corp.	3,720,847	8,707
*	International Inc.	580,522	16,237	*	Luna Innovations Inc.	960,256	8,441
	FARO	E46.000	16.005	*	BrightView		0.400
*	Technologies Inc.	546,929	16,085	*	Holdings Inc.	1,219,101	8,400
	Ducommun Inc.	315,153	15,745		IES Holdings Inc.	235,697	8,384
	Argan Inc.	426,696	15,737	*	Astronics Corp.	808,671	8,329
	Kelly Services Inc.	004 700	15 570	*,1	Velo3D Inc.	4,652,256	8,328
	Class A	921,762	15,578		Miller Industries Inc.	308,624	8,228
	Insteel Industries Inc.	,	14,689		Park Aerospace Corp.	610,019	8,180
*	Transcat Inc.	203,696	14,436	*	HireRight Holdings		
*	TaskUS Inc. Class A	839,369	14,185		Corp.	676,654	8,025
*	CIRCOR				Universal Logistics		
	International Inc.	591,811	14,180		Holdings Inc.	230,693	7,714
1	Eagle Bulk				United States Lime &		
	Shipping Inc.	283,417	14,154		Minerals Inc.	53,708	7,560
	VSE Corp.	291,711	13,675	*	Daseke Inc.	1,310,814	7,459
	Allied Motion			*,1	Workhorse		
	Technologies Inc.	388,182	13,513		Group Inc.	4,801,523	7,298
*	Target Hospitality				Covenant Logistics		
	Corp.	883,697	13,379		Group Inc. Class A	209,606	7,246
*	Vishay Precision			*,1	Microvast		
	Group Inc.	346,096	13,377		Holdings Inc.	4,657,800	7,126
*	Cimpress plc	477,287	13,178	*,1	TuSimple		
*	DXP Enterprises Inc.	478,217	13,175		Holdings Inc.		
*,1	Aurora				Class A	4,277,881	7,016
	Innovation Inc.	10,860,578	13,141	*	Radiant Logistics Inc.	1,368,861	6,967
*	V2X Inc.	316,924	13,086	*	Archer Aviation Inc.		
*	Forrester				Class A	3,679,429	6,881
	Research Inc.	359,746	12,865		Hyster-Yale Materials		
	REV Group Inc.	1,017,861	12,845		Handling Inc.	269,570	6,823
	Perella Weinberg			*	Willdan Group Inc.	379,924	6,782
	Partners Class A	1,278,425	12,529		Greif Inc. Class B	85,951	6,724
	Pactiv Evergreen Inc.	1,068,389	12,137	*	Commercial Vehicle		
	National Presto				Group Inc.	986,674	6,719
	Industries Inc.	174,466	11,944	*	Cantaloupe Inc.	1,518,675	6,606
*	Hudson			*	DHI Group Inc.	1,239,544	6,557
	Technologies Inc.	1,149,613	11,634	*	Ranpak Holdings		
*	Custom Truck One				Corp. Class A	1,135,957	6,554
	Source Inc.	1,831,243	11,573	*	Performant Financial		
*	Great Lakes Dredge				Corp.	1,777,229	6,416
	& Dock Corp.	1,843,428	10,968	*,1	Blade Air		
*	Babcock & Wilcox				Mobility Inc.	1,780,179	6,373
	Enterprises Inc.	1,843,405	10,636		Kronos		
*	Manitowoc Co. Inc.	1,083,726	9,927		Worldwide Inc.	666,260	6,263
*	CECO Environmental			*,1	ShiftPixy Inc.	298,600	6,256
	Corp.	843,032	9,847				
	Cadre Holdings Inc.	488,900	9,846				

		Shares	Market Value• (\$000)			Shares	Market Value• (\$000)
*	Overseas			*,1	Hyzon Motors Inc.	2,227,561	3,453
	Shipholding			,.	PFSweb Inc.	559,304	3,440
	Group Inc. Class A	2,157,938	6,236	*	Gencor	333,304	3,440
*	Bowman Consulting				Industries Inc.	332,487	3,358
	Group Ltd. Class A	281,036	6,141	*	Twin Disc Inc.	342,600	3,330
*	Acacia Research			*,1	Paymentus	,	,
	Corp.	1,349,295	5,681		Holdings Inc.		
*	Distribution Solutions	444.070			Class A	404,533	3,240
*,1	Group Inc.	144,378	5,322	*	Mayville Engineering		
",1	Danimer Scientific Inc.				Co. Inc.	251,155	3,180
	Class A	2,920,239	5,227		Park-Ohio Holdings Corp.	250.617	3.163
*	PAM Transportation	2,020,200	0,227	*	Willis Lease Finance	258,617	3,103
	Services Inc.	196,206	5,082		Corp.	53,245	3,142
	BGSF Inc.	327,376	5,015	*,1	Markforged Holding	33,243	3,142
	Hurco Cos. Inc.	189,475	4,951		Corp.	2,651,263	3,075
*	Blue Bird Corp.	456,096	4,885	*,1	SKYX Platforms	_,,	-,
*	CPI Card Group Inc.	132,336	4,775		Corp.	1,219,153	3,072
*	Advantage				ARC Document		
	Solutions Inc.	2,262,148	4,705		Solutions Inc.	1,040,504	3,049
*	Iteris Inc.	1,478,666	4,599	*,1	MSP Recovery Inc.	1,855,915	2,969
*	Atlas Technical			*	Innovative Solutions		
	Consultants Inc.	000 011	4.500		& Support Inc.	353,301	2,904
*	Class A	880,011	4,532	*,1	Spire Global Inc.	2,946,300	2,828
	Quad/Graphics Inc. Information Services	1,103,900	4,504	*	Paysign Inc.	1,077,060	2,779
	Group Inc.	977,121	4,495	*,1	Smith-Midland Corp.	127,258	2,609
*	Evolv Technologies	577,121	4,400	*,1 *,1	Moneylion Inc.	4,172,254	2,587
	Holdings Inc.	1,718,460	4,451	*,1	INNOVATE Corp.	1,371,484	2,565
*	CS Disco Inc.	700,982	4,430	-,1	Eos Energy Enterprises Inc.	1,694,200	2,507
*	Velodyne Lidar Inc.	5,956,174	4,400	*,1	MICT Inc.	2,994,134	2,485
*	Concrete Pumping	.,,	,	,.	Karat Packaging Inc.	171,091	2,459
	Holdings Inc.	737,042	4,312	*	Limbach	171,031	2,433
*	Yellow Corp.	1,705,847	4,282		Holdings Inc.	232,517	2,420
*	Core Molding				HireQuest Inc.	149,263	2,360
	Technologies Inc.	316,688	4,114	*,1	Astra Space Inc.	5,320,648	2,308
*	L B Foster Co.	404 000		*	Hudson Global Inc.	100,173	2,267
* 4	Class A	421,226	4,077	*	Orion Group		
*,1 *,1	View Inc.	4,168,453	4,022		Holdings Inc.	939,452	2,236
",1	BlackSky Technology Inc.			*,1	Cepton Inc.	1,753,500	2,227
	Class A	2,605,410	4,012	*	Latch Inc.	3,068,500	2,178
*	Atlanticus Holdings	2,000,	.,0.2	*,1	Knightscope Inc.		
	Corp.	150,156	3,934	*	Class A	1,010,525	1,910
*,1	Terran Orbital Corp.	2,419,100	3,822	*	StarTek Inc.	457,203	1,714
*,1	Virgin Orbit				GEE Group Inc.	3,354,057	1,643
	Holdings Inc.	2,044,300	3,782	*,1 *	Energous Corp.	1,958,094	1,637
*,1	Skillsoft Corp.	2,900,886	3,771		Frequency Electronics Inc.	228,179	1,609
*	EVI Industries Inc.	155,167	3,704	*	Alpha Pro Tech Ltd.	398,671	1,603
*,1	Byrna			*,1	Katapult	330,071	1,003
	Technologies Inc.	472,114	3,701	,.	Holdings Inc.	1,643,191	1,572
*,1	Global Business	E44.000	0.070	*,1	AEye Inc.	3,258,500	1,566
*	Travel Group I	544,900	3,678	*	Hydrofarm Holdings	.,,	.,000
-	RCM Technologies Inc.	294,549	3 635		Group Inc.	950,421	1,473
*	Graham Corp.	294,549 377,551	3,635 3,632	*	Orion Energy	•	,
*	Mistras Group Inc.	709,943	3,500		Systems Inc.	765,432	1,393
*	DLH Holdings Corp.	292,132	3,466				
	Dentificatings corp.	202,102	3,400				

		Shares	Market Value• (\$000)			Shares	Market Value• (\$000)
*	US Xpress		(,,,,,,		Taitron		*******
	Enterprises Inc.				Components Inc.		
	Class A	752,668	1,362		Class A	126,100	434
*	Research			*,1	CompoSecure Inc.	79,739	392
	Solutions Inc.	700,394	1,352	*	Astrotech Corp.	38,881	388
*	Lightbridge Corp.	345,233	1,343	*	Biotricity Inc.	845,735	381
*	Ultralife Corp.	348,051	1,343	*	Williams Industrial	,	
*	Sarcos Technology &				Services Group Inc.	366,258	374
	Robotics Corp.	2,362,032	1,326	*,1	Dominari	,	
*,1	Momentus Inc.				Holdings Inc.	111,013	361
	Class A	1,648,139	1,285	*	Team Inc.	67,315	353
*	RF Industries Ltd.	249,088	1,270	*	TSR Inc.	50,537	343
*	Priority Technology			*	ClearSign	,	
	Holdings Inc.	239,738	1,261		Technologies Corp.	584,529	313
*,1	Coda Octopus			*,1	Air Industries Group	69,263	294
	Group Inc.	183,470	1,259	*	ENGlobal Corp.	378,679	292
*	VirTra Inc.	262,879	1,230	*,1	Pioneer Power	070,070	202
*	LS Starrett Co.	, , , ,	,		Solutions Inc.	107,157	287
	Class A	166,241	1,224	*	Horizon Global Corp.	737,857	287
*	Usio Inc.	757,304	1,212	*,1	AmpliTech Group Inc.	132,700	281
*,1	Rekor Systems Inc.	1,005,498	1,207	*,1	Ampiriedi Group inc. Aeroclean	132,700	201
*,1	Berkshire Grey Inc.	1,873,972	1,132	, ,	Technologies Inc.	77,685	243
*,1	Odyssey Marine	1,070,072	1,102	*,1	Digital Ally Inc.	1,045,002	243
	Exploration Inc.			*,1	TOMI Environmental	1,045,002	243
	Class B	290,463	1,127	, '	Solutions Inc.	191 660	238
*	FreightCar	200, 100	.,,	*	DSS Inc.	484,669	
	America Inc.	350,356	1,121	*,1		1,292,763	212
*,1	Wrap	000,000	.,	",1	Polar Power Inc.	156,102	201
	Technologies Inc.	658,952	1,114	_	Jewett-Cameron	00.500	100
*,1	Redwire Corp.	562,616	1,114		Trading Co. Ltd.	33,538	193
*	Sono-Tek Corp.	157,600	1,012	_	Shapeways	054.017	100
*,1	BitNile Holdings Inc.	8,202,267	1,005		Holdings Inc.	354,017	193
*,1	Where Food Comes	0,202,207	1,003		M-Tron	21 704	191
, .	From Inc.	69,360	969	*,1	Industries Inc.	21,794	191
*	Air T Inc.	32,860	824	-,1	Safe & Green	104 007	170
*	IZEA Worldwide Inc.		759	*,1	Holdings Corp.	124,227	170
*		1,398,592	759	",1	Nuvve Holding Corp.	234,173	157
	LightPath Technologies Inc.				Sidus Space Inc.	104.001	1.40
	Class A	619,617	756	*,1	Class A	134,281	146
*	Broadwind Inc.	385,036	689	*	OLB Group Inc.	172,095	144
*,1	AgEagle Aerial	303,030	009		LGL Group Inc.	30,781	125
,.	Systems Inc.	1,950,222	683	*,1	Ryvyl Inc.	263,629	121
*	Wireless Telecom	1,000,222	000	*	Socket Mobile Inc.	60,175	117
	Group Inc.	339,257	607		P&F Industries Inc.		
*	FG Group	000,207	007		Class A	19,762	99
	Holdings Inc.	226,990	595	*	Servotronics Inc.	8,633	91
*	Sypris Solutions Inc.	286,226	578		Autoscope		
*,1	Applied DNA	200,220	370		Technologies Corp.	20,187	73
,.	Sciences Inc.	346,633	575	*	Manitex		
*,1	Lightning	340,033	373		International Inc.	8,258	33
,.	eMotors Inc.	1,485,715	545	*,1	Staffing 360		
*	Fuel Tech Inc.				Solutions Inc.	8,115	23
*,1		424,566	539 531	*	Fathom Digital		
*	Xos Inc.	1,199,595	531		Manufacturing C	8,300	11
	Espey Manufacturing	26 020	E24	*,1	AppTech Payments		
*,1	& Electronics Corp.	36,920	524		Corp.	4,100	10
-, 1	Orbital Infrastructure	2 200 006	470	*	Art's-Way		
	Group Inc.	2,398,886	473		Manufacturing Co.	4 40 4	_
					Inc.	4,484	9

		Shares	Market Value• (\$000)		Shares	Market Value• (\$000)
*,2	Datrict National Inc		(4444)	Facility Life Chyle		(4000)
, Z *	Patriot National Inc. Ardagh Group SA	129,819	_	Equity LifeStyle Properties Inc.	5,089,517	328,783
	Class A	37	_	Regency Centers	0,000,017	020,700
*	LGL Group Inc.	0,		Corp.	5,198,185	324,887
	Warrants Exp.			Rexford Industrial		
	12/16/25	2,391	_	Realty Inc.	5,573,334	304,527
			156,778,170	Boston	4 00 4 040	000 555
Real	Estate (3.4%)			Properties Inc.	4,284,619	289,555
	Prologis Inc.	28,071,854	3,164,540	CubeSmart American Homes 4	6,816,908	274,381
	American Tower			Rent Class A	8,586,374	258,793
	Corp.	14,159,997	2,999,937	Life Storage Inc.	2,587,160	254,835
	Equinix Inc.	2,814,333	1,843,473	Lamar Advertising	_,,	
	Crown Castle Inc.	13,169,960	1,786,373	Co. Class A	2,649,309	250,095
	Public Storage Realty Income Corp.	4,540,330 19,064,759	1,272,155 1,209,278	Federal Realty		
	Simon Property	19,004,759	1,209,276	Investment Trust	2,467,526	249,319
	Group Inc.	9,944,803	1,168,315	National Retail	E 410.000	0.40.010
*	CoStar Group Inc.	12,365,660	955,618	Properties Inc. STORE Capital Corp.	5,419,969 7,721,004	248,018 247,535
	Welltower Inc.	14,371,569	942,056	Americold Realty	1,721,004	247,000
	SBA			Trust Inc.	8,198,633	232,103
	Communications			* Jones Lang		,
	Corp. Class A	3,281,949	919,963	LaSalle Inc.	1,444,748	230,250
	Digital Realty Trust Inc.	8,745,029	076 064	Healthcare Realty		
	VICI Properties Inc.	25,554,170	876,864 827,955		11,569,048	222,936
	Alexandria Real	23,334,170	027,000	Brixmor Property	0.070.007	205 664
	Estate Equities Inc.	4,990,552	726,974	Group Inc. Medical Properties	9,072,087	205,664
*	CBRE Group Inc.				18,158,335	202,284
	Class A	9,149,676	704,159	Omega Healthcare	-,,	,
	Weyerhaeuser Co.	22,372,185	693,538	Investors Inc.	7,119,301	198,984
	AvalonBay	4 05 4 607	007007	EastGroup		
	Communities Inc.	4,254,627 10,920,323	687,207 644,299	Properties Inc.	1,325,066	196,189
	Equity Residential Extra Space	10,920,323	044,299	First Industrial Realty Trust Inc.	4 004 015	102 224
	Storage Inc.	4,071,709	599,274	Agree Realty Corp.	4,004,015 2,681,423	193,234 190,193
	Mid-America	.,,		STAG Industrial Inc.	5,462,419	176,491
	Apartment			Spirit Realty	0,102,110	170,101
	Communities Inc.	3,511,214	551,226	Capital Inc.	4,263,338	170,235
	Invitation Homes Inc.		551,172	Apartment Income		
	Ventas Inc.	12,161,508	547,876	REIT Corp. Class A	4,605,051	157,999
	Sun Communities Inc.	3,765,629	538,485	* Zillow Group Inc.	4 000 040	457005
	WP Carey Inc.	6,327,113	494,464	Class C	4,899,243	157,805
	Iron Mountain Inc.	8,833,577	440,354	Rayonier Inc.	4,447,915	146,603
	Essex Property	0,000,077		Kite Realty Group Trust	6,639,872	139,769
	Trust Inc.	1,970,033	417,489	Kilroy Realty Corp.	3,545,183	137,092
	Healthpeak			Ryman Hospitality	-,,	,
	Properties Inc.	16,344,278	409,751	Properties Inc.	1,589,519	129,991
	Kimco Realty Corp.	18,769,832	397,545	Terreno Realty Corp.	2,208,805	125,615
	Gaming & Leisure Properties Inc.	7/2/ 520	207265	Cousins		
	UDR Inc.	7,434,538 9,888,406	387,265 382,978	Properties Inc.	4,617,142	116,768
	Camden Property	3,000,400	302,370	Independence Realty Trust Inc.	6,823,832	115,050
	Trust	3,235,736	362,014	Phillips Edison & Co.	0,020,002	110,000
	Host Hotels &	,		Inc.	3,548,191	112,974
	Resorts Inc.	21,754,252	349,156	Vornado Realty Trust	5,281,480	109,908
				PotlatchDeltic Corp.	2,450,399	107,793

		Shares	Market Value• (\$000)		Shares	Market Value* (\$000)
	Essential Properties			DiamondRock		
	Realty Trust Inc.	4,374,284	102,664	Hospitality Co.	6,398,737	52,406
	Physicians Realty		,	RLJ Lodging Trust	4,945,600	52,374
	Trust	6,929,270	100,267	Elme Communities	2,726,831	48,538
	Apple Hospitality			Urban Edge	_,,.	,
	REIT Inc.	6,222,898	98,197	Properties	3,402,084	47,935
	National Storage			InvenTrust Properties	., . ,	,
	Affiliates Trust	2,630,659	95,019	Corp.	1,959,753	46,387
	Highwoods			Xenia Hotels &		,
	Properties Inc.	3,217,026	90,012	Resorts Inc.	3,493,149	46,040
	Corporate Office			LTC Properties Inc.	1,221,233	43,390
	Properties Trust	3,428,085	88,925	Getty Realty Corp.	1,266,179	42,860
	Sabra Health Care			* Veris Residential Inc.	2,686,816	42,801
	REIT Inc.	6,970,017	86,637	Hudson Pacific	_,,	,
	Innovative Industrial			Properties Inc.	4,370,707	42,527
	Properties Inc.	849,282	86,075	Acadia Realty Trust	2,912,504	41,794
	EPR Properties	2,274,676	85,801	Alexander &	, - ,	, -
	LXP Industrial Trust	8,489,172	85,062	Baldwin Inc.	2,211,166	41,415
	Broadstone Net			Easterly Government		
	Lease Inc.	5,022,510	81,415	Properties Inc.		
	Equity			Class A	2,814,966	40,170
	Commonwealth	3,194,059	79,756	Uniti Group Inc.	7,164,853	39,622
	Douglas Emmett Inc.	5,070,434	79,504	American Assets		
*,1	Howard Hughes			Trust Inc.	1,488,186	39,437
	Corp.	1,034,131	79,028	Global Net Lease Inc.	3,135,658	39,415
	Hannon Armstrong			* GEO Group Inc.	3,590,246	39,313
	Sustainable			St. Joe Co.	999,745	38,640
	Infrastructure	2,723,437	70 025	Service Properties		
	Capital Inc.	2,723,437	78,925	Trust	5,050,565	36,819
	Park Hotels & Resorts Inc.	6,490,659	76,525	Paramount		
	SITE Centers Corp.	5,519,346	75,394	Group Inc.	5,914,575	35,133
	Outfront Media Inc.			Piedmont Office		
		4,478,178	74,248	Realty Trust Inc.		
	Macerich Co. JBG SMITH	6,555,435	73,814	Class A	3,788,999	34,745
	Properties	3,473,430	65,926	* Zillow Group Inc.		
1	SL Green Realty	3,473,430	03,320	Class A	1,083,087	33,803
	Corp.	1,940,860	65,446	Empire State Realty	E 00E 070	20.740
	Four Corners	1,040,000	00,440	Trust Inc. Class A	5,005,870	33,740
	Property Trust Inc.	2,518,781	65,312	Brandywine Realty	E 300 003	22.002
	National Health	2,0.0,70.	00,012	Trust	5,380,893	33,093
	Investors Inc.	1,243,893	64,956	Newmark Group Inc. Class A	3,957,178	31,539
	Sunstone Hotel			Apartment	0,007,170	01,000
	Investors Inc.	6,406,404	61,886	Investment &		
*	Cushman &			Management Co.		
	Wakefield plc	4,793,912	59,732	Class A	4,331,912	30,843
	Kennedy-Wilson			NexPoint Residential		
	Holdings Inc.	3,583,854	56,374	Trust Inc.	677,616	29,490
	CareTrust REIT Inc.	2,941,443	54,652	NETSTREIT Corp.	1,549,386	28,400
	Retail Opportunity			* Radius Global		
	Investments Corp.	3,627,228	54,517	Infrastructure Inc.	2,290,762	27,077
	Pebblebrook Hotel			RPT Realty	2,686,489	26,972
	Trust	4,024,072	53,882	Centerspace	455,138	26,703
	Tanger Factory Outlet			Community		
	Centers Inc.	2,995,208	53,734	Healthcare Trust Inc.	740,782	26,520
	DigitalBridge	4 05 4 5 4 4	FO 400	Plymouth Industrial		
	Group Inc.	4,854,511	53,108	REIT Inc.	1,354,907	25,987

		Shares	Market Value• (\$000)			Shares	Market Value• (\$000)
	Marcus &				RE/MAX		
1	Millichap Inc.	742,423	25,576		Holdings Inc.	519,322	9,680
·	eXp World Holdings Inc.	2,296,413	25,444		Hersha Hospitality	313,322	5,000
	UMH Properties Inc.	1,524,833	24,550		Trust Class A	1,109,885	9,456
	Armada Hoffler	, - ,	,	*	FRP Holdings Inc.	170,118	9,163
	Properties Inc.	2,118,054	24,358		Indus Realty		
	Necessity Retail				Trust Inc.	136,973	8,696
	REIT Inc. Class A	3,941,256	23,372		Braemar Hotels & Resorts Inc.	2 007772	8.622
	Summit Hotel Properties Inc.	3,173,275	22,911	*	Forestar Group Inc.	2,097,772 538,939	8,305
	Gladstone	3,173,275	22,311		Douglas Elliman Inc.	1,920,937	7.818
	Commercial Corp.	1,182,896	21,884		Franklin Street	1,020,007	7,010
	Safehold Inc.	761,747	21,801		Properties Corp.	2,758,628	7,531
*	Anywhere Real				Postal Realty		
	Estate Inc.	3,293,319	21,044		Trust Inc. Class A	503,103	7,310
	Office Properties	4 550 500	00.740		Industrial Logistics	0.405.007	0.000
	Income Trust Gladstone Land	1,553,526	20,740		Properties Trust	2,135,037	6,982
	Corp.	1,118,425	20,523		BRT Apartments Corp.	355,404	6,980
*	Compass Inc.	1,110,120	20,020		Alpine Income	000, 10 1	0,000
	Class A	8,507,087	19,822		Property Trust Inc.	326,561	6,231
*,1	Opendoor				Urstadt Biddle		
	Technologies Inc.	16,341,522	18,956		Properties Inc.	340,991	6,209
	Chatham Lodging	1 474 700	10.005	*	Ashford Hospitality	1 100 000	E 107
	Trust Saul Centers Inc.	1,474,768 432,397	18,095 17,590		Trust Inc. Stratus	1,160,323	5,187
	Farmland	432,397	17,590		Properties Inc.	235,957	4,552
	Partners Inc.	1,408,234	17,547		Diversified	200,007	1,002
	Global Medical	,, -	, -		Healthcare Trust	6,421,459	4,153
	REIT Inc.	1,827,279	17,323		Modiv Inc. Class C	224,372	2,692
	Universal Health				Clipper Realty Inc.	405,295	2,594
1	Realty Income Trust	355,007	16,944		Creative Media &		
'	Ares Commercial Real Estate Corp.	1,520,824	15,649		Community Trust Corp.	477,630	2,340
	Orion Office	1,020,024	10,040	*	Bluerock Homes	477,000	2,040
	REIT Inc.	1,773,249	15,144		Trust Inc.	109,382	2,331
	Whitestone REIT	1,512,138	14,577	*	Altisource Portfolio		
*	Redfin Corp.	3,051,525	12,938		Solutions SA	195,665	1,851
	Alexander's Inc.	58,505	12,875	*	Maui Land &	100 F01	1.010
	RMR Group Inc.	440.704	40 505		Pineapple Co. Inc. Global Self	192,501	1,813
*,1	Class A WeWork Inc.	443,704 8,465,950	12,535		Storage Inc.	319,661	1,560
*	Seritage Growth	0,400,900	12,106	*	AMREP Corp.	115,952	1,339
	Properties Class A	1,013,232	11,987	*	Rafael Holdings Inc.	•	•
	One Liberty	, , .	,		Class B	381,611	714
	Properties Inc.	534,493	11,876	*	Comstock Holding	101051	
	Urstadt Biddle			1	Cos. Inc. Class A	164,051	699
	Properties Inc.	614,832	11,651		New York City REIT Inc. Class A	395,144	699
	Class A CTO Realty	014,032	11,001		CorEnergy	000,144	000
	Growth Inc.	630,295	11,522		Infrastructure		
*	Tejon Ranch Co.	610,106	11,494		Trust Inc.	293,803	614
	City Office REIT Inc.	1,177,661	9,869	*	Sotherly Hotels Inc.	337,859	612
	Bridge Investment			*	Fathom Holdings Inc.	144,051	612
	Group Holdings Inc.		0.710	-	Trinity Place Holdings Inc.	756,919	560
	Class A	806,505	9,718		i lolulinga IIIG.	700,010	500

		Shares	Market Value• (\$000)			Shares	Market Value• (\$000)
*,1	Offerpad				Amphenol Corp.		
	Solutions Inc.	1,145,520	528		Class A	18,109,473	1,378,855
*	Power REIT	72,668	287	*	Cadence Design		
*	Avalon GloboCare				Systems Inc.	8,340,108	1,339,755
	Corp.	486,240	253	*	Palo Alto		
*,2	New York REIT				Networks Inc.	9,195,817	1,283,184
	Liquidating LLC	19,100	214	*	Autodesk Inc.	6,561,625	1,226,171
1	Presidio Property	404 505	105	*	Snowflake Inc.	0.074.044	4 407000
*	Trust Inc. Class A	184,525	185		Class A	8,271,044	1,187,226
	Wheeler REIT Inc.	130,830	179		Microchip	10 707100	1 175 000
*,1	Alset Inc.	77,598	178		Technology Inc.	16,727,199	1,175,086
1	Generation Income	00.010	150		TE Connectivity Ltd.	9,655,712	1,108,476
*,1	Properties Inc.	32,616	158	*	Workday Inc. Class A		1,023,027
-, 1	Harbor Custom Development Inc.	127,370	50		Fortinet Inc.	20,193,591	987,265
	Medalist Diversified	127,370	50		Marvell Technology Inc.	25 042 566	060 050
	REIT Inc.	48,881	35		Cognizant Technology	25,943,566	960,950
*	Presidio Property	40,001	33		Solutions Corp.		
	Trust Inc. Warrants				Class A	15,638,586	894,371
	Exp. 1/24/27	110,319	6	*	VMware Inc. Class A	7,103,355	872,008
*	JW Mays Inc.	100	5	*	ON Semiconductor	,, .00,000	0,2,000
*,2	Spirit MTA REIT	2,854,330	_		Corp.	13,152,359	820,313
*,1	Pennsylvania REIT	3	_	*	Gartner Inc.	2,282,610	767,277
		_	00 000 500		HP Inc.	27,540,071	740,002
- .	1 (00.00/)		38,923,536		Corning Inc.	23,159,196	739,705
lechi	nology (23.3%)		50 740 040		CDW Corp.	4,118,435	735,470
	Apple Inc.	459,623,200	59,718,842	*	Crowdstrike	.,,	, 00,
	Microsoft Corp.	226,710,185	54,369,637		Holdings Inc.		
Ĵ	Alphabet Inc. Class		16,038,220		Class A	6,533,823	687,946
_	Alphabet Inc. Class (13,948,650	*	ANSYS Inc.	2,648,559	639,865
	NVIDIA Corp.	71,076,358	10,387,099		Hewlett Packard		
	Meta Platforms Inc.	00 000 000	0.000.004		Enterprise Co.	39,154,154	624,900
	Class A	68,388,680	8,229,894	*	Datadog Inc. Class A	7,996,299	587,728
	Broadcom Inc.	12,316,850	6,886,720	*	Atlassian Corp.		
	Adobe Inc.	14,138,391	4,757,993		Class A	4,510,535	580,416
	Texas Instruments Inc.	27506 550	4 550 500	*	VeriSign Inc.	2,740,406	562,989
	International	27,596,559	4,559,503	*	EPAM Systems Inc.	1,662,085	544,732
	Business Machines			*	Paycom		
	Corp.	27,498,107	3,874,208		Software Inc.	1,549,505	480,827
*	Salesforce Inc.	28,893,138	3,830,941		Monolithic Power		
	QUALCOMM Inc.	34,093,490	3,748,238		Systems Inc.	1,356,612	479,712
	Oracle Corp.	45,096,132	3,686,158		Skyworks	4 074 050	440.007
	Intel Corp.	125,513,881	3,317,332		Solutions Inc.	4,871,359	443,927
*	Advanced Micro	120,010,001	0,017,002		Leidos Holdings Inc.	4,157,814	437,360
	Devices Inc.	49,036,817	3,176,115		Pinterest Inc. Class A	17,849,136	433,377
	Intuit Inc.	8,116,959	3,159,283		Zoom Video Communications		
	Applied	-,,	0,.00,=00		Inc. Class A	6,334,134	429,074
	Materials Inc.	26,165,880	2,548,033	*	DoorDash Inc.	0,004,104	423,074
	Analog Devices Inc.	15,487,728	2,540,452		Class A	8,748,963	427,124
*	ServiceNow Inc.	6,143,380	2,385,290	*	Splunk Inc.	4,943,142	425,555
	Lam Research Corp.		1,743,379		Teradyne Inc.	4,734,131	413,526
	Micron	, ,	, .,.	*	Tyler	4,754,151	413,320
	Technology Inc.	33,061,567	1,652,417		Technologies Inc.	1,264,675	407,744
	KLA Corp.	4,308,991	1,624,619	*	HubSpot Inc.	1,404,674	406,133
*	Synopsys Inc.	4,649,526	1,484,547	*	Akamai	.,,	.50,100
	Roper				Technologies Inc.	4,786,431	403,496
	Technologies Inc.	3,224,370	1,393,218		NetApp Inc.	6,612,339	397,137
					- F-F	.,,	, ,

		Shares	Market Value• (\$000)			Shares	Market Value• (\$000)
*	MongoDB Inc.			*	Dropbox Inc. Class A	8,065,440	180,505
	Class A	1,983,423	390,417	*	DXC Technology Co.	6,809,525	180,452
*	PTC Inc.	3,211,622	385,523	*	Toast Inc. Class A	9,138,626	164,769
*	Cloudflare Inc.	0,211,022	000,020			1,181,625	
	Class A	8,219,486	371,603	*	Concentrix Corp.	1,181,025	157,345
	Gen Digital Inc.	16,823,719	360,532		Guidewire Software Inc.	2 402 222	155 251
*	GoDaddy Inc. Class A		353,389	*		2,483,233	155,351
*	Match Group Inc.	8,498,001			Smartsheet Inc. Class A	2 779 500	140 706
	SS&C Technologies	0,490,001	352,582		National Instruments	3,778,599	148,726
	Holdings Inc.	6,527,138	339,803		Corp.	3,995,646	147,439
*	DocuSign Inc.			*	Five9 Inc.	2,146,116	145,635
	Class A	6,099,472	338,033	*	Fabrinet	1,116,412	143,146
*	Palantir			*	SPS Commerce Inc.	1,097,206	140,914
	Technologies Inc.	E4 404 E04	000 507	*	Novanta Inc.	1,035,825	140,738
	Class A	51,181,704	328,587		Universal Display		
_	ZoomInfo				Corp.	1,294,919	139,903
	Technologies Inc.	10 100 070	014 017	*	Tenable Holdings Inc.	3,445,763	131,456
	Class A	10,438,973	314,317	*	Silicon		
	Seagate Technology	E 062 204	212 724		Laboratories Inc.	962,814	130,625
*	Holdings plc	5,963,204	313,724	*	Box Inc. Class A	4,119,789	128,249
	Western Digital Corp		305,246		Dolby		
	Dell Technologies Inc		201 200		Laboratories Inc.		
*	Class C	7,493,533	301,390		Class A	1,813,862	127,950
	Okta Inc. Class A	4,380,062	299,290	*	Coherent Corp.	3,588,687	125,963
	Entegris Inc.	4,529,661	297,100		Vertiv Holdings Co.		
	Zscaler Inc.	2,626,856	293,945		Class A	9,212,615	125,844
*	Ceridian HCM			*	Cirrus Logic Inc.	1,679,565	125,094
	Holding Inc.	4,433,498	284,409		Power		
*	Qorvo Inc.	3,081,737	279,329		Integrations Inc.	1,737,467	124,611
*	Black Knight Inc.	4,505,585	278,220		TD SYNNEX Corp.	1,314,534	124,500
*	Snap Inc. Class A	30,928,419	276,809	*	Elastic NV	2,310,512	118,991
*	Lattice			*	Workiva Inc. Class A	1,413,247	118,670
	Semiconductor	4 400 704	070 070	*	UiPath Inc. Class A	9,254,895	117,630
	Corp.	4,162,734	270,078	*	Qualys Inc.	1,042,269	116,974
*,1	Unity Software Inc.	9,432,774	269,683	*	Rambus Inc.	3,260,139	116,778
	Jabil Inc.	3,891,428	265,395		Avnet Inc.	2,784,963	115,799
	F5 Inc.	1,835,758	263,450	*	Synaptics Inc.	1,215,585	115,675
*	Wolfspeed Inc.	3,780,608	261,013	*	Super Micro	, .,	-,-
*	Twilio Inc. Class A	5,313,520	260,150		Computer Inc.	1,367,278	112,254
	Bentley Systems Inc.			*	Blackline Inc.	1,630,363	109,675
	Class B	6,733,363	248,865	*	Ziff Davis Inc.	1,358,788	107,480
*	Dynatrace Inc.	6,122,275	234,483	*	IAC Inc.	2,399,808	106,551
*	Pure Storage Inc.			*	Insight	2,000,000	.00,001
	Class A	8,624,313	230,787		Enterprises Inc.	1,060,003	106,287
*	Manhattan			*	Teradata Corp.	3,087,709	103,932
	Associates Inc.	1,899,341	230,580	*	Envestnet Inc.	1,675,931	103,405
	KBR Inc.	4,171,222	220,241	*	Onto Innovation Inc.	1,501,599	102,244
*	CACI			*,1			102,244
	International Inc.			*	Gitlab Inc. Class A	2,246,106	102,003
	Class A	714,865	214,881		MACOM Technology Solutions		
*	Arrow				Holdings Inc.	1,606,931	101,205
	Electronics Inc.	1,872,469	195,804	*	Diodes Inc.		
	Science Applications			*	Procore	1,323,264	100,753
	International Corp.	1,674,191	185,718		Technologies Inc.	2 080 082	98,600
*	Coupa Software Inc.		182,860		Dun & Bradstreet	2,089,862	30,000
*	Nutanix Inc. Class A	6,990,900	182,113		Holdings Inc.	7,939,091	97,333
*	Aspen				i loluli iga IIIG.	7,000,001	31,333
	Technology Inc.	884,115	181,597				

		Shares	Market Value• (\$000)			Shares	Market Value• (\$000)
		Sildles	(\$000)	*		Sildies	(\$000)
	Advanced Energy	1 122 610	07242		Allscripts Healthcare	2 161 220	EE 766
*	Industries Inc.	1,133,618	97,242	*	Solutions Inc.	3,161,338	55,766
*	Sanmina Corp. Blackbaud Inc.	1,653,982 1,607,289	94,757 94,605	*	Semtech Corp. Yelp Inc. Class A	1,929,162 2,013,343	55,348 55,045
*	New Relic Inc.	1,668,059	94,003	*	DoubleVerify	2,013,343	55,045
*	NCR Corp.	3,962,274	92,757		Holdings Inc.	2,483,915	54,547
*	RingCentral Inc.	3,302,274	32,737	*	Bumble Inc. Class A	2,559,851	53,885
	Class A	2,609,410	92,373		CSG Systems	2,000,00.	00,000
*	Ambarella Inc.	1,106,533	90,990		International Inc.	925,548	52,941
*	Alteryx Inc. Class A	1,758,997	89,128	*,1	HashiCorp Inc.		
*	Plexus Corp.	845,566	87,034		Class A	1,912,703	52,293
*	SentinelOne Inc.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,	*	FormFactor Inc.	2,343,232	52,090
	Class A	5,963,407	87,006	*	Parsons Corp.	1,095,312	50,658
	Vishay			*	DigitalOcean		
	Intertechnology Inc.	3,931,123	84,794		Holdings Inc.	1,917,500	48,839
*	IPG Photonics Corp.	891,864	84,433	*	Agilysys Inc.	609,866	48,265
*	CommVault				Xerox Holdings Corp.	3,279,828	47,885
	Systems Inc.	1,343,452	84,423		Methode	4 004 004	47000
*	Confluent Inc.	0.707774	04.040		Electronics Inc.	1,061,221	47,086
*	Class A	3,787,774	84,240		LiveRamp Holdings Inc.	1,985,001	46,528
	Sprout Social Inc. Class A	1 120 201	81,206	*	SiTime Corp.	453,792	46,326
	Amkor	1,438,284	01,200	*	Model N Inc.	1,103,089	44,741
	Technology Inc.	3,364,074	80,670	*	Q2 Holdings Inc.	1,661,343	44,640
*	Varonis Systems Inc.	0,001,071	00,070	*	Cohu Inc.	1,376,278	44,110
	Class B	3,187,820	76,316	*	Ultra Clean	1,070,270	44,110
*	Axcelis				Holdings Inc.	1,314,737	43,584
	Technologies Inc.	943,370	74,866	*	Digital Turbine Inc.	2,845,488	43,365
*	Perficient Inc.	1,052,876	73,522	*	Jamf Holding Corp.	2,029,942	43,238
*	Altair				Pegasystems Inc.	1,259,450	43,124
	Engineering Inc.			*	TTM		
	Class A	1,613,509	73,366		Technologies Inc.	2,798,390	42,200
	Impinj Inc.	669,226	73,066	*	JFrog Ltd.	1,969,517	42,010
	MaxLinear Inc. Class A	2,149,267	72,968	*	Cargurus Inc. Class A	2,959,535	41,463
*	Alarm.com	2,149,207	72,300	*	CCC Intelligent		
	Holdings Inc.	1,441,425	71,322		Solutions	4 700 454	44.400
*	Kyndryl Holdings Inc.	6,255,300	69,559		Holdings Inc.	4,726,454	41,120
*,1	Freshworks Inc.	-,,		*	Paycor HCM Inc.	1,660,032	40,621
	Class A	4,677,671	68,809	*,1	Magnite Inc. MicroStrategy Inc.	3,831,249	40,573
*	Rogers Corp.	572,290	68,297	, .	Class A	285,067	40,357
*	Verint Systems Inc.	1,875,379	68,039	*,1	Xometry Inc. Class A	1,223,667	39,439
*	NetScout			*	Appian Corp. Class A	1,194,983	38,909
	Systems Inc.	2,087,777	67,874	*	E2open Parent	1,101,000	00,000
	Clear Secure Inc.				Holdings Inc.	6,465,136	37,950
	Class A	2,473,067	67,836	*	Upwork Inc.	3,570,489	37,276
*	PagerDuty Inc.	2,473,155	65,687		Shutterstock Inc.	702,876	37,056
	Progress Software	1 000 100	OF FFF		CTS Corp.	909,709	35,861
*	Corp. KnowBe4 Inc.	1,299,409	65,555	*	TechTarget Inc.	813,687	35,851
	Class A	2,610,582	64,690	*	Everbridge Inc.	1,210,506	35,807
*	Allegro	2,010,002	04,030	*,1	Samsara Inc. Class A	2,877,656	35,769
	MicroSystems Inc.	2,044,537	61,377	*	ePlus Inc.	801,946	35,510
*	Appfolio Inc. Class A	559,535	58,964		A10 Networks Inc.	2,126,311	35,361
*	nCino Inc.	2,215,710	58,583	*	Qualtrics		
*	Rapid7 Inc.	1,699,591	57,752		International Inc.		
*,1	AppLovin Corp.	, ,			Class A	3,394,615	35,236
	Class A	5,314,404	55,961				

			Market				Market
		Shares	Value* (\$000)			Shares	Value• (\$000)
*	Zeta Global Holdings			*	CEVA Inc.	645,647	16,516
	Corp. Class A	4,017,660	32,824		PC Connection Inc.	342,881	16,081
*,1	Credo Technology			*	Vertex Inc. Class A	1,081,312	15,690
	Group Holding Ltd.	2,448,300	32,587	*	Alkami	, , -	-,
*,1	C3.ai Inc. Class A	2,867,884	32,092		Technology Inc.	1,064,985	15,538
*	Squarespace Inc.			*	BigCommerce		
	Class A	1,354,064	30,020		Holdings Inc.	1,768,100	15,453
*	Thoughtworks		00.007	*	PubMatic Inc.		
	Holding Inc.	2,936,882	29,927		Class A	1,205,268	15,439
_	Schrodinger Inc.	1,592,005	29,755	*	Kimball		45.007
_	ForgeRock Inc.	1 204 011	20.712		Electronics Inc.	681,124	15,387
*	Class A	1,304,911	29,713		Ebix Inc.	765,121	15,272
*	PROS Holdings Inc.	1,222,742	29,664	Ţ	SolarWinds Corp.	1,618,452	15,149
*	Photronics Inc. Veeco	1,758,193	29,590		Eventbrite Inc.	0.500.700	14.040
	Instruments Inc.	1,592,329	29,585	*,1	Class A	2,533,728	14,848
*	Consensus Cloud	1,092,329	29,565	, '	Aehr Test Systems	732,904	14,731
	Solutions Inc.	544,091	29,250	*	Hackett Group Inc.	689,753	14,050
	Adeia Inc.	3,049,495	28,909		Amplitude Inc. Class A	1,158,040	12.000
*,1	Asana Inc. Class A	2,088,403	28,757	*	Vimeo Inc.		13,989
, .	Benchmark	2,000,403	20,757	*		3,982,389	13,660
	Electronics Inc.	1,049,006	27,998		Bandwidth Inc. Class A	E00 0E4	12 560
*,1	Braze Inc. Class A	1,023,274	27,915		American	590,854	13,560
*	3D Systems Corp.	3,732,912	27,624		Software Inc.		
*	Fastly Inc. Class A	3,732,312	27,529		Class A	921,406	13,526
*	Momentive	3,301,313	27,529	*	Mitek Systems Inc.	1,391,563	13,484
	Global Inc.	3,822,194	26,755	*	indie	.,00.,000	.0, .0 .
*	Duck Creek	0,022,.0.	20,700		Semiconductor Inc.		
	Technologies Inc.	2,215,353	26,695		Class A	2,256,789	13,157
*	Avid Technology Inc.	1,000,776	26,611	*	EngageSmart Inc.	739,319	13,012
*	PDF Solutions Inc.	917,483	26,167	*	nLight Inc.	1,264,578	12,823
*,1	Planet Labs PBC	5,705,087	24,817	*	Definitive Healthcare		
*	Sprinklr Inc. Class A	2,987,601	24,409		Corp. Class A	1,161,629	12,766
*	Zuora Inc. Class A	3,711,427	23,605	*	Domo Inc. Class B	876,577	12,482
*	Sumo Logic Inc.	2,845,248	23,047	*,1	Cvent Holding Corp.		
*	Ichor Holdings Ltd.	847,475	22,729		Class A	2,269,000	12,253
*,1	Matterport Inc.	7,851,178	21,983	*,1	MicroVision Inc.	4,838,257	11,370
*	Cerence Inc.	1,185,156	21,961	*	Intapp Inc.	453,545	11,311
*	LivePerson Inc.	2,152,384	21,825	*	OneSpan Inc.	973,180	10,890
*	ScanSource Inc.	729,236	21,308	*	Expensify Inc.		
*	SMART Global	,	,		Class A	1,226,965	10,834
	Holdings Inc.	1,409,909	20,979	*	NerdWallet Inc.		
*	Yext Inc.	3,175,521	20,736	*	Class A	1,080,320	10,371
*,1	PAR Technology	, ,	,	*	ACM Research Inc.	4 005 055	0.007
	Corp.	786,360	20,500	*	Class A	1,295,355	9,987
*,1	UserTesting Inc.	2,597,409	19,507	*,1	Couchbase Inc.	747,916	9,917
*	N-able Inc.	1,882,441	19,351	^,1	SmartRent Inc.	4 000 740	0.707
*	Olo Inc. Class A	3,067,735	19,173	*	Class A	4,002,742	9,727
*	Grid Dynamics			*	Unisys Corp.	1,893,734	9,677
	Holdings Inc.	1,666,570	18,699	*	Benefitfocus Inc. EverQuote Inc.	917,128	9,593
*	Alpha & Omega				Class A	645,954	9,521
	Semiconductor Ltd.	643,490	18,385	*,1	Tucows Inc. Class A	278,469	9,321
*,1	AvePoint Inc.	4,421,969	18,174	, '	NVE Corp.	278,469 145,801	9,446
	Simulations Plus Inc.	475,654	17,395	*	Blend Labs Inc.	140,001	3,441
*	Informatica Inc.				Class A	6,432,185	9,262
	Class A	1,056,927	17,217	*	ON24 Inc.	1,062,930	9,173
*,1	IonQ Inc.	4,817,950	16,622	*,1	Digimarc Corp.	490,852	9,076
					2.5.11010 0010.	100,002	3,370

		Shares	Market Value• (\$000)			Shares	Market Value• (\$000)
*,1	NI-, de	0110100	(\$000)	*	F	0.10.00	(\$000)
, '	Navitas Semiconductor				Everspin Technologies Inc.	636,377	3,538
	Corp.	2,424,400	8,510	*	inTEST Corp.	338,791	3,490
*,1	SoundHound Al Inc.	4,658,401	8,245	*	Identiv Inc.		3,450
*	Immersion Corp.	1,102,930	7,754	*,1		476,807	- ,
*	Nextdoor	1,102,550	7,734	*,1	System1 Inc.	726,600	3,408
	Holdings Inc.	3,659,313	7,538	*	Applied Digital Corp.	1,836,200	3,379
*	Red Violet Inc.	320,472	7,336	*	Quantum Corp.	3,061,313	3,337
*	MediaAlpha Inc.	320,472	1,377		WM Technology Inc.	3,203,513	3,236
	Class A	726,568	7,229	*,1	Arena Group	201 000	0.001
*	Telos Corp.	1,351,503	6,879	*	Holdings Inc.	301,686	3,201
*,1	Enfusion Inc. Class A	707,347	6,840		AstroNova Inc.	241,721	3,099
*	SEMrush	707,347	0,040	*,1 *	VirnetX Holding Corp.		3,003
	Holdings Inc.				1stdibs.com Inc.	570,459	2,898
	Class A	822,251	6,693		comScore Inc.	2,442,580	2,833
	Richardson	022,201	0,000	*,1	Alpine 4	- 40- 000	0.740
	Electronics Ltd.	309,653	6,605		Holdings Inc.	5,195,298	2,746
*	EverCommerce Inc.	865,323	6,438	*	QuickLogic Corp.	525,294	2,700
*	TrueCar Inc.	2,547,978	6,395		Mastech Digital Inc.	243,683	2,683
*	MeridianLink Inc.	461,628	6,338	*,1	LiveVox Holdings Inc.	898,787	2,669
*	CoreCard Corp.	218,240	6,322	*	Arteris Inc.	586,203	2,521
*	Brightcove Inc.			*,1	eMagin Corp.	2,923,838	2,485
*,1	NextNav Inc.	1,198,403	6,268	*,1	Vinco Ventures Inc.	5,348,103	2,482
*		2,126,531	6,231	*	Innodata Inc.	818,315	2,426
* 1	Upland Software Inc.	853,856	6,088	*	Backblaze Inc.		
*,1	Groupon Inc. Class A	698,916	5,997		Class A	378,125	2,325
*	eGain Corp.	657,552	5,938	*,1	Phunware Inc.	2,995,747	2,317
	Asure Software Inc.	632,680	5,909	*,1	Skillz Inc. Class A	4,509,252	2,284
*,1	Veritone Inc.	1,079,319	5,720	*	Amtech Systems Inc.	299,830	2,279
*,1	Rackspace	4 044 500	5 000	*,1	KULR Technology		
*	Technology Inc.	1,911,506	5,639		Group Inc.	1,895,666	2,275
	Rimini Street Inc.	1,477,020	5,627	*	Issuer Direct Corp.	89,309	2,236
*	Aeva		5040	*,1	Cyxtera		
	Technologies Inc.	3,931,094	5,346		Technologies Inc.	1,124,515	2,159
*,1	Rumble Inc.	873,200	5,196	*	Synchronoss		
	Porch Group Inc.	2,673,021	5,025		Technologies Inc.	3,129,535	1,934
*	Computer Task	004.005	4.005	*	Steel Connect Inc.	1,333,595	1,907
	Group Inc.	621,005	4,695	1	Park City Group Inc.	344,056	1,703
*,1	Atomera Inc.	742,219	4,617	*	SecureWorks Corp.		
	Intevac Inc.	709,768	4,592		Class A	263,152	1,682
*,1	Innovid Corp.	2,584,769	4,420	*	TransAct		
*,1	Vroom Inc.	4,332,182	4,419		Technologies Inc.	268,278	1,669
*,1	SkyWater			*,1	Beachbody Co. Inc.	3,047,190	1,603
	Technology Inc.	621,278	4,417	*,1	Embark		
*	Transphorm Inc.	793,700	4,318		Technology Inc.	482,700	1,588
*	AXT Inc.	967,301	4,237	*	Research		
*	Edgio Inc.	3,619,157	4,090		Frontiers Inc.	799,655	1,535
*,1	Cleanspark Inc.	1,947,178	3,972	*,1	BuzzFeed Inc.	2,108,022	1,454
*,1	Weave			*	Streamline Health		
	Communications				Solutions Inc.	916,198	1,448
_	Inc.	843,625	3,864	*	EMCORE Corp.	1,425,083	1,372
*	Daktronics Inc.	1,325,348	3,737	*,1	Glimpse Group Inc.	441,350	1,337
*	Pixelworks Inc.	2,099,613	3,716	*,1	Terawulf Inc.	1,992,318	1,326
*,1	Ouster Inc.	4,276,255	3,690	*,1	DecisionPoint		
*,1	Smith Micro				Systems Inc.	160,700	1,302
	Software Inc.	1,731,542	3,636		CSP Inc.	129,793	1,224
*	Diebold Nixdorf Inc.	2,523,583	3,583	*	Loyalty Ventures Inc.	505,277	1,218
*	Kopin Corp.	2,889,183	3,583				

			Market Value•				Market Value•
		Shares	(\$000)			Shares	(\$000)
*	Viant Technology Inc.			*	Leafly Holdings Inc.	310,600	202
	Class A	299,468	1,204	*	Kubient Inc.	295,586	189
*	Key Tronic Corp.	270,500	1,171	*	BTCS Inc.	280,193	177
*	Aware Inc.	617,876	1,057	*	Duos Technologies		
*,1	Flux Power		,		Group Inc.	73,218	154
	Holdings Inc.	265,036	1,052	*,1	iPower Inc.	386,294	147
*	Intellicheck Inc.	524,781	1,050	*	Creative Realities Inc		99
*,1	KORE Group	•	,	*	VerifyMe Inc.	85,157	99
	Holdings Inc.	823,448	1,038	*,1	Data Storage Corp.	64,393	94
*,1	Intrusion Inc.	327,757	1,036	*	Paltalk Inc.	65,588	87
*,1	Quantum	,	,	*,1	Greenidae	03,300	07
	Computing Inc.	675,564	1,020	,.	Generation		
*	One Stop	,	,		Holdings Inc.		
	Systems Inc.	331,059	996		Class A	254,255	74
*	CVD Equipment			*	Soluna Holdings Inc.	260,638	70
	Corp.	172,490	950	*	Nortech Systems Inc		63
*	NetSol			*,1	LogicMark Inc.	124,022	57
	Technologies Inc.	324,880	926	*	Recruiter.com	124,022	37
*	GSI Technology Inc.	481,492	833		Group Inc.	123,854	54
*	OMNIQ Corp.	175,600	799	*	T Stamp Inc. Class A		37
*	Zedge Inc. Class B	433,006	762	*,1	Exela	71,000	37
*,1	Cipher Mining Inc.	1,308,472	733	, .	Technologies Inc.	433,800	36
*	Inuvo Inc.	3,288,909	728	*	WaveDancer Inc.	27,707	13
*	Data I/O Corp.	180,859	718	*	Cryptyde Inc.	66,466	13
*	AudioEye Inc.	162,397	617	*	Sigma Additive	00,400	13
*,1	SeaChange	102,007	017		Solutions Inc.	26,358	11
	International Inc.	1,192,825	562	*	Inpixon	6,333	11
*,1	Verb Technology Co.	1,102,020	002	*,1	Waitr Holdings Inc.	5,949	2
	Inc.	3,198,586	525	*,2	Ikonics Corp. CVR	7,226	۷
*	WidePoint Corp.	265,533	483	,-	ikonics corp. CVh	7,220_	
*	Trio-Tech International	105,180	473				268,168,078
*,1	Boxlight Corp.	100,100	475	Teled	communications (2.4%	%)	
	Class A	1,499,605	466		Cisco Systems Inc.	112,455,321	5,357,371
*,1	Avaya Holdings Corp.		444		Verizon		
*,1	IronNet Inc.	1,890,753	435		Communications		
*	SigmaTron	1,000,700	455		Inc.	121,358,404	4,781,521
	International Inc.	98,274	377		Comcast Corp.		
*	BSQUARE Corp.	329,095	372		Class A	130,976,593	4,580,251
*	GSE Systems Inc.	541,861	368		AT&T Inc.	216,754,884	3,990,457
*	Peraso Inc.	496,038	362	*	T-Mobile US Inc.	18,916,548	2,648,317
*	PetVivo Holdings Inc.		346		Motorola		
*,1	Remark Holdings Inc.	173,200			Solutions Inc.	5,086,888	1,310,942
*	•	310,306	341	*	Charter		
*	CYNGN Inc.	479,651	325		Communications		
	authID Inc.	553,374	325		Inc. Class A	3,071,157	1,041,429
_	SilverSun	104 551	200	*	Arista Networks Inc.	6,972,899	846,161
*,1	Technologies Inc.	104,551	309		Juniper		
-, 1	NextPlay	2 541 646	201		Networks Inc.	9,878,142	315,705
*	Technologies Inc.	2,541,646	291	*	Liberty Broadband		
-	Super League	726 401	250	_	Corp. Class C	3,663,318	279,401
*	Gaming Inc. Direct Digital	736,401	250	*	Ciena Corp.	4,505,869	229,709
				*	Frontier		
	Holdings Inc. Class A	90,848	223		Communications		
*	Bridgeline Digital Inc.	210,329	221	*	Parent Inc.	7,453,365	189,912
*,1	American Virtual	210,323	221	*	Iridium		
,.	Cloud				Communications	2 447007	177170
	Technologies Inc.	180,236	207		Inc.	3,447,007	177,176
	. 300.09100 1110.	.00,200	207				

		Shares	Market Value• (\$000)			Shares	Market Value• (\$000)
	Lumen			*	DZS Inc.	641,747	8,137
	Technologies Inc.	31,457,441	164,208	*	Consolidated	011,717	0,107
*	Roku Inc. Class A	3,710,537	151,019		Communications		
	Cable One Inc.	177,213	126,151		Holdings Inc.	2,207,355	7,902
*	Calix Inc.	1,698,043	116,197	*	Cambium Networks		
*	DISH Network Corp.	.,000,0.0	110,107		Corp.	347,319	7,526
	Class A	7,572,131	106,313	*	Ribbon		
*	Lumentum	, - , -	,-		Communications		
	Holdings Inc.	1,965,814	102,557		Inc.	2,258,211	6,300
	Cogent		,	*	KVH Industries Inc.	523,973	5,355
	Communications			*	CalAmp Corp.	1,083,412	4,854
	Holdings Inc.	1,313,070	74,950	*,1	Akoustis		
*	Extreme				Technologies Inc.	1,659,890	4,681
	Networks Inc.	3,973,332	72,752	*	Lantronix Inc.	1,043,968	4,510
*	Viavi Solutions Inc.	6,898,039	72,498		Spok Holdings Inc.	517,811	4,241
*	Viasat Inc.	2,194,013	69,441	*	Genasys Inc.	1,014,600	3,754
	InterDigital Inc.	894,912	44,280	*,1	Kaltura Inc.	2,119,548	3,646
*	CommScope Holding			*	Charge		
	Co. Inc.	5,995,636	44,068		Enterprises Inc.	2,488,228	3,085
*	Harmonic Inc.	3,182,421	41,690	*	Casa Systems Inc.	957,382	2,614
	ADTRAN			*,1	Inseego Corp.	3,041,116	2,562
	Holdings Inc.	2,164,947	40,679	*	Powerfleet Inc.	952,316	2,562
*	Infinera Corp.	5,672,577	38,233	*,1	SurgePays Inc.	345,312	2,265
*	Liberty Broadband			*	PCTEL Inc.	471,713	2,028
	Corp. Class A	503,030	38,155	*	Airgain Inc.	309,957	2,018
*	Digi International Inc.	1,020,276	37,291	*,1	Applied		
*	Clearfield Inc.	385,400	36,282		Optoelectronics Inc.	828,961	1,567
	Telephone & Data				Network-1		
	Systems Inc.	3,065,247	32,154		Technologies Inc.	570,833	1,256
*	Altice USA Inc.			*	Franklin Wireless		
	Class A	6,570,329	30,224		Corp.	243,722	1,087
*	Globalstar Inc.	21,677,414	28,831	*,1	Airspan Networks		
*	Gogo Inc.	1,933,605	28,540		Holdings Inc.	614,890	806
	Shenandoah			*	TESSCO		
	Telecommunications		00.450		Technologies Inc.	138,125	666
	Co.	1,395,384	22,159		Crexendo Inc.	345,906	657
	EchoStar Corp. Class A	1 100 004	10.464	*,1	Vislink	4 440 405	
*		1,106,964	18,464		Technologies Inc.	1,119,195	627
	IDT Corp. Class B	640,184	18,034	_	Optical Cable Corp.	92,325	384
	ATN International Inc.		14,715	*	ClearOne Inc.	230,450	350
*	NETGEAR Inc.	802,059	14,525	-	ADDvantage		
	WideOpenWest Inc.	1,564,532	14,253		Technologies	06 416	140
*,1 *	Lightwave Logic Inc.	3,299,828	14,222	*	Group Inc. Minim Inc.	96,416	140 137
	8x8 Inc.	3,289,503	14,211	*,1,2	FTE Networks Inc.	701,390	
	Bel Fuse Inc. Class B	379,156	12,482	,1,2		84,180	126
	Anterix Inc.	369,725	11,894	* 1	Bel Fuse Inc. Class A	3,626	121
*,1	fuboTV Inc.	6,082,840	10,584	*,1	ComSovereign	1 145 207	00
*	Xperi Inc.	1,203,602	10,363		Holding Corp.	1,145,207_	82
	Comtech						27,553,763
	Telecommunications Corp.	846,569	10,277	Utilit	ies (3.4%)		
*	United States	0-0,000	10,277		NextEra Energy Inc.	60,435,187	5,052,382
	Cellular Corp.	461,155	9,615		Duke Energy Corp.	23,412,482	2,411,252
*	Aviat Networks Inc.	301,106	9,392		Southern Co.	33,106,568	2,364,140
*	Ooma Inc.	671,112	9,141		Waste	10 170 575	
*,1	AST	0/1,112	5, 141		Management Inc.	12,478,073	1,957,560
,	SpaceMobile Inc.				Dominion Energy Inc.	25,347,149	1,554,287
	Class A	1,767,881	8,521				
		. ,	-,-				

		Shares	Market Value• (\$000)			Shares	Market Value• (\$000)
	American Electric		(4555)	-	Portland General		(4000)
	Power Co. Inc.	15,626,852	1,483,770		Electric Co.	2,707,023	132,644
	Sempra Energy	9,560,971	1,477,552		South Jersey	_,, .,,,	,
	Exelon Corp.	30,160,292	1,303,829		Industries Inc.	3,710,507	131,834
	Xcel Energy Inc.	16,642,045	1,166,774		PNM Resources Inc.	2,599,819	126,845
	Waste				Ormat		
	Connections Inc.	7,822,938	1,037,009		Technologies Inc.	1,453,270	125,679
*	PG&E Corp.	63,707,628	1,035,886		ONE Gas Inc.	1,646,361	124,662
	Consolidated			*	Casella Waste		
	Edison Inc.	10,795,591	1,028,928		Systems Inc. Class A	1,542,658	122,348
	Public Service Enterprise				Southwest Gas	1,042,000	122,040
	Group Inc.	15,175,439	929,799		Holdings Inc.	1,931,270	119,507
	WEC Energy	10,170,100	020,700		ALLETE Inc.	1,731,008	111,667
	Group Inc.	9,602,901	900,368		Spire Inc.	1,521,349	104,760
	Eversource Energy	10,592,579	888,082		American States		
	Constellation Energy				Water Co.	1,131,515	104,722
	Corp.	9,933,893	856,401		NorthWestern Corp.	1,759,477	104,407
	American Water		0.40.007		Avangrid Inc.	2,375,146	102,084
	Works Co. Inc.	5,525,567	842,207		California Water	4 000 540	400.070
	Republic Services Inc.				Service Group	1,663,549	100,878
	Class A	6,248,575	806,004		Avista Corp.	2,246,550	99,612
	Edison International	11,619,107	739,208		MGE Energy Inc. Clearway Energy Inc.	1,122,106	78,996
	Ameren Corp.	7,859,173	698,838		Class C	2,306,682	73,514
	Entergy Corp.	6,184,424	695,748		SJW Group	845,979	68,685
	FirstEnergy Corp.	16,515,664	692,667		Chesapeake Utilities	0.10,070	00,000
	PPL Corp.	21,255,386	621,082		Corp.	520,461	61,508
	DTE Energy Co.	5,004,197	588,143	*	Sunnova Energy		
	AES Corp.	20,306,354	584,011		International Inc.	2,974,743	53,575
	CenterPoint				Northwest Natural		
	Energy Inc.	19,111,005	573,139		Holding Co.	1,065,570	50,710
	CMS Energy Corp.	8,820,983	558,633		Middlesex Water Co.	543,787	42,780
	Atmos Energy Corp.	4,277,327	479,360		Clearway Energy Inc. Class A	1,249,501	37,385
	Evergy Inc.	6,974,290	438,892		Unitil Corp.	502,176	25,792
	Alliant Energy Corp.	7,629,292	421,213		York Water Co.	433,004	19,476
	Essential Utilities Inc NiSource Inc.		342,776	*	Harsco Corp.	2,563,153	16,122
	Vistra Corp.	12,320,434 12,113,266	337,826 281,028		Excelerate	2,000,.00	.0,.22
	Pinnacle West Capita		201,020		Energy Inc. Class A	635,447	15,918
	Corp.	3,428,826	260,728	*	Heritage-Crystal		
	OGE Energy Corp.	6,071,822	240,141		Clean Inc.	487,171	15,823
	UGI Corp.	6,372,594	236,232		Artesian Resources	0.40.005	44.505
	NRG Energy Inc.	6,996,145	222,617	* 1	Corp. Class A	248,665	14,567
*	Clean Harbors Inc.	1,558,741	177,884	*,1	NuScale Power Corp.	1,294,240	13,279
	National Fuel Gas Co	. 2,776,317	175,741		Aris Water Solution Inc.		
	IDACORP Inc.	1,539,427	166,027		Class A	797,758	11,496
*	Sunrun Inc.	6,141,032	147,508	*,1	Vertex Energy Inc.	1,808,451	11,212
*	Evoqua Water			*,1	Altus Power Inc.	, ,	,
	Technologies Corp.	3,700,358	146,534		Class A	1,153,700	7,522
	New Jersey	0.001.011	145 447		RGC Resources Inc.	297,109	6,551
*	Resources Corp. Stericycle Inc.	2,931,211	145,447		Genie Energy Ltd.		
	Hawaiian Electric	2,812,255	140,303		Class B	626,553	6,479
	Industries Inc.	3,342,412	139,880	*	Pure Cycle Corp.	599,533	6,283
	Black Hills Corp.	1,982,721	139,465		Global Water	420.064	E 710
	a series	, , !	,		Resources Inc.	429,961	5,710

		Shares	Market Value* (\$000)
		Silaies	(\$000)
*	Quest Resource		
	Holding Corp.	558,617	3,413
*,1	Cadiz Inc.	819,649	2,049
*,1	Aqua Metals Inc.	1,524,663	1,906
	Via Renewables Inc.		
	Class A	344,223	1,759
*	Perma-Fix		
	Environmental		
	Services Inc.	325,244	1,148
*	Advanced Emissions		
	Solutions Inc.	440,948	1,071
*	Charah Solutions Inc.	43,176	233
*,1	Stronghold Digital		
	Mining Inc. Class A	398,400	191
		_	39,754,103
Total	Common Stocks		
	t \$643,671,180)	1	,144,316,873
Prefe	erred Stock (0.0%)		
	Air T Funding Pfd.,		
	8.000%, 6/7/24		
	(Cost \$36)	1,727	36
Tem		•	36
	oorary Cash Investmer	nts (0.9%)	36
Mon	porary Cash Investmer ey Market Fund (0.9%)	nts (0.9%)	36
	porary Cash Investmer ey Market Fund (0.9%) Vanguard Market	nts (0.9%)	36
Mon	oorary Cash Investmer ey Market Fund (0.9%) Vanguard Market Liquidity Fund,	nts (0.9%)	36
Mon	corary Cash Investmer ey Market Fund (0.9%) Vanguard Market Liquidity Fund, 4.334%	nts (0.9%)	
Mon	oorary Cash Investmer ey Market Fund (0.9%) Vanguard Market Liquidity Fund,	nts (0.9%)	10,588,790
Mone 3,4	oorary Cash Investmer ey Market Fund (0.9%) Vanguard Market Liquidity Fund, 4.334% (Cost \$10,586,135) 1 Investments (100.2%)	nts (0.9%) 05,898,486	
Mone 3,4	ey Market Fund (0.9%) Vanguard Market Liquidity Fund, 4.334% (Cost \$10,586,135) 1	nts (0.9%) 05,898,486	
Mon 3,4	porary Cash Investmer ey Market Fund (0.9%) Vanguard Market Liquidity Fund, 4.334% (Cost \$10,586,135) 1 Investments (100.2%) \$654,257,351)	nts (0.9%) 05,898,486	10,588,790
Mone 3,4 Total (Cost	oorary Cash Investmer ey Market Fund (0.9%) Vanguard Market Liquidity Fund, 4.334% (Cost \$10,586,135) 1 Investments (100.2%) t \$654,257,351) r Assets and	nts (0.9%) 05,898,486	10,588,790
Mono 3,4 Total (Cost Othe Liabi	porary Cash Investmer ey Market Fund (0.9%) Vanguard Market Liquidity Fund, 4.334% (Cost \$10,586,135) 1 Investments (100.2%) \$654,257,351)	nts (0.9%) 05,898,486	10,588,790

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 \$2,776,937,000.
- 2 Security value determined using significant unobservable inputs.
- 3 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 \$3,130,152,000 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	4,453	394,291	(9,075)
E-mini S&P 500 Index	March 2023	37,805	7,298,255	(177,510)
E-mini S&P Mid-Cap 400 Index	March 2023	240	58,623	(1,058)
				(187,643)

Over-the-Counter Total Return Swaps

			Notional	Floating Interest Rate Received	Value and Unrealized	Value and Unrealized
	Termination		Amount	(Paid)1	Appreciation	(Depreciation)
Reference Entity	Date	Counterparty	(\$000)	(%)	(\$000)	(\$000)
ACI Worldwide Inc.	8/31/23	BANA	1,306	(4.515)	126	
ACI Worldwide Inc.	8/31/23	BANA	1,568	(4.515)	152	
ACI Worldwide Inc.	8/31/23	BANA	1,400	(4.515)	136	_
DXC Technology Co.	8/31/23	BANA	5,934	(4.515)	_	(655)
Global Payments Inc.	8/31/23	BANA	8,951	(4.749)	_	(8)
Global Payments Inc.	8/31/23	BANA	13,950	(4.727)	_	(41)
Global Payments Inc.	8/31/23	BANA	13,695	(4.707)	213	_
Goldman Sachs Group Inc.	8/30/24	BANA	243,275	(4.715)	_	(26,288)
Goldman Sachs Group Inc.	8/30/24	BANA	66,032	(4.715)	_	(7,135)
Goldman Sachs Group Inc.	8/30/24	BANA	19,308	(4.715)	_	(2,086)
Lockheed Martin Corp.	8/31/23	BANA	41,241	(4.115)	230	_
Lockheed Martin Corp.	8/31/23	BANA	43,667	(4.115)	243	_
Paycor HCM Inc.	1/31/24	CITNA	5,432	(4.277)	_	(549)
State Street Corp.	8/30/24	BANA	205,150	(4.715)	_	(4,560)
State Street Corp.	8/30/24	BANA	9,560	(4.715)	_	(213)
State Street Corp.	8/30/24	BANA	9,560	(4.715)	_	(213)
VICI Properties Inc.	8/31/23	BANA	162,450	(4.665)	_	(7,304)
Virtu Financial Inc. Class A	8/31/23	BANA	1,087	(4.515)	_	(79)
Virtu Financial Inc. Class A	8/31/23	BANA	510	(4.515)		(37)
Visa Inc. Class A	8/31/23	BANA	48,825	(4.015)		(2,135)
					1,100	(51,303)

¹ 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. CITNA—Citibank, N.A.

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 ¹	
Unaffiliated Issuers (Cost \$643,671,216)	1,144,316,909
Affiliated Issuers (Cost \$10,586,135)	10,588,790
Total Investments in Securities	1,154,905,699
Investment in Vanguard	44,075
Cash	104,849
Cash Collateral Pledged—Futures Contracts	426,640
Cash Collateral Pledged—Over-the-Counter Swap Contracts	49,910
Receivables for Investment Securities Sold	24,827
Receivables for Accrued Income	1,074,581
Receivables for Capital Shares Issued	762,690
Unrealized Appreciation—Over-the-Counter Swap Contracts	1,100
Total Assets	1,157,394,371
Liabilities	
Payables for Investment Securities Purchased	1,039,534
Collateral for Securities on Loan	3,130,152
Payables for Capital Shares Redeemed	210,418
Payables for Distributions	13
Payables to Vanguard	14,719
Variation Margin Payable—Futures Contracts	21,749
Unrealized Depreciation—Over-the-Counter Swap Contracts	51,303
Total Liabilities	4,467,888
Net Assets	1,152,926,483

¹ Includes \$2,776,937,000 of securities on loan.

Statement of Assets and Liabilities (continued)

(\$000s, except shares, footnotes, and per-share amounts) Amount Paid-in Capital 678,721,162 Total Distributable Earnings (Loss) 474,205,321 Net Assets 1,152,926,483 Investor Shares—Net Assets 4Applicable to 197,756,979 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 18,409,235 Net Asset Value Per Share—Investor Shares \$93.09 ETF Shares—Net Assets 4Applicable to 1,365,109,194 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 261,083,828 Net Asset Value Per Share—ETF Shares \$191.25 Admiral Shares—Net Assets 4Applicable to 2,948,262,764 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 274,488,864 Net Asset Value Per Share—Admiral Shares \$93.10 Institutional Shares—Net Assets 4Applicable to 716,859,646 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 66,751,142 Net Asset Value Per Share—Institutional Shares \$93.12 Institutional Plus Shares—Net Assets 4Applicable to 2,794,942,329 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 488,092,664 Net Asset Value Per Share—Institutional Plus Shares \$174.63 Institutiona	At December 31, 2022, net assets consisted of:	
Total Distributable Earnings (Loss) A74,205,321 Net Assets 1,152,926,483 Investor Shares—Net Assets Applicable to 197,756,979 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) ETF Shares—Net Assets Applicable to 1,365,109,194 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) ETF Shares—Net Assets Applicable to 1,365,109,194 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) Admiral Shares—Net Assets Applicable to 2,948,262,764 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 274,488,864 Net Asset Value Per Share—Admiral Shares \$93.10 Institutional Shares—Net Assets Applicable to 716,859,646 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) Ret Asset Value Per Share—Institutional Shares \$93.12 Institutional Plus Shares—Net Assets Applicable to 2,794,942,329 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) Asset Value Per Share—Institutional Plus Shares \$93.12 Institutional Plus Shares—Net Assets Applicable to 2,794,942,329 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 488,092,664 Net Asset Value Per Share—Institutional Plus Shares \$174.63 Institutional Select Shares—Net Assets Applicable to 240,652,808 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) Asset Value Per Share—Institutional Plus Shares \$174.63	(\$000s, except shares, footnotes, and per-share amounts)	Amount
Net Assets 1,152,926,483 Investor Shares—Net Assets Applicable to 197,756,979 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 18,409,235 Net Asset Value Per Share—Investor Shares \$93.09 ETF Shares—Net Assets Applicable to 1,365,109,194 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 261,083,828 Net Asset Value Per Share—ETF Shares \$191.25 Admiral Shares—Net Assets Applicable to 2,948,262,764 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 274,488,864 Net Asset Value Per Share—Admiral Shares \$93.10 Institutional Shares—Net Assets Applicable to 716,859,646 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 66,751,142 Net Asset Value Per Share—Institutional Shares \$93.12 Institutional Plus Shares—Net Assets Applicable to 2,794,942,329 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 488,092,664 Net Asset Value Per Share—Institutional Plus Shares \$174.63 Institutional Select Shares—Net Assets Applicable to 240,652,808 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 488,092,664 Net Asset Value Per Share—Institutional Plus Shares \$174.63	Paid-in Capital	678,721,162
Investor Shares—Net Assets Applicable to 197,756,979 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) It Asset Value Per Share—Investor Shares \$93.09 ETF Shares—Net Assets Applicable to 1,365,109,194 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 261,083,828 Net Asset Value Per Share—ETF Shares \$191.25 Admiral Shares—Net Assets Applicable to 2,948,262,764 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 274,488,864 Net Asset Value Per Share—Admiral Shares \$93.10 Institutional Shares—Net Assets Applicable to 716,859,646 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 66,751,142 Net Asset Value Per Share—Institutional Shares \$93.12 Institutional Plus Shares—Net Assets Applicable to 2,794,942,329 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 488,092,664 Net Asset Value Per Share—Institutional Plus Shares \$174,63 Institutional Select Shares—Net Assets Applicable to 240,652,808 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 488,092,664 Institutional Select Shares—Net Assets Applicable to 240,652,808 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 488,092,664 Institutional Select Shares—Net Assets Applicable to 240,652,808 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 44,100,750	Total Distributable Earnings (Loss)	474,205,321
Applicable to 197,756,979 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) Net Asset Value Per Share—Investor Shares \$93.09 ETF Shares—Net Assets Applicable to 1,365,109,194 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) Net Asset Value Per Share—ETF Shares \$191.25 Admiral Shares—Net Assets Applicable to 2,948,262,764 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 274,488,864 Net Asset Value Per Share—Admiral Shares \$93.10 Institutional Shares—Net Assets Applicable to 716,859,646 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 66,751,142 Net Asset Value Per Share—Institutional Shares \$93.12 Institutional Plus Shares—Net Assets Applicable to 2,794,942,329 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 488,092,664 Net Asset Value Per Share—Institutional Plus Shares \$174.63 Institutional Select Shares—Net Assets Applicable to 2,794,942,329 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 488,092,664 Net Asset Value Per Share—Institutional Plus Shares \$174.63	Net Assets	1,152,926,483
Applicable to 197,756,979 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) Net Asset Value Per Share—Investor Shares \$93.09 ETF Shares—Net Assets Applicable to 1,365,109,194 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) Net Asset Value Per Share—ETF Shares \$191.25 Admiral Shares—Net Assets Applicable to 2,948,262,764 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 274,488,864 Net Asset Value Per Share—Admiral Shares \$93.10 Institutional Shares—Net Assets Applicable to 716,859,646 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 66,751,142 Net Asset Value Per Share—Institutional Shares \$93.12 Institutional Plus Shares—Net Assets Applicable to 2,794,942,329 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 488,092,664 Net Asset Value Per Share—Institutional Plus Shares \$174.63 Institutional Select Shares—Net Assets Applicable to 2,794,942,329 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 488,092,664 Net Asset Value Per Share—Institutional Plus Shares \$174.63		
beneficial interest (unlimited authorization) 18,409,235 Net Asset Value Per Share—Investor Shares \$93.09 ETF Shares—Net Assets 40,003,000 Applicable to 1,365,109,194 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 261,083,828 Net Asset Value Per Share—ETF Shares \$191.25 Admiral Shares—Net Assets 40,001 par value shares of beneficial interest (unlimited authorization) 274,488,864 Net Asset Value Per Share—Admiral Shares \$93.10 Institutional Shares—Net Assets 40,751,142 Net Asset Value Per Share—Institutional Shares \$93.12 Institutional Plus Shares—Net Assets 48,092,664 Applicable to 2,794,942,329 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 488,092,664 Net Asset Value Per Share—Institutional Plus Shares \$174.63 Institutional Select Shares—Net Assets 44,100,750 Applicable to 240,652,808 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 44,100,750	Investor Shares—Net Assets	
ETF Shares—Net Assets Applicable to 1,365,109,194 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) Net Asset Value Per Share—ETF Shares \$191.25 Admiral Shares—Net Assets Applicable to 2,948,262,764 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 274,488,864 Net Asset Value Per Share—Admiral Shares \$93.10 Institutional Shares—Net Assets Applicable to 716,859,646 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 66,751,142 Net Asset Value Per Share—Institutional Shares \$93.12 Institutional Plus Shares—Net Assets Applicable to 2,794,942,329 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 488,092,664 Net Asset Value Per Share—Institutional Plus Shares \$174.63 Institutional Select Shares—Net Assets Applicable to 240,652,808 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 44,100,750		18,409,235
Applicable to 1,365,109,194 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) Net Asset Value Per Share—ETF Shares \$191.25 Admiral Shares—Net Assets Applicable to 2,948,262,764 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) Part Asset Value Per Share—Admiral Shares \$93.10 Institutional Shares—Net Assets Applicable to 716,859,646 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) Ret Asset Value Per Share—Institutional Shares \$93.12 Institutional Plus Shares—Net Assets Applicable to 2,794,942,329 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) Asset Value Per Share—Institutional Plus Shares Applicable to 2,794,942,329 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) Asset Value Per Share—Institutional Plus Shares \$174.63 Institutional Select Shares—Net Assets Applicable to 240,652,808 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 44,100,750	Net Asset Value Per Share—Investor Shares	\$93.09
Applicable to 1,365,109,194 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) Net Asset Value Per Share—ETF Shares \$191.25 Admiral Shares—Net Assets Applicable to 2,948,262,764 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) Part Asset Value Per Share—Admiral Shares \$93.10 Institutional Shares—Net Assets Applicable to 716,859,646 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) Ret Asset Value Per Share—Institutional Shares \$93.12 Institutional Plus Shares—Net Assets Applicable to 2,794,942,329 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) Asset Value Per Share—Institutional Plus Shares Applicable to 2,794,942,329 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) Asset Value Per Share—Institutional Plus Shares \$174.63 Institutional Select Shares—Net Assets Applicable to 240,652,808 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 44,100,750		
beneficial interest (unlimited authorization) Ret Asset Value Per Share—ETF Shares \$191.25 Admiral Shares—Net Assets Applicable to 2,948,262,764 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) Ret Asset Value Per Share—Admiral Shares \$93.10 Institutional Shares—Net Assets Applicable to 716,859,646 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) Ret Asset Value Per Share—Institutional Shares \$93.12 Institutional Plus Shares—Net Assets Applicable to 2,794,942,329 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) Asset Value Per Share—Institutional Plus Shares \$93.12 Institutional Plus Shares—Net Assets Applicable to 2,794,942,329 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) Asset Value Per Share—Institutional Plus Shares \$174.63 Institutional Select Shares—Net Assets Applicable to 240,652,808 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 44,100,750	ETF Shares—Net Assets	
Admiral Shares—Net Assets Applicable to 2,948,262,764 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) Institutional Shares—Net Assets Applicable to 716,859,646 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) Asset Value Per Share—Admiral Shares Applicable to 716,859,646 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) Asset Value Per Share—Institutional Shares Applicable to 2,794,942,329 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) Asset Value Per Share—Institutional Plus Shares Applicable to 2,794,942,329 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) Asset Value Per Share—Institutional Plus Shares \$174.63 Institutional Select Shares—Net Assets Applicable to 240,652,808 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 44,100,750		261.083.828
Applicable to 2,948,262,764 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) Net Asset Value Per Share—Admiral Shares \$93.10 Institutional Shares—Net Assets Applicable to 716,859,646 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) Net Asset Value Per Share—Institutional Shares \$93.12 Institutional Plus Shares—Net Assets Applicable to 2,794,942,329 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) Net Asset Value Per Share—Institutional Plus Shares \$174.63 Institutional Select Shares—Net Assets Applicable to 240,652,808 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 44,100,750		
Applicable to 2,948,262,764 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) Net Asset Value Per Share—Admiral Shares \$93.10 Institutional Shares—Net Assets Applicable to 716,859,646 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) Net Asset Value Per Share—Institutional Shares \$93.12 Institutional Plus Shares—Net Assets Applicable to 2,794,942,329 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) Net Asset Value Per Share—Institutional Plus Shares \$174.63 Institutional Select Shares—Net Assets Applicable to 240,652,808 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 44,100,750		<u> </u>
beneficial interest (unlimited authorization) Net Asset Value Per Share—Admiral Shares \$93.10 Institutional Shares—Net Assets Applicable to 716,859,646 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) Net Asset Value Per Share—Institutional Shares \$93.12 Institutional Plus Shares—Net Assets Applicable to 2,794,942,329 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) Net Asset Value Per Share—Institutional Plus Shares \$174.63 Institutional Select Shares—Net Assets Applicable to 240,652,808 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 44,100,750	Admiral Shares – Net Assets	
Institutional Shares—Net Assets Applicable to 716,859,646 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) Net Asset Value Per Share—Institutional Shares \$93.12 Institutional Plus Shares—Net Assets Applicable to 2,794,942,329 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) Net Asset Value Per Share—Institutional Plus Shares \$174.63 Institutional Select Shares—Net Assets Applicable to 240,652,808 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 44,100,750		274,488,864
Applicable to 716,859,646 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) Net Asset Value Per Share—Institutional Shares \$93.12 Institutional Plus Shares—Net Assets Applicable to 2,794,942,329 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) Net Asset Value Per Share—Institutional Plus Shares \$174.63 Institutional Select Shares—Net Assets Applicable to 240,652,808 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 44,100,750	Net Asset Value Per Share—Admiral Shares	\$93.10
Applicable to 716,859,646 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) Net Asset Value Per Share—Institutional Shares \$93.12 Institutional Plus Shares—Net Assets Applicable to 2,794,942,329 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) Net Asset Value Per Share—Institutional Plus Shares \$174.63 Institutional Select Shares—Net Assets Applicable to 240,652,808 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 44,100,750		
beneficial interest (unlimited authorization) 66,751,142 Net Asset Value Per Share—Institutional Shares \$93.12 Institutional Plus Shares—Net Assets Applicable to 2,794,942,329 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 488,092,664 Net Asset Value Per Share—Institutional Plus Shares \$174.63 Institutional Select Shares—Net Assets Applicable to 240,652,808 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 44,100,750	Institutional Shares—Net Assets	
Institutional Plus Shares—Net Assets Applicable to 2,794,942,329 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) Net Asset Value Per Share—Institutional Plus Shares \$174.63 Institutional Select Shares—Net Assets Applicable to 240,652,808 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 44,100,750		66,751,142
Applicable to 2,794,942,329 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) Net Asset Value Per Share—Institutional Plus Shares \$174.63 Institutional Select Shares—Net Assets Applicable to 240,652,808 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 44,100,750	Net Asset Value Per Share—Institutional Shares	\$93.12
Applicable to 2,794,942,329 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) Net Asset Value Per Share—Institutional Plus Shares \$174.63 Institutional Select Shares—Net Assets Applicable to 240,652,808 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 44,100,750		
beneficial interest (unlimited authorization) 488,092,664 Net Asset Value Per Share—Institutional Plus Shares \$174.63 Institutional Select Shares—Net Assets Applicable to 240,652,808 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 44,100,750	Institutional Plus Shares—Net Assets	
Institutional Select Shares—Net Assets Applicable to 240,652,808 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 44,100,750		488,092,664
Applicable to 240,652,808 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 44,100,750	Net Asset Value Per Share—Institutional Plus Shares	\$174.63
Applicable to 240,652,808 outstanding \$.001 par value shares of beneficial interest (unlimited authorization) 44,100,750		
beneficial interest (unlimited authorization) 44,100,750	Institutional Select Shares – Net Assets	
Net Asset Value Per Share—Institutional Select Shares \$183.25		44,100,750
	Net Asset Value Per Share—Institutional Select Shares	\$183.25

Statement of Operations

December 31, 2022 (\$000)Investment Income Income Dividends—Unaffiliated Issuers1 18.676.000 Dividends—Affiliated Issuers Interest—Unaffiliated Issuers 3.395 Interest—Affiliated Issuers 104 414 Securities Lending-Net 247,749 19,031,558 Total Income Expenses The Vanguard Group—Note B Investment Advisory Services 23,150 Management and Administrative—Investor Shares 40.508 Management and Administrative—ETF Shares 63.071 Management and Administrative—Admiral Shares 101.568 Management and Administrative—Institutional Shares 21.299 Management and Administrative—Institutional Plus Shares 70.619 Management and Administrative—Institutional Select Shares 3,905 Marketing and Distribution—Investor Shares 1,876 Marketing and Distribution—ETF Shares 9.890 Marketing and Distribution—Admiral Shares 10,123 Marketing and Distribution—Institutional Shares 3.051 Marketing and Distribution—Institutional Plus Shares 10.121 Marketing and Distribution—Institutional Select Shares Custodian Fees 1,961 238 Auditing Fees Shareholders' Reports-Investor Shares 82 Shareholders' Reports—ETF Shares 2,979 Shareholders' Reports—Admiral Shares 1,274 Shareholders' Reports—Institutional Shares 653 Shareholders' Reports—Institutional Plus Shares 2,097 Shareholders' Reports—Institutional Select Shares Trustees' Fees and Expenses 449 Other Expenses 131 Total Expenses 369,051 Expenses Paid Indirectly (313)Net Expenses 368 738 Net Investment Income 18.662.820 Realized Net Gain (Loss) Capital Gain Distributions Received—Affiliated Issuers 23

Year Ended

Statement of Operations (continued)

	Year Ended
	December 31, 2022
	(\$000)
Investment Securities Sold—Unaffiliated Issuers ²	6,536,956
Investment Securities Sold—Affiliated Issuers	(4,131)
Futures Contracts	(889,682)
Swap Contracts	21,069
Realized Net Gain (Loss)	5,664,235
Change in Unrealized Appreciation (Depreciation)	
Investment Securities—Unaffiliated Issuers	(294,093,642)
Investment Securities—Affiliated Issuers	3,468
Futures Contracts	(288,691)
Swap Contracts	(86,101)
Change in Unrealized Appreciation (Depreciation)	(294,464,966)
Net Increase (Decrease) in Net Assets Resulting from Operations	(270,137,911)

¹ Dividends are net of foreign withholding taxes of \$1,329,000.

² Includes \$19,138,772,000 of net gain (loss) resulting from in-kind redemptions.

Statement of Changes in Net Assets

	Year Ende	ed December 31,
	2022 (\$000)	2021 (\$000)
Increase (Decrease) in Net Assets		
Operations		
Net Investment Income	18,662,820	16,173,398
Realized Net Gain (Loss)	5,664,235	25,405,131
Change in Unrealized Appreciation (Depreciation)	(294,464,966)	238,495,999
Net Increase (Decrease) in Net Assets Resulting from Operations	(270,137,911)	280,074,528
Distributions		
Investor Shares	(284,794)	(1,676,741)
ETF Shares	(4,187,918)	(3,403,927)
Admiral Shares	(4,513,747)	(4,103,816)
Institutional Shares	(1,107,318)	(2,969,898)
Institutional Plus Shares	(7,915,118)	(3,559,330)
Institutional Select Shares	(713,492)	(647,913)
Total Distributions	(18,722,387)	(16,361,625)
Capital Share Transactions		
Investor Shares	(104,300,286)	(51,574,306)
ETF Shares	25,952,138	44,386,309
Admiral Shares	4,099,576	1,876,942
Institutional Shares	(155,304,571)	22,144,976
Institutional Plus Shares	295,703,507	14,016,596
Institutional Select Shares	2,223,565	(1,862,868)
Net Increase (Decrease) from Capital Share Transactions	68,373,929	28,987,649
Total Increase (Decrease)	(220,486,369)	292,700,552
Net Assets		
Beginning of Period	1,373,412,852	1,080,712,300
End of Period	1,152,926,483	1,373,412,852

Financial Highlights

Investor Shares

For a Share Outstanding			Year Ended December		
Throughout Each Period	2022	2021	2020	2019	2018
Net Asset Value, Beginning of Period	\$117.53	\$94.71	\$79.66	\$62.08	\$66.70
Investment Operations					
Net Investment Income ¹	1.335	1.284	1.284	1.279	1.275
Capital Gain Distributions Received	.0001,2	.0001,2	_	_	_
Net Realized and Unrealized Gain (Loss) on Investments	(24.344)	22.837	15.026	17.634	(4.703)
Total from Investment Operations	(23.009)	24.121	16.310	18.913	(3.428)
Distributions					
Dividends from Net Investment Income	(1.431)	(1.301)	(1.260)	(1.333)	(1.192)
Distributions from Realized Capital Gains	_	_	_	_	_
Total Distributions	(1.431)	(1.301)	(1.260)	(1.333)	(1.192)
Net Asset Value, End of Period	\$93.09	\$117.53	\$94.71	\$79.66	\$62.08
Total Return ³	-19.60%	25.59%	20.87%	30.65%	-5.26%
Ratios/Supplemental Data					
Net Assets, End of Period (Millions)	\$18,409	\$133,977	\$153,845	\$139,686	\$121,266
Ratio of Total Expenses to Average Net Assets	0.14%4	0.14%	0.14%	0.14%	0.14%
Ratio of Net Investment Income to Average Net Assets	1.28%	1.20%	1.62%	1.78%	1.86%
Portfolio Turnover Rate ⁵	3%	4%	8%	4%	3%

¹ Calculated based on average shares outstanding.

² Distribution was less than \$.001 per share.

³ 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.

⁴ The ratio of expenses to average net assets for the period net of reduction from custody fee offset arrangements was 0.14%.

⁵ 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 Year Ended December 31					cember 31,
Throughout Each Period	2022	2021	2020	2019	2018
Net Asset Value, Beginning of Period	\$241.49	\$194.61	\$163.70	\$127.56	\$137.06
Investment Operations					
Net Investment Income ¹	3.191	2.912	2.831	2.809	2.781
Capital Gain Distributions Received	.0001,2	.0001,2	_	_	_
Net Realized and Unrealized Gain (Loss) on Investments	(50.248)	46.898	30.848	36.236	(9.676)
Total from Investment Operations	(47.057)	49.810	33.679	39.045	(6.895)
Distributions					
Dividends from Net Investment Income	(3.183)	(2.930)	(2.769)	(2.905)	(2.605)
Distributions from Realized Capital Gains	_	_	_	_	_
Total Distributions	(3.183)	(2.930)	(2.769)	(2.905)	(2.605)
Net Asset Value, End of Period	\$191.25	\$241.49	\$194.61	\$163.70	\$127.56
Total Return	-19.50%	25.72%	20.95%	30.80%	-5.13%
Ratios/Supplemental Data					
Net Assets, End of Period (Millions)	\$261,084	\$299,088	\$202,075	\$138,067	\$94,809
Ratio of Total Expenses to Average Net Assets	0.03%3	0.03%	0.03%	0.03%	0.03%
Ratio of Net Investment Income to Average Net Assets	1.55%	1.31%	1.73%	1.89%	1.97%
Portfolio Turnover Rate ⁴	3%	4%	8%	4%	3%

¹ Calculated based on average shares outstanding.

² Distribution was less than \$.001 per share.

³ The ratio of expenses to average net assets for the period net of reduction from custody fee offset arrangements was 0.03%.

⁴ 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					cember 31,
Throughout Each Period	2022	2021	2020	2019	2018
Net Asset Value, Beginning of Period	\$117.56	\$94.74	\$79.69	\$62.09	\$66.72
Investment Operations					
Net Investment Income ¹	1.540	1.402	1.364	1.360	1.344
Capital Gain Distributions Received	.0001,2	.0001,2	_	_	_
Net Realized and Unrealized Gain (Loss) on Investments	(24.460)	22.833	15.025	17.646	(4.711)
Total from Investment Operations	(22.920)	24.235	16.389	19.006	(3.367)
Distributions					
Dividends from Net Investment Income	(1.540)	(1.415)	(1.339)	(1.406)	(1.263)
Distributions from Realized Capital Gains	_	_	_	_	_
Total Distributions	(1.540)	(1.415)	(1.339)	(1.406)	(1.263)
Net Asset Value, End of Period	\$93.10	\$117.56	\$94.74	\$79.69	\$62.09
Total Return ³	-19.53%	25.71%	20.99%	30.80%	-5.17%
Ratios/Supplemental Data					
Net Assets, End of Period (Millions)	\$274,489	\$341,733	\$273,622	\$252,536	\$185,102
Ratio of Total Expenses to Average Net Assets	0.04%4	0.04%	0.04%	0.04%	0.04%
Ratio of Net Investment Income to Average Net Assets	1.54%	1.30%	1.72%	1.88%	1.96%
Portfolio Turnover Rate ⁵	3%	4%	8%	4%	3%

¹ Calculated based on average shares outstanding.

² Distribution was less than \$.001 per share.

³ 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.

⁴ The ratio of expenses to average net assets for the period net of reduction from custody fee offset arrangements was 0.04%.

⁵ 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 Shares

For a Share Outstanding	Year Ended December 31,				
Throughout Each Period	2022	2021	2020	2019	2018
Net Asset Value, Beginning of Period	\$117.58	\$94.75	\$79.70	\$62.10	\$66.73
Investment Operations					
Net Investment Income ¹	1.497	1.416	1.374	1.365	1.354
Capital Gain Distributions Received	.0001,2	.0001,2	_	_	_
Net Realized and Unrealized Gain (Loss) on Investments	(24.407)	22.841	15.024	17.649	(4.715)
Total from Investment Operations	(22.910)	24.257	16.398	19.014	(3.361)
Distributions					
Dividends from Net Investment Income	(1.550)	(1.427)	(1.348)	(1.414)	(1.269)
Distributions from Realized Capital Gains	_	_	_	_	_
Total Distributions	(1.550)	(1.427)	(1.348)	(1.414)	(1.269)
Net Asset Value, End of Period	\$93.12	\$117.58	\$94.75	\$79.70	\$62.10
Total Return	-19.51%	25.73%	21.00%	30.81%	-5.16%
Ratios/Supplemental Data					
Net Assets, End of Period (Millions)	\$66,751	\$249,282	\$180,586	\$152,716	\$115,115
Ratio of Total Expenses to Average Net Assets	0.03%³	0.03%	0.03%	0.03%	0.03%
Ratio of Net Investment Income to Average Net Assets	1.46%	1.31%	1.73%	1.89%	1.97%
Portfolio Turnover Rate ⁴	3%	4%	8%	4%	3%

¹ Calculated based on average shares outstanding.

² Distribution was less than \$.001 per share.

³ The ratio of expenses to average net assets for the period net of reduction from custody fee offset arrangements was 0.03%.

⁴ 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	\$220.49	\$177.69	\$149.47	\$116.46	\$125.14
Investment Operations					
Net Investment Income ¹	2.960	2.672	2.591	2.575	2.555
Capital Gain Distributions Received	.0001,2	.0001,2	_	_	_
Net Realized and Unrealized Gain (Loss) on Investments	(45.906)	42.823	28.172	33.100	(8.842)
Total from Investment Operations	(42.946)	45.495	30.763	35.675	(6.287)
Distributions					
Dividends from Net Investment Income	(2.914)	(2.695)	(2.543)	(2.665)	(2.393)
Distributions from Realized Capital Gains	_	_	_	_	_
Total Distributions	(2.914)	(2.695)	(2.543)	(2.665)	(2.393)
Net Asset Value, End of Period	\$174.63	\$220.49	\$177.69	\$149.47	\$116.46
Total Return	-19.51%	25.74%	21.02%	30.82%	-5.15%
Ratios/Supplemental Data					
Net Assets, End of Period (Millions)	\$488,093	\$296,554	\$226,288	\$188,188	\$135,641
Ratio of Total Expenses to Average Net Assets	0.02%3	0.02%	0.02%	0.02%	0.02%
Ratio of Net Investment Income to Average Net Assets	1.59%	1.32%	1.74%	1.90%	1.98%
Portfolio Turnover Rate ⁴	3%	4%	8%	4%	3%

¹ Calculated based on average shares outstanding.

² Distribution was less than \$.001 per share.

³ The ratio of expenses to average net assets for the period net of reduction from custody fee offset arrangements was 0.02%.

⁴ 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 Select Shares

For a Share Outstanding Year Ended December					cember 31,
Throughout Each Period	2022	2021	2020	2019	2018
Net Asset Value, Beginning of Period	\$231.36	\$186.45	\$156.83	\$122.20	\$131.31
Investment Operations					
Net Investment Income ¹	3.093	2.821	2.772	2.709	2.704
Capital Gain Distributions Received	.0001,2	.0001,2	_	_	_
Net Realized and Unrealized Gain (Loss) on Investments	(48.139)	44.937	29.532	34.731	(9.290)
Total from Investment Operations	(45.046)	47.758	32.304	37.440	(6.586)
Distributions					
Dividends from Net Investment Income	(3.064)	(2.848)	(2.684)	(2.810)	(2.524)
Distributions from Realized Capital Gains	_	_	_	_	_
Total Distributions	(3.064)	(2.848)	(2.684)	(2.810)	(2.524)
Net Asset Value, End of Period	\$183.25	\$231.36	\$186.45	\$156.83	\$122.20
Total Return	-19.50%	25.75%	21.03%	30.84%	-5.14%
Ratios/Supplemental Data					
Net Assets, End of Period (Millions)	\$44,101	\$52,780	\$44,296	\$26,431	\$20,262
Ratio of Total Expenses to Average Net Assets	0.01%3	0.01%	0.01%	0.01%	0.01%
Ratio of Net Investment Income to Average Net Assets	1.57%	1.33%	1.76%	1.91%	1.99%
Portfolio Turnover Rate ⁴	3%	4%	8%	4%	3%

¹ Calculated based on average shares outstanding.

² Distribution was less than \$.001 per share.

³ The ratio of expenses to average net assets for the period net of reduction from custody fee offset arrangements was 0.01%.

⁴ 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 Total Stock 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 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 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, but it did make one loan to Vanguard 500 Index Fund in the amount of \$1,000,000 to test the operational readiness of the Interfund Lending Program process. The loan was outstanding for one business day at an annualized interest rate of 2.72%, and the related interest income of less than \$500 is recorded in the Statement of Operations. At December 31, 2022, the fund had no loans outstanding.

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 \$44,075,000, representing less than 0.01% of the fund's net assets and 17.63% 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 \$313,000 (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	1,144,305,105	673	11,095	1,144,316,873
Preferred Stock	36	_	_	36
Temporary Cash Investments	10,588,790	_	_	10,588,790
Total	1,154,893,931	673	11,095	1,154,905,699
Derivative Financial Instruments				
Assets				
Swap Contracts	_	1,100	_	1,100
Liabilities				
Futures Contracts ¹	187,643	_	_	187,643
Swap Contracts	_	51,303	_	51,303
Total	187,643	51,303	_	238,946

¹ 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	19,139,428
Total Distributable Earnings (Loss)	(19,139,428)

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; 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	142,762
Undistributed Long-Term Gains	
Capital Loss Carryforwards	(23,659,027)
Qualified Late-Year Losses	_
Net Unrealized Gains (Losses)	497,721,586

The tax character of distributions paid was as follows:

	Year Ended	December 31,
	2022 Amount (\$000)	2021 Amount (\$000)
Ordinary Income*	18,722,387	16,361,625
Long-Term Capital Gains	_	_
Total	18,722,387	16,361,625

^{*} 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	657,184,113
Gross Unrealized Appreciation	564,431,072
Gross Unrealized Depreciation	(66,709,486)
Net Unrealized Appreciation (Depreciation)	497,721,586

F. During the year ended December 31, 2022, the fund purchased \$130,916,726,000 of investment securities and sold \$66,622,586,000 of investment securities, other than temporary cash investments. Purchases and sales include \$43,208,304,000 and \$25,411,060,000, 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 \$1,774,251,000 and sales were \$1,803,772,000, resulting in net realized loss of \$732,926,000; 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	ecember 31,
		2022		2021
	Amount (\$000)	Shares (000)	Amount (\$000)	Shares (000)
Investor Shares				
Issued	3,914,517	36,574	496,590	4,799
Issued in Lieu of Cash Distributions	284,794	2,978	1,676,741	15,550
Redeemed	(108,499,597)	(981,740)	(53,747,637)	(504,787)
Net Increase (Decrease)—Investor Shares	(104,300,286)	(942,188)	(51,574,306)	(484,438)
ETF Shares				
Issued	50,798,717	249,707	69,095,066	308,260
Issued in Lieu of Cash Distributions	_	_	_	_
Redeemed	(24,846,579)	(123,100)	(24,708,757)	(108,100)
Net Increase (Decrease)—ETF Shares	25,952,138	126,607	44,386,309	200,160
Admiral Shares				
Issued	31,898,755	317,329	37,025,893	347,554
Issued in Lieu of Cash Distributions	3,762,619	39,309	3,424,237	31,536
Redeemed	(31,561,798)	(315,336)	(38,573,188)	(360,387)
Net Increase (Decrease)—Admiral Shares	4,099,576	41,302	1,876,942	18,703
Institutional Shares				
Issued	9,249,702	92,024	44,920,917	425,435
Issued in Lieu of Cash Distributions	903,770	9,433	2,799,517	25,726
Redeemed	(165,458,043)	(1,504,789)	(25,575,458)	(236,871)
Net Increase (Decrease)—Institutional Shares	(155,304,571)	(1,403,332)	22,144,976	214,290
Institutional Plus Shares				
Issued	320,489,415	1,582,401	27,268,129	137,022
Issued in Lieu of Cash Distributions	7,850,659	43,753	3,498,917	17,171
Redeemed	(32,636,567)	(176,178)	(16,750,450)	(82,739)
Net Increase (Decrease)—Institutional Plus Shares	295,703,507	1,449,976	14,016,596	71,454
Institutional Select Shares				
Issued	6,711,633	34,640	5,779,241	28,270
Issued in Lieu of Cash Distributions	713,492	3,786	647,913	3,034
Redeemed	(5,201,560)	(25,901)	(8,290,022)	(40,759)
Net Increase (Decrease)—Institutional Select Shares	2,223,565	12,525	(1,862,868)	(9,455)

H. Certain of the fund's investments are in companies that are considered to be affiliated companies of the fund because the fund owns more than 5% of the outstanding voting securities of the company or the issuer is another member of The Vanguard Group. Transactions during the period in securities of these companies were as follows:

			Current Period Transactions					
	Dec. 31, 2021	Purchases	Proceeds from Securities	Realized Net Gain	Change in Unrealized		Capital Gain Distributions	Dec. 31, 2022
	Market Value (\$000)	at Cost (\$000)	Sold (\$000)	(Loss) (\$000)	App. (Dep.) (\$000)	Income (\$000)	Received (\$000)	Market Value (\$000)
1895 Bancorp of Wisconsin Inc.	NA¹	3,706	262	(35)	(297)	_	_	NA ²
Asure Software Inc.	NA ¹	4,449	5,246	(2,085)	1,458	_	_	NA ²
Vanguard Market Liquidity Fund	8,612,238	NΑ3	NA³	(2,011)	2,307	104,414	23	10,588,790
Total	8,612,238	8,155	5,508	(4,131)	3,468	104,414	23	10,588,790

¹ Not applicable—at December 31, 2021, the issuer was not an affiliated company of the fund.

² Not applicable—at December 31, 2022, the security was still held, but the issuer was no longer an affiliated company of the fund.

³ Not applicable—purchases and sales are for temporary cash investment purposes.

I. 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 Total Stock Market Index Fund

Opinion on the Financial Statements

We have audited the accompanying statement of assets and liabilities, including the schedule of investments, of Vanguard Total Stock Market Index Fund (one of the funds constituting Vanguard Index Funds, referred to hereafter as the "Fund") as of December 31, 2022, the related statement of operations for the year ended December 31, 2022, the statement 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 the Fund as of December 31, 2022, the results of its operations for the year then ended, the changes in its net assets for each of the two years in the period ended December 31, 2022 and 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 Opinion

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

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

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

/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)

For corporate shareholders, 90.9%, or if subsequently determined to be different, the maximum percentage allowable by law, of ordinary income (dividend income plus short-term gains, if any) for the fiscal year qualified for the dividends-received deduction.

The fund hereby designates \$17,559,727,000, or if subsequently determined to be different, the maximum amount allowable by law, as qualified dividend income for individual shareholders for the fiscal year.

The fund hereby designates \$30,390,000, or if subsequently determined to be different, the maximum amount allowable by law, of interest earned from obligations of the U.S. government which is generally exempt from state income tax.

The fund hereby designates \$835,018,000, or if subsequently determined to be different, the maximum amount allowable by law, of qualified business income for individual shareholders for the fiscal year.

The CRSP US Total Market Index (the "Index") is a product of the Center for Research in Security Prices, LLC ("CRSP"), an affiliate of the University of Chicago ("University"), and has been licensed for use by Vanguard. CRSP® is a trademark of CRSP; and has been licensed by CRSP for use for certain purposes by Vanquard. The Vanquard Total Stock Market Index Fund is not sponsored, endorsed, sold or promoted by CRSP or University. Neither CRSP nor University makes any representation or warranty, express or implied, to the owners of the Vanguard Total Stock Market Index Fund or any member of the public regarding the advisability of investing in securities generally or in Vanguard Total Stock Market Index Fund particularly or the ability of the Index to track general market performance. The Index is determined, composed and calculated without regard to Vanguard or the Vanguard Total Stock Market Index Fund, Neither CRSP nor the University has any obligation to take the needs of Vanguard or the owners of Vanguard Total Stock Market Index Fund into consideration in determining, composing or calculating the Index. Neither CRSP nor the University is responsible for and has not participated in the determination of the prices and amount of Vanguard Total Stock Market Index Fund or the timing of the issuance or sale of Vanguard Total Stock Market Index Fund or in the determination or calculation of the equation by which Vanguard Total Stock Market Index Fund is to be converted into cash, surrendered or redeemed, as the case may be. Neither CRSP nor the University has any obligation or liability in connection with the administration, marketing or trading of Vanguard Total Stock Market Index Fund. There is no assurance that investment products based on the Index will accurately track index performance or provide positive investment returns. Neither CRSP nor the University is an investment advisor. Inclusion of a security within an index is not a recommendation by CRSP or the University to buy, sell, or hold such security, nor is it considered to be investment advice.

NEITHER CRSP NOR THE UNIVERSITY GUARANTEE THE ADEQUACY, ACCURACY, TIMELINESS AND/OR THE COMPLETENESS OF THE INDEX OR ANY DATA RELATED THERETO OR ANY COMMUNICATION, INCLUDING BUT NOT LIMITED TO, ORAL OR WRITTEN COMMUNICATION (INCLUDING ELECTRONIC COMMUNICATIONS) WITH RESPECT THERETO. NEITHER CRSP NOR THE UNIVERSITY SHALL BE SUBJECT TO ANY DAMAGES OR LIABILITY FOR ANY ERRORS, OMISSIONS, OR DELAYS THEREIN. NEITHER CRSP NOR THE UNIVERSITY MAKES ANY EXPRESS OR IMPLIED WARRANTIES, AND CRSP AND THE UNIVERSITY EXPRESSLY DISCLAIM ALL WARRANTIES, OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE OR AS TO RESULTS TO BE OBTAINED BY VANGUARD, OWNERS OF THE VANGUARD TOTAL STOCK MARKET INDEX FUND, OR ANY OTHER PERSON OR ENTITY FROM THE USE OF THE INDEX OR WITH RESPECT TO ANY DATA RELATED THERETO. WITHOUT LIMITING ANY OF THE FOREGOING, IN NO EVENT WHATSOEVER SHALL CRSP OR THE UNIVERSITY BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, PUNITIVE, OR CONSEQUENTIAL DAMAGES INCLUDING BUT NOT LIMITED TO, LOSS OF PROFITS, TRADING LOSSES, LOST TIME OR GOODWILL, EVEN IF IT HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, WHETHER IN CONTRACT, TORT, STRICT LIABILITY, OR OTHERWISE. THERE ARE NO THIRD-PARTY BENEFICIARIES OF ANY AGREEMENTS OR ARRANGEMENTS BETWEEN CRSP AND VANGUARD, OTHER THAN THE LICENSORS, IF ANY, OF CRSP.

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 Trustee¹

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.

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

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 darketing 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

Vanguard

Connect with Vanguard® > vanguard.com

Fund Information > 800-662-7447

Direct Investor Account Services > 800-662-2739

Institutional Investor Services > 800-523-1036

Text Telephone for People Who Are Deaf or Hard of Hearing > 800-749-7273

This material may be used in conjunction with the offering of shares of any Vanguard fund only if preceded or accompanied by the fund's current prospectus.

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.

Source for Bloomberg indexes: Bloomberg Index Services Limited. Copyright 2023, Bloomberg. All rights reserved.

> © 2023 The Vanguard Group, Inc. All rights reserved. U.S. Patent No. 6,879,964. Vanguard Marketing Corporation, Distributor.