



LANE COUNTY
457 Deferred Compensation and
401(a) Defined Contribution Plans
September 30, 2022 Performance Report

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Section 1



THE NOMINALLY OBSCURE MOLODOVSKY EFFECT

The Molodovsky Effect (ME) is typically not the first topic of conversation at financial planning sessions though the subject is relevant at this economic juncture. Stemming from Nicholas Molodovsky's 1953 article in the Financial Analysts Journal, the ME is the observation that price-to-earnings ratios of stocks (P/E) tend to increase in economic downturns. The supporting intuition is simple: if earnings drop more than prices during a recession, a P/E ratio may increase, leaving stocks more expensive than they started. Logical as this sounds, it may counter other market intuition, such as that stocks tend to fare well when they are cheap but they also fare well when the economy is recovering. How could stocks start out expensive but still provide above-average returns? Either way, is the ME still valid?¹

The disconnect notwithstanding, the ME observations have continued to hold accurate. To wit, US Large Cap Stocks have tended to provide above-average returns when the P/E was below-average. This same category of stocks has also averaged 9.9% for the first two years coming out of recessions since 1953 versus their average of 7.3% for the entire period. As for the ME's real-time accuracy, the P/E of the S&P Large Cap Composite Index has increased in nine of the eleven recessions from 1953 to present by an average of 12% (by 52% if you include the great financial crisis). What reconciles these seemingly conflicting tendencies? Likely the combination of improving sentiment bolstered by reduced borrowing costs found at the end of recessions. Earnings have tended to grow well above their long-term averages for the two years coming out of recessions while long-term interest rates tend to stay relatively low. The resulting combination of improving stock fundamentals which compare more favorably to bond yields can serve as a market tailwind. It is also worth considering that the stock market, as a forward-looking mechanism, tends to move ahead of improvement in the broader economy. As such, the P/E ratio tends to bottom before the end of a recession even though earnings have not, meaning that some of the ratio's increase relative to the ME may reflect increasing optimism.²

If the United States is currently in recession, the ME will get another chance to demonstrate its validity. Regardless of this, the market and economic history orbiting the ME is of greater practical insight to investors than the phenomenon itself; namely that market timing around recessions is a challenging endeavor. There is no rule around how long it takes for the National Bureau of Economic Research to declare a recession (it once took twenty-one months) or that it must be declared before it is over. Timing one's market exposure around such announcements could lead to selling after recessionary fears have been priced in or re-entering the market long after a rebound. Moving this subject to the present, the S&P 500 Index returned -23.9% for the first three quarters of 2022. Whether or not the stock market will end the year lower or if a recession will be declared by then, investors may note that valuations ended the third quarter at levels more in line with longer-term averages. Investors with an adequate time horizon and risk-tolerance may see this as reason enough to look beyond near-term recessionary fears.³

¹ Sources: "A Theory of Price Earnings Ratios", Financial Analysts Journal, 1953; P/E ratio refers to the price of the S&P Composite Index divided by the trailing twelve months of nominal earnings, derived from data from Robert J. Shiller.

² Sources: Robert J. Shiller S&P Data. St. Louis Federal Reserve, Standard and Poors, Morningstar.

³ Sources: National Bureau of Economic Research, JP Morgan.

GLOBAL ECONOMIC LANDSCAPE

- In October 2022, the International Monetary Fund lowered its global growth expectations for 2023 to 2.7%, down from 2.9% in July; its lowest since 2001. Within this was the expectation that over a third of the global economy will see two quarters of contraction while larger ones such as the United States, China, and the European Union will stall. These growth scenarios include a battery of negative scenarios including persistently high inflation, aggressive monetary policies, energy shortages in Europe, the war in Ukraine, and financial market fragility.⁴
- Treasury yields continued their climb throughout the third quarter of 2022 with the 10-year rising from 2.98% to 3.83%. The Federal Reserve's release of its economic projections on September 21, which forecast a federal funds rate of 4.6% for 2023, added fuel to the run-up. In contrast, market-based indicators of rate expectations (such as the fed fund futures) are pricing in moderately lower rates than what the Fed is expecting for the next several quarters.⁵
- US job openings fell by over one million in August 2022, their largest drop since April 2020 and eliciting speculation that the labor market may indeed be cooling. In agreement with economists' views that job openings may continue to decrease, some equity sector analysts have reported that companies may be closing out non-essential job openings, reducing the demand for labor and contrasting the Fed's view that an "extraordinarily" tight job market may tolerate additional rate increases.⁶
- September's inflation reading showed that the core Consumer Price Index increased 6.6% for the trailing year, its highest reading since 1982. Despite this high reading, forward-looking inflation expectations remain muted. Five-year inflation expectations implied from the US Treasury market ended the quarter at 2.14%, down from 2022's high of 3.59%. Part of the explanation for this divergence may be because corporations currently sit on high inventory levels. The extent to which this overstock crimps corporate demand and induces write-downs and discounted selling may work against inflation.⁷

GLOBAL FINANCIAL MARKETS

- Bond markets continued their collective slump, with the Bloomberg US and Global Aggregate Bond indexes returning -4.75% and -6.94% respectively for the third quarter. In partial offset, rising yields work against duration, leaving bonds marginally less sensitive to future rate increases. The durations of the US and international bond markets are 7% and 11% lower than they stood on September 30, 2021.⁸
- Going into the third quarter, a variety of leading indicators continue to bode ominously for the US stock market. A composite of consumer confidence, housing starts, manufacturing, and credit spreads, all of which tend to lead earnings growth in the S&P 500 suggest a year-over-

⁴ Source: International Monetary Fund, World Economic Outlook, "Countering the Cost-of-Living Crisis", October 2022.

⁵ Sources: Federal Reserve "Summary of Economic Projections", September 2022, and Morgan Stanley's "GIC Weekly" October 10, 2022.

⁶ Sources: Bloomberg "US Job Openings Drop to 10.1 Million, Lowest Since June 2021", October 4, 2022, and Morgan Stanley's "Job Gains Start to Fade", October 4, 2022.

⁷ Source: Morgan Stanley's "Monthly Perspectives", October 2022, Morgan Stanley's "Daily Positioning", October 13, 2022, and data from St. Louis Federal Reserve.

⁸ Source: JP Morgan's "Guide to the Markets", September 30, 2022.

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year earnings decline. Similarly, measures of corporate profitability such as the difference between final demand and wages as well as producer versus consumer prices imply that operating margins are likely to decline in the coming quarters.⁹

- ▶ Thirty-year mortgage rates ended the third quarter at 6.70%, rising by 1.00% over the three-month period to their highest level since 2007. Mortgage-backed securities ended the quarter trading at spreads well above their longer-term averages. The extent to which these valuations attract institutional investors may offset the upward price pressure stemming from monetary policy.¹⁰
- ▶ Exchange rates continued to exhibit extreme movements through the third quarter, with currency volatility at its highest in ten years, the US Dollar at its highest valuation in two decades, and the British Pound approaching a near all-time low. Many investors continue to be net long the US Dollar and decelerating global growth coupled with a still-tightening Federal Reserve may provide a further tailwind for the greenback.¹¹

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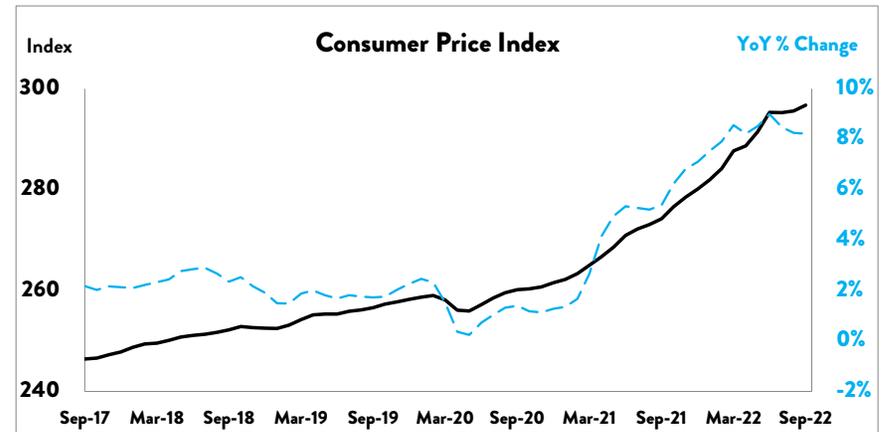
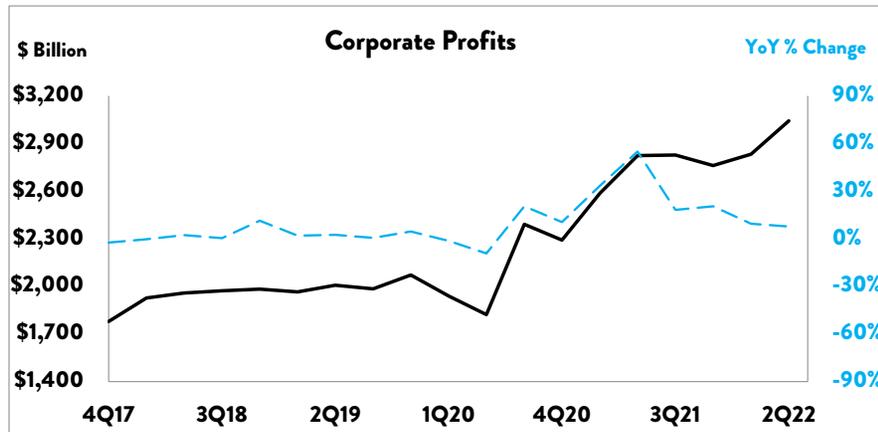
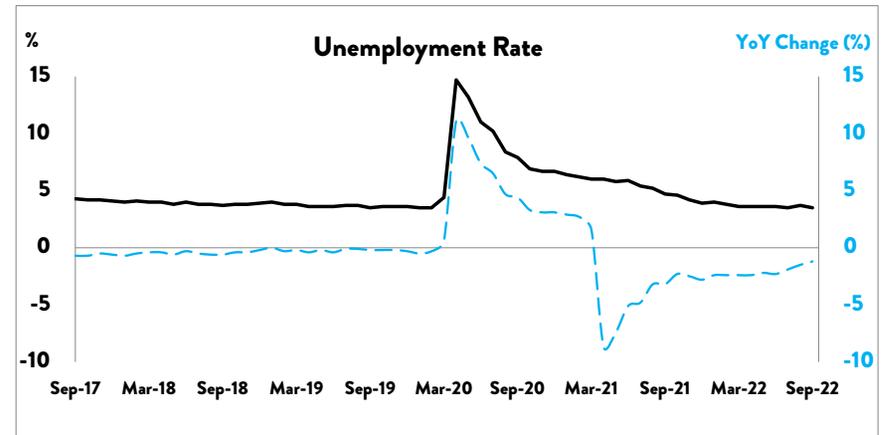
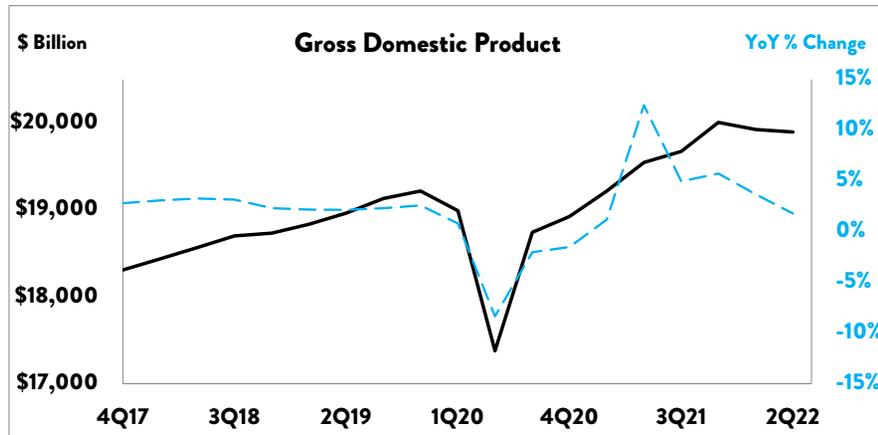
⁹ Source: Morgan Stanley's "Monthly Perspectives", October 2022.

¹⁰ Sources: Data from St. Louis Federal Reserve, and Morgan Stanley's, "GIC Weekly", October 3, 2022.

¹¹ Source: Morgan Stanley's "Global Insights", October 12, 2022.

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3Q2022 Economic Data



Key: — Economic Series - - - Year-Over-Year Change

Labor Market Statistics (Monthly)					
Category	Recent	5-Yr High	5-Yr Low	5-Yr Avg.	Date
Jobs Added/Lost Monthly	263,000	4,505,000	-20,493,000	100,100	Sep-22
Unemployment Rate	3.5%	14.7%	3.5%	4.9%	Sep-22
Median Unemployment Length (Weeks)	8.8	22.2	4.0	11.2	Sep-22
Average Hourly Earnings	\$32.46	\$32.46	\$26.49	\$29.14	Sep-22

Source: Federal Reserve Bank of St. Louis and Bureau of Labor Statistics

Other Prices and Indexes (Monthly)					
Category	Recent	5-Yr High	5-Yr Low	% Off Peak	Date
Gas: Price per Gallon	\$3.65	\$4.84	\$1.80	-24.6%	Sep-22
Spot Oil	\$84.26	\$114.84	\$16.55	-26.6%	Sep-22
Case-Shiller Home Price Index	314.8	316.2	201.0	56.6%*	Jul-22
Medical Care CPI	557.4	557.4	477.7	16.7%*	Sep-22

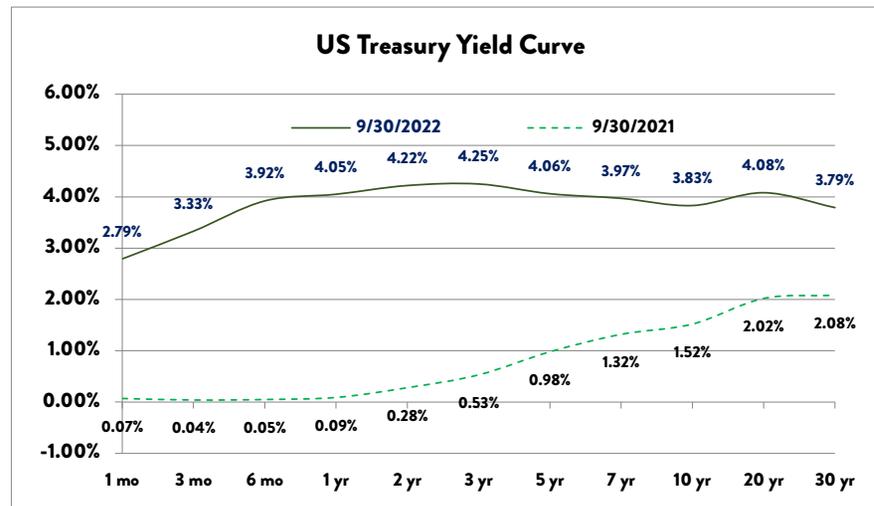
*% Off Low

Morningstar data as of 9/30/2022

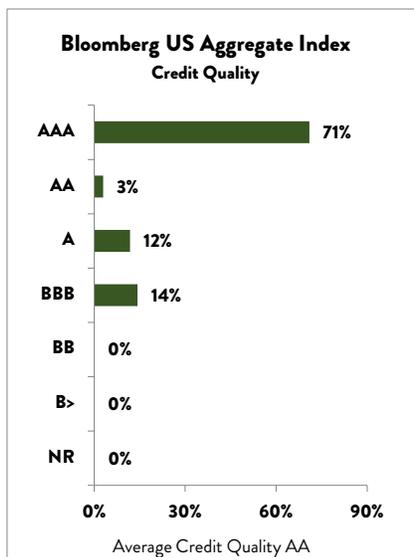
3Q2022 Bond Market Data

Index	QTR	YTD	1 yr.	3 yrs.	5 yrs.	10 yrs.
90-Day T-Bill	0.67%	1.02%	1.04%	0.61%	1.16%	0.69%
Bloomberg US Aggregate	-4.75%	-14.61%	-14.60%	-3.26%	-0.27%	0.89%
Bloomberg Short US Treasury	0.28%	0.13%	0.11%	0.54%	1.13%	0.72%
Bloomberg Int. US Treasury	-3.08%	-8.70%	-9.23%	-1.72%	0.17%	0.59%
Bloomberg Long US Treasury	-9.63%	-28.84%	-26.65%	-8.51%	-1.62%	0.59%
Bloomberg US TIPS	-5.14%	-13.61%	-11.57%	0.79%	1.95%	0.98%
Bloomberg US Credit	-4.95%	-18.07%	-17.89%	-3.61%	-0.05%	1.58%
Bloomberg US Mortgage-Backed	-5.35%	-13.66%	-13.98%	-3.67%	-0.92%	0.51%
Bloomberg US Asset-Backed	-1.34%	-5.06%	-5.61%	-0.24%	1.02%	1.17%
Bloomberg US 20-Yr Municipal	-4.38%	-15.44%	-14.43%	-2.51%	0.69%	2.22%
Bloomberg US High Yield	-0.65%	-14.74%	-14.14%	-0.45%	1.57%	3.94%
Bloomberg Global	-6.94%	-19.89%	-20.43%	-5.74%	-2.32%	-0.93%
Bloomberg International	-8.85%	-23.88%	-24.77%	-7.78%	-4.03%	-2.39%
Bloomberg Emerging Market	-4.06%	-20.50%	-20.92%	-5.26%	-1.56%	1.39%

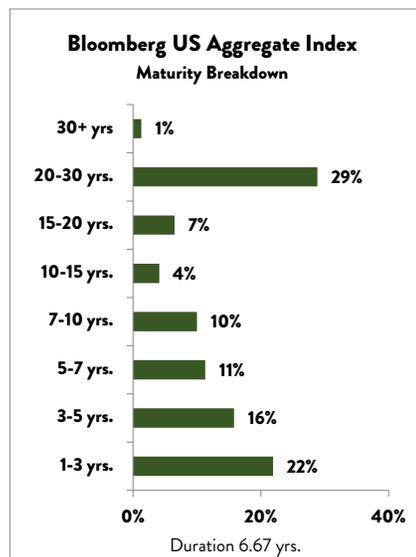
Source: Morningstar



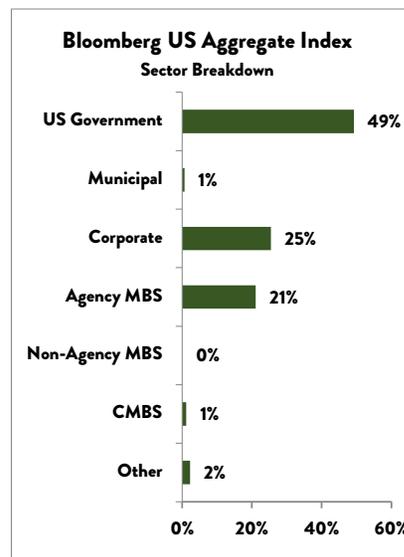
Source: Department of US Treasury



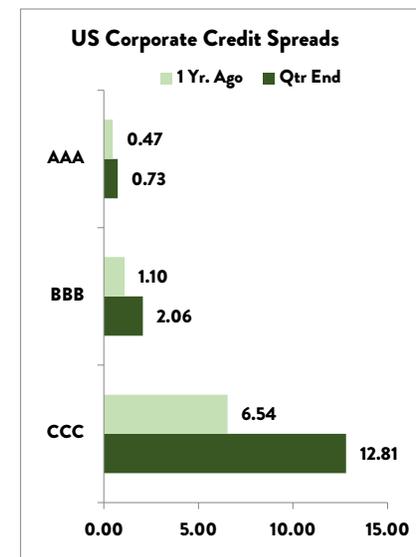
Source: Morningstar



Source: Morningstar



Source: Morningstar



Source: Federal Reserve / Bank of America

3Q2022 US Equity Market Data

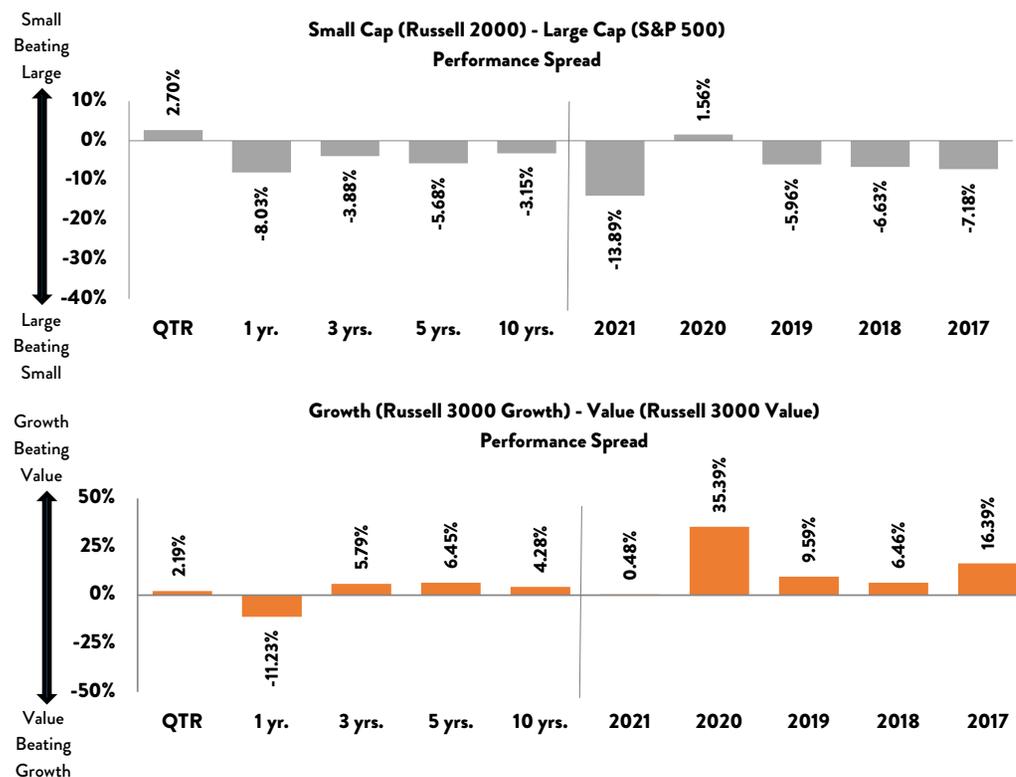
Sectors Weights/Returns (ranked by quarter performance)

	Wgt.	Sector	QTR	YTD	1 yr.
S&P 500 Index	12%	Consumer Discretionary	4.36%	-29.89%	-20.89%
	5%	Energy	2.35%	34.94%	45.70%
	11%	Financials	-3.10%	-21.25%	-17.65%
	8%	Industrials	-4.72%	-20.72%	-13.87%
	15%	Health Care	-5.18%	-13.08%	-3.37%
	3%	Utilities	-5.99%	-6.51%	5.58%
	26%	Information Technology	-6.21%	-31.44%	-20.00%
	7%	Consumer Staples	-6.62%	-11.83%	-0.09%
	3%	Materials	-7.13%	-23.74%	-12.15%
	3%	Real Estate	-11.03%	-28.85%	-16.37%
8%	Communication Services	-12.72%	-39.04%	-39.05%	
S&P Midcap 400 Index	5%	Energy	5.53%	23.70%	27.20%
	19%	Industrials	1.31%	-21.52%	-12.40%
	16%	Financials	0.54%	-11.51%	-5.29%
	4%	Consumer Staples	-1.92%	-11.07%	-4.47%
	12%	Information Technology	-2.15%	-27.28%	-21.28%
	14%	Consumer Discretionary	-2.90%	-30.87%	-27.99%
	2%	Communication Services	-3.60%	-23.68%	-25.77%
	10%	Health Care	-5.05%	-24.02%	-23.00%
	7%	Materials	-6.21%	-20.22%	-9.35%
	4%	Utilities	-9.61%	-10.55%	-0.60%
8%	Real Estate	-9.67%	-29.00%	-18.94%	
S&P Smallcap 600 Index	5%	Energy	-2.12%	22.78%	13.30%
	19%	Financials	-2.59%	-19.80%	-15.46%
	13%	Health Care	-4.04%	-26.68%	-27.95%
	6%	Materials	-4.10%	-15.78%	-10.58%
	13%	Consumer Discretionary	-4.20%	-34.92%	-32.49%
	16%	Industrials	-4.43%	-20.99%	-13.40%
	13%	Information Technology	-4.44%	-28.17%	-20.33%
	5%	Consumer Staples	-7.35%	-14.79%	-5.79%
	2%	Utilities	-8.47%	-12.86%	2.95%
	2%	Communication Services	-10.54%	-32.30%	-34.70%
8%	Real Estate	-14.51%	-35.32%	-29.66%	

Source: Morningstar

Index Performance Data

Index	QTR	YTD	1 yr.	Annualized		
				3 yrs.	5 yrs.	10 yrs.
S&P 500	-4.88%	-23.87%	-15.47%	8.16%	9.24%	11.70%
Russell 1000 Value	-5.62%	-17.75%	-11.36%	4.36%	5.29%	9.17%
Russell 1000 Growth	-3.60%	-30.66%	-22.59%	10.67%	12.17%	13.70%
Russell Mid Cap	-3.44%	-24.27%	-19.39%	5.19%	6.48%	10.30%
Russell Mid Cap Value	-4.93%	-20.36%	-13.56%	4.50%	4.76%	9.44%
Russell Mid Cap Growth	-0.65%	-31.45%	-29.50%	4.26%	7.62%	10.85%
Russell 2000	-2.19%	-25.10%	-23.50%	4.29%	3.55%	8.55%
Russell 2000 Value	-4.61%	-21.12%	-17.69%	4.72%	2.87%	7.94%
Russell 2000 Growth	0.24%	-29.28%	-29.27%	2.94%	3.60%	8.81%
Russell 3000	-4.46%	-24.62%	-17.63%	7.70%	8.62%	11.39%
DJ US Select REIT	-10.37%	-29.32%	-17.15%	-3.29%	1.95%	5.49%



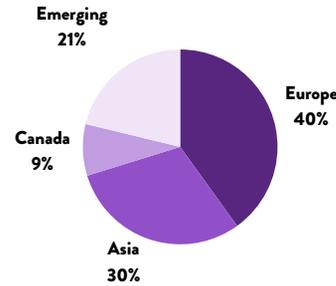
3Q2022 International Market Data

Index Performance Data (net)

Index (US\$)	QTR	YTD	1 yr.	3 yrs.	5 yrs.	10 yrs.
MSCI ACWI ex-US	-9.91%	-26.50%	-25.17%	-1.52%	-0.81%	3.01%
MSCI EAFE	-9.36%	-27.09%	-25.13%	-1.83%	-0.84%	3.67%
Europe	-10.15%	-28.83%	-24.80%	-1.72%	-1.24%	3.45%
United Kingdom	-10.76%	-18.65%	-14.08%	-1.73%	-1.06%	1.88%
Germany	-12.59%	-37.66%	-37.15%	-6.97%	-6.68%	1.25%
France	-8.88%	-29.07%	-24.03%	-1.45%	-0.36%	5.11%
Pacific	-8.09%	-23.80%	-25.87%	-2.15%	-0.16%	4.11%
Japan	-7.67%	-26.38%	-29.30%	-2.65%	-0.63%	4.84%
Hong Kong	-16.97%	-19.39%	-22.25%	-4.18%	-2.34%	3.60%
Australia	-6.74%	-18.09%	-16.37%	0.54%	2.40%	3.15%
Canada	-7.94%	-18.89%	-13.06%	4.12%	3.44%	3.00%
MSCI EM	-11.57%	-27.16%	-28.11%	-2.07%	-1.81%	1.05%
MSCI EM Latin America	3.61%	3.02%	0.24%	-3.39%	-2.64%	-2.28%
MSCI EM Asia	-14.03%	-28.82%	-29.51%	-0.81%	-1.07%	3.08%
MSCI EM Eur/Mid East	-2.60%	-36.13%	-38.07%	-7.42%	-3.51%	-3.54%
MSCI ACWI Value ex-US	-10.44%	-21.00%	-20.02%	-2.15%	-2.12%	1.87%
MSCI ACWI Growth ex-US	-9.37%	-31.84%	-30.22%	-1.38%	0.18%	3.95%
MSCI ACWI Sm Cap ex-US	-8.37%	-29.37%	-28.93%	0.38%	-0.56%	4.44%

Regional Exposure

MSCI ACWI ex-USA

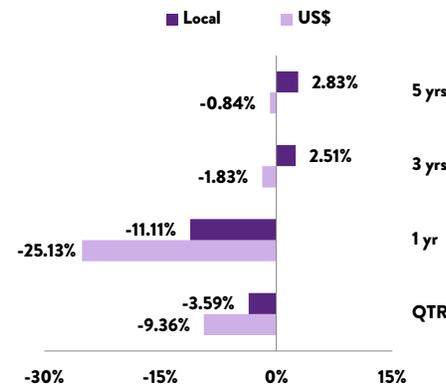


Top 10 Countries (MSCI AC World ex-USA)

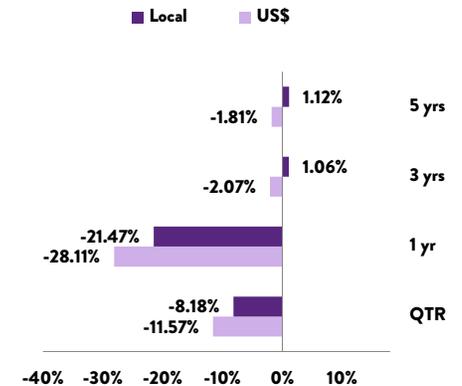
Japan	14%
UK	10%
China	9%
Canada	8%
France	7%
Switzerland	7%
Australia	5%
Germany	5%
India	4%
Taiwan	4%

Source: Morningstar

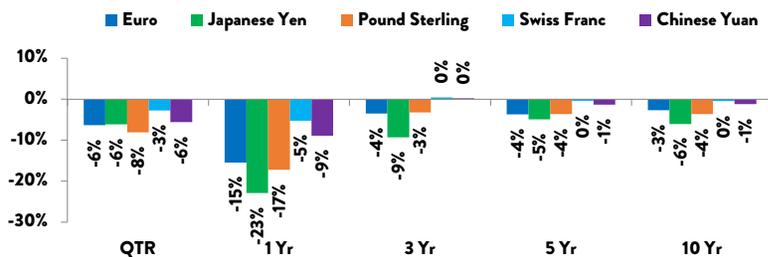
MSCI EAFE Index Return



MSCI Emerging Index Return



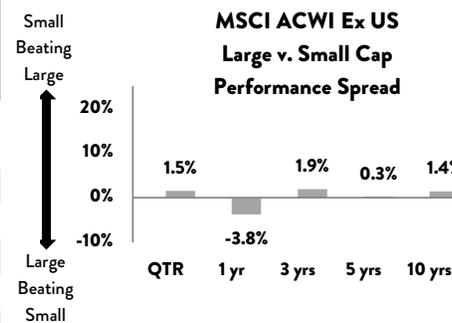
Foreign Currency v. US\$ Returns



Exchange Rates	QTR	2Q22	1Q22	4Q21	3Q21	2Q21
Japanese Yen	144.71	135.69	121.44	115.17	111.50	111.05
Euro	1.02	0.96	0.90	0.88	0.86	0.84
British Pound	0.90	0.82	0.76	0.74	0.74	0.72
Swiss Franc	0.98	0.96	0.92	0.91	0.93	0.93
Chinese Yuan	7.11	6.70	6.34	6.37	6.44	6.46

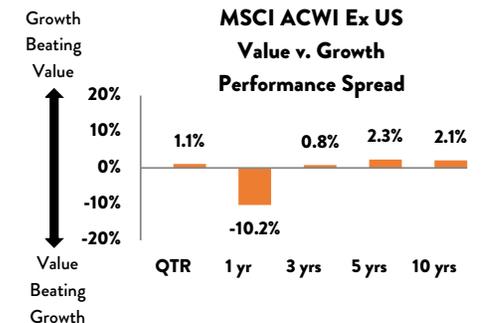
Source: Federal Reserve Bank of St. Louis

MSCI ACWI Ex US Large v. Small Cap Performance Spread



Performance Source: Morningstar

MSCI ACWI Ex US Value v. Growth Performance Spread



Historical Market Returns

Ranked by Performance

2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	YTD	3Q22
Emerging Markets 39.42%	US Bonds 5.24%	Emerging Markets 78.51%	Small Cap 26.85%	Core Real Estate 14.96%	Emerging Markets 18.22%	Small Cap 38.82%	Large Cap 13.68%	Core Real Estate 13.95%	Small Cap 21.30%	Emerging Markets 37.28%	Core Real Estate 7.36%	Large Cap 31.49%	Small Cap 19.96%	Large Cap 28.71%	Commod. 13.57%	Cash 0.67%
Intl 16.65%	Global Bonds 4.79%	High Yield 58.21%	Mid Cap 25.48%	TIPS 13.56%	Mid Cap 17.28%	Mid Cap 34.76%	Mid Cap 13.21%	Large Cap 1.38%	High Yield 17.12%	Intl 27.19%	Cash 1.69%	Mid Cap 30.54%	Large Cap 18.40%	Commod. 27.11%	Core Real Estate 12.40%	Core Real Estate 0.35%
Commod. 16.23%	Cash 1.39%	Intl 41.45%	Emerging Markets 18.88%	US Bonds 7.84%	Intl 16.83%	Large Cap 32.39%	Core Real Estate 11.44%	US Bonds 0.55%	Mid Cap 13.79%	Large Cap 21.83%	US Bonds 0.01%	Small Cap 25.52%	Emerging Markets 18.31%	Mid Cap 22.58%	Cash 1.02%	High Yield -0.65%
Core Real Estate 14.84%	TIPS -2.35%	Mid Cap 40.48%	Commod. 16.83%	Global Bonds 5.64%	Small Cap 16.35%	Intl 15.29%	US Bonds 5.97%	Cash 0.03%	Large Cap 11.95%	Mid Cap 18.52%	Global Bonds -1.20%	Intl 21.51%	Mid Cap 17.10%	Core Real Estate 21.06%	TIPS -13.61%	Small Cap -2.19%
TIPS 11.64%	Core Real Estate -10.70%	Small Cap 27.17%	Core Real Estate 15.26%	High Yield 4.98%	Large Cap 16.00%	Global Balanced 14.46%	Small Cap 4.89%	TIPS -1.43%	Commod. 11.76	Global Balanced 15.87%	TIPS -1.26%	Global Balanced 18.86%	Global Balanced 13.93%	Small Cap 14.82%	US Bonds -14.61%	Mid Cap -3.44%
Global Bonds 9.48%	Global Balanced -24.51%	Large Cap 26.46%	High Yield 15.12%	Large Cap 2.11%	High Yield 15.81%	Core Real Estate 12.95%	TIPS 3.64%	Global Balanced -1.45%	Emerging Markets 11.18%	Small Cap 14.65%	High Yield -2.08%	Emerging Markets 18.42%	TIPS 10.99%	Global Balanced 10.94%	High Yield -14.74%	Commod. -4.11%
Global Balanced 9.07%	High Yield -26.16%	Global Balanced 20.49%	Large Cap 15.06%	Cash 0.06%	Global Balanced 11.06%	High Yield 7.44%	Global Balanced 3.17%	Mid Cap -2.43%	Core Real Estate 7.76%	High Yield 7.50%	Large Cap -4.38%	High Yield 14.32%	Intl 10.65%	Intl 7.82%	Global Bonds -19.89%	US Bonds -4.75%
US Bonds 6.97%	Small Cap -33.79%	Commod. 18.91%	Intl 11.15%	Global Balanced -0.97%	Core Real Estate 9.76%	Cash 0.07%	High Yield 2.45%	Global Bonds -3.15%	Global Balanced 5.38%	Global Bonds 7.39%	Global Balanced -5.30%	US Bonds 8.72%	Global Bonds 9.20%	TIPS 5.96%	Global Balanced -22.23%	Large Cap -4.88%
Mid Cap 5.60%	Commod. -35.65%	TIPS 11.41%	Global Balanced 9.40%	Mid Cap -1.55%	TIPS 6.98%	US Bonds -2.02%	Global Bonds 0.59%	Small Cap -4.41%	TIPS 4.68%	Core Real Estate 6.66%	Mid Cap -9.06%	TIPS 8.43%	US Bonds 7.51%	High Yield 5.28%	Large Cap -23.87%	TIPS -5.14%
Large Cap 5.49%	Large Cap -37.00%	Global Bonds 6.93%	US Bonds 6.54%	Small Cap -4.18%	Global Bonds 4.32%	Global Bonds -2.60%	Cash 0.04%	High Yield -4.46%	Intl 4.50%	US Bonds 3.54%	Small Cap -11.01%	Commod. 7.69%	High Yield 7.11%	Cash 0.05%	Mid Cap -24.27%	Global Balanced -6.11%
Cash 4.44%	Mid Cap -41.46%	US Bonds 5.93%	TIPS 6.31%	Commod. -13.32%	US Bonds 4.21%	Emerging Markets -2.60%	Emerging Markets -2.18%	Intl -5.66%	US Bonds 2.65%	TIPS 3.01%	Commod. -11.25%	Global Bonds 6.84%	Cash 0.37%	US Bonds -1.54%	Small Cap -25.10%	Global Bonds -6.94%
High Yield 1.87%	Intl -45.53%	Cash 0.16%	Global Bonds 5.54%	Intl -13.71%	Cash 0.08%	TIPS -8.61%	Intl -3.86%	Emerging Markets -14.90%	Global Bonds 2.09%	Commod. 1.70%	Intl -14.20%	Core Real Estate 4.41%	Core Real Estate 0.35%	Emerging Markets -2.54%	Intl -26.50%	Intl -9.91%
Small Cap -1.57%	Emerging Markets -53.33%	Core Real Estate -30.40%	Cash 0.15%	Emerging Markets -18.42%	Commod. -1.06%	Commod. -9.52%	Commod. -17.00%	Commod. -24.60%	Cash 0.25%	Cash 0.71%	Emerging Markets -14.58%	Cash 2.30%	Commod. -3.12%	Global Bonds -4.71%	Emerging Markets -27.16%	Emerging Markets -11.57%

Global Balanced is composed of 60% MSCI World Stock Index, 35% BBgBarc Global Aggregate Bond Index, and 5% US 90-Day T-Bills.

Source: Morningstar; Core Real Estate Source: NCREIF

Section 2

LANE COUNTY

457 Deferred Compensation Plans

PLAN ASSET ALLOCATION

Third Quarter 2022

Fixed Income	Ticker	Assets	%
MissionSquare PLUS Fund R10	-	\$26,342,837	21.6%
Western Asset Core Plus Bond I	WACPX	\$2,938,173	2.4%
Vanguard Total Bond Market Index Adm	VBTLX	\$3,437,991	2.8%
PIMCO Real Return Instl	PRRIX	\$1,437,789	1.2%
American Beacon SiM High Yield Opps R5	SHOIX	\$1,262,095	1.0%
Total		\$35,418,884	29.1%

Large Cap	Ticker	Assets	%
American Beacon Large Cap Value R6	AALRX	\$3,037,851	2.5%
Parnassus Core Equity Instl	PRILX	\$2,358,159	1.9%
Vanguard Institutional Index Instl	VINIX	\$11,859,455	9.7%
T. Rowe Price Large Cap Growth I	TRLGX	\$9,077,187	7.4%
Total		\$26,332,653	21.6%

Mid Cap	Ticker	Assets	%
Allspring Special Mid Cap Value Fund	WFPRX	\$1,699,682	1.4%
Vanguard Mid Cap Index Adm	VIMAX	\$2,979,381	2.4%
JPMorgan Mid Cap Growth R6	JMGMX	\$607,435	0.5%
Total		\$5,286,498	4.3%

Small Cap	Ticker	Assets	%
Westwood SmallCap Instl	WHGSX	\$831,184	0.7%
Vanguard Small Cap Index Adm	VSMAX	\$3,044,860	2.5%
Artisan Small Cap Instl	APHSX	\$1,086,686	0.9%
Total		\$4,962,730	4.1%

International	Ticker	Assets	%
Dodge & Cox International Stock	DODFX	\$1,628,846	1.3%
Vanguard Total Intl Stock Index Adm	VTIAX	\$2,527,350	2.1%
American Funds EuroPacific Growth R6	REGRX	\$2,116,507	1.7%
Invesco Global Opports R6	OGIIX	\$1,215,877	1.0%
Total		\$7,488,580	6.1%

Asset Allocation	Ticker	Assets	%
Vanguard Target Retirement Income	VTINX	\$3,081,550	2.5%
Vanguard Target Retirement 2020	VTWNX	\$5,670,201	4.7%
Vanguard Target Retirement 2025	VTTVX	\$4,323,228	3.5%
Vanguard Target Retirement 2030	VTHRXX	\$7,471,942	6.1%
Vanguard Target Retirement 2035	VTTHX	\$1,562,824	1.3%
Vanguard Target Retirement 2040	VFORX	\$9,215,807	7.6%
Vanguard Target Retirement 2045	VTIVX	\$2,804,633	2.3%
Vanguard Target Retirement 2050	VVIFX	\$4,463,245	3.7%
Vanguard Target Retirement 2055	VFFVX	\$1,004,169	0.8%
Vanguard Target Retirement 2060	VTTSX	\$380,757	0.3%
Vanguard Target Retirement 2065	VLXVX	\$84,225	0.1%
Vanguard Target Retirement 2070	VSVNX	\$0	0.0%
Total		\$40,062,581	32.9%

Miscellaneous	Ticker	Assets	%
Self-Directed Brokerage	-	\$1,207,910	1.0%
Participant Loans	-	\$1,151,885	0.9%
Total		\$2,359,795	1.9%

TOTAL PLAN ASSETS

\$121,911,721

Administrative Account Balance

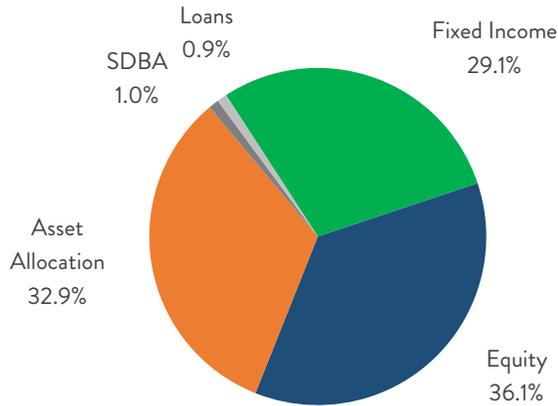
\$49,053

LANE COUNTY

457 Deferred Compensation Plans

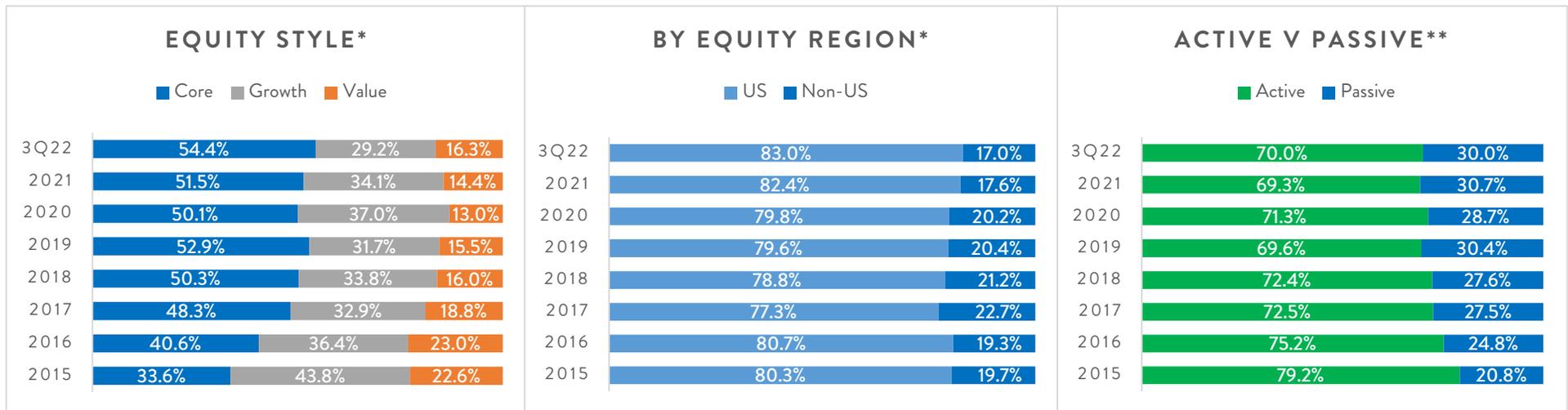
PLAN ASSET ALLOCATION

Third Quarter 2022



HISTORICAL PLAN ALLOCATION

Asset Class	3Q22	2021	2020	2019	2018	2017	2016	2015
Fixed Income	29.1%	25.0%	27.9%	29.5%	31.1%	28.9%	32.3%	32.3%
Large Cap	21.6%	24.9%	22.7%	22.8%	22.4%	22.8%	21.6%	22.7%
Mid Cap	4.3%	4.7%	4.1%	4.4%	4.4%	5.1%	5.6%	5.2%
Small Cap	4.1%	4.5%	5.2%	5.1%	4.9%	5.2%	4.9%	4.3%
International	6.1%	7.3%	8.1%	8.3%	8.5%	9.8%	7.6%	7.9%
Asset Allocation	32.9%	31.9%	30.2%	28.2%	26.8%	26.3%	26.2%	25.4%
SDBA	1.0%	0.9%	0.8%	0.6%	0.7%	0.7%	0.5%	0.8%
Loans	0.9%	0.8%	1.0%	1.1%	1.3%	1.2%	1.3%	1.3%



*Excludes Fixed Income, Asset Allocation, Brokerage, and Loan assets

**Excludes Asset Allocation, Brokerage, and Loan assets

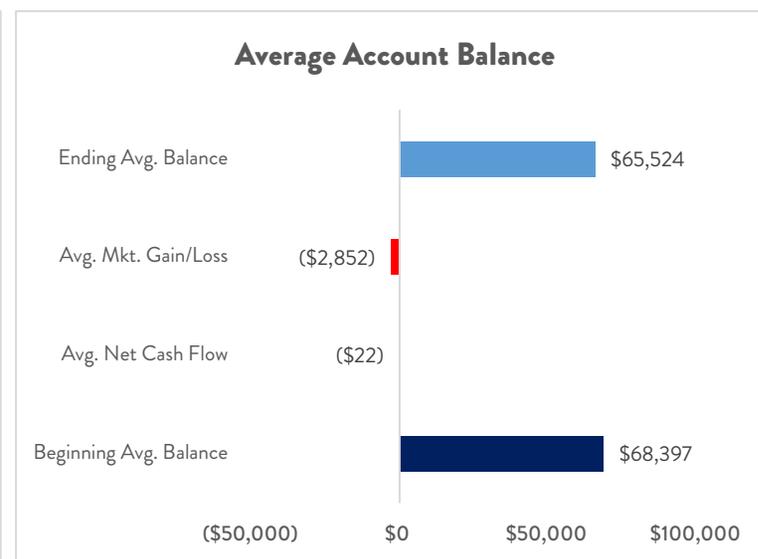
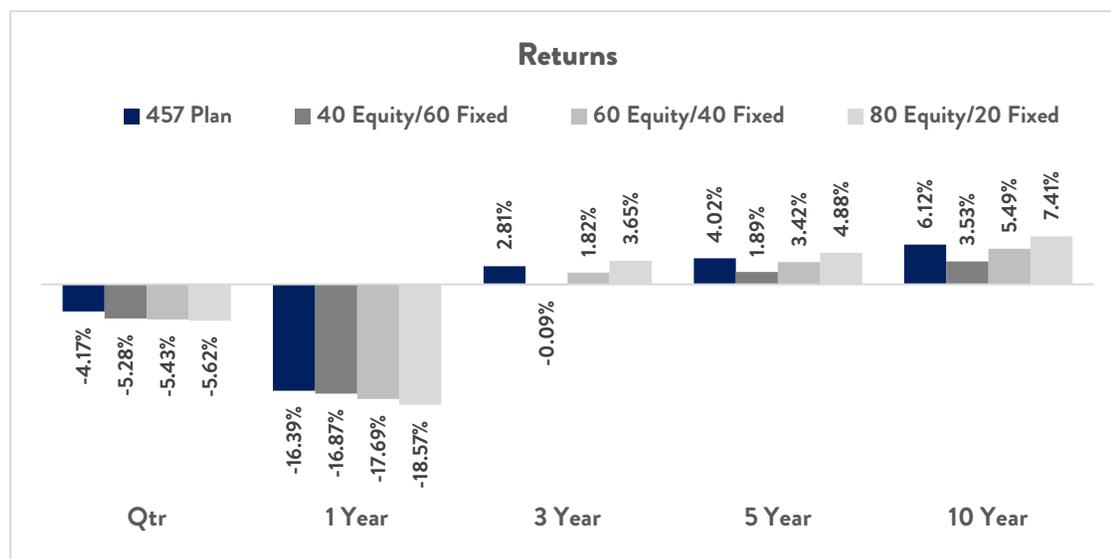
PLAN LEVEL CASH FLOWS

	Beginning Value	Cash Flow* (+)	Cash Flow (-)	Transfer	Market Gain/Loss	Ending Value
Fixed Income	\$36,937,462	\$763,314	(\$1,301,378)	(\$640,945)	(\$339,569)	\$35,418,884
Large Cap	\$27,628,027	\$359,529	(\$588,624)	\$135,966	(\$1,202,245)	\$26,332,653
Mid Cap	\$5,503,731	\$93,057	(\$15,483)	(\$67,538)	(\$227,269)	\$5,286,498
Small Cap	\$5,021,663	\$113,828	(\$23,914)	(\$54,406)	(\$94,441)	\$4,962,730
International	\$8,247,211	\$201,500	(\$93,762)	(\$33,641)	(\$832,728)	\$7,488,580
Asset Allocation	\$41,483,310	\$1,418,382	(\$967,372)	\$641,623	(\$2,513,362)	\$40,062,581
SDBA	\$1,235,152	\$0	\$0	\$18,939	(\$46,181)	\$1,207,910
Total	\$126,056,557	\$2,949,609	(\$2,990,533)	(\$2)	(\$5,255,795)	\$120,759,837

HISTORICAL PLAN CASH FLOWS

	Beginning Value	Net Cash Flow	Market Gain/Loss	Ending Value
3Q22	\$126,056,557	(\$40,925)	(\$5,255,795)	\$120,759,837
YTD	\$148,997,927	\$1,146,694	(\$29,384,784)	\$120,759,837
2021	\$130,848,666	\$2,416,928	\$15,732,332	\$148,997,927
2020	\$115,885,968	(\$1,480,506)	\$16,443,204	\$130,848,666
2019	\$98,065,476	(\$658,084)	\$18,478,577	\$115,885,968
2018	\$102,941,529	(\$670,032)	(\$4,206,021)	\$98,065,476
2017	\$93,044,537	(\$4,427,384)	\$14,324,375	\$102,941,529

*During the period the 457(b) Admin Plan was rolled into the total 457 report. For reporting purposes, cash flows includes the 457(b) Admin Plan's beginning balances.



Equity Indices: Russell 3000, MSCI ACWI ex USA; Fixed Indices: US Treasury 3 Mo T-Bill, Bloomberg Global Aggregate Bond (rebalanced quarterly)

Section 3

LANE COUNTY

401(a) Defined Contribution Plan

PLAN ASSET ALLOCATION

Third Quarter 2022

Fixed Income	Ticker	Assets	%
MissionSquare PLUS Fund R10	-	\$336,576	4.8%
Western Asset Core Plus Bond I	WACPX	\$69,023	1.0%
Vanguard Total Bond Market Index Adm	VBTLX	\$143,190	2.0%
PIMCO Real Return Instl	PRRIX	\$48,157	0.7%
American Beacon SiM High Yield Opps R5	SHOIX	\$38,071	0.5%
Total		\$635,018	9.0%

Large Cap	Ticker	Assets	%
American Beacon Large Cap Value R6	AALRX	\$75,600	1.1%
Parnassus Core Equity Instl	PRILX	\$38,704	0.5%
Vanguard Institutional Index Instl	VINIX	\$443,461	6.3%
T. Rowe Price Large Cap Growth I	TRLGX	\$43,728	0.6%
Total		\$601,493	8.5%

Mid Cap	Ticker	Assets	%
Allspring Special Mid Cap Value Fund	WFPRX	\$75,052	1.1%
Vanguard Mid Cap Index Adm	VIMAX	\$45,429	0.6%
JPMorgan Mid Cap Growth R6	JMGMX	\$7,146	0.1%
Total		\$127,627	1.8%

Small Cap	Ticker	Assets	%
Westwood SmallCap Instl	WHGSX	\$14,027	0.2%
Vanguard Small Cap Index Adm	VSMAX	\$162,347	2.3%
Artisan Small Cap Instl	APHSX	\$31,255	0.4%
Total		\$207,630	2.9%

International	Ticker	Assets	%
Dodge & Cox International Stock	DODFX	\$62,734	0.9%
Vanguard Total Intl Stock Index Adm	VTIAX	\$158,918	2.3%
American Funds EuroPacific Growth R6	REGRX	\$123,763	1.8%
Invesco Global Opports R6	OGIIX	\$16,402	0.2%
Total		\$361,817	5.1%

Asset Allocation	Ticker	Assets	%
Vanguard Target Retirement Income	VTINX	\$91,195	1.3%
Vanguard Target Retirement 2020	VTWNX	\$396,667	5.6%
Vanguard Target Retirement 2025	VTTVX	\$661,517	9.4%
Vanguard Target Retirement 2030	VTHRXX	\$715,916	10.1%
Vanguard Target Retirement 2035	VTTHX	\$794,201	11.2%
Vanguard Target Retirement 2040	VFORX	\$1,056,128	15.0%
Vanguard Target Retirement 2045	VTIVX	\$660,046	9.3%
Vanguard Target Retirement 2050	VFIFX	\$332,882	4.7%
Vanguard Target Retirement 2055	VFFVX	\$256,177	3.6%
Vanguard Target Retirement 2060	VTTSX	\$102,774	1.5%
Vanguard Target Retirement 2065	VLXVX	\$61,550	0.9%
Vanguard Target Retirement 2070	VSVNX	\$137	0.0%
Total		\$5,129,190	72.6%

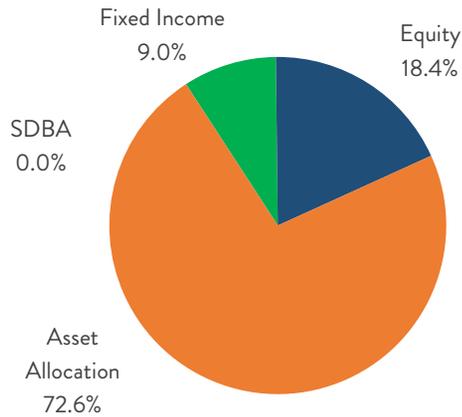
Miscellaneous	Ticker	Assets	%
Self-Directed Brokerage	-	\$22	0.0%
Total		\$22	0.0%

TOTAL PLAN ASSETS

\$7,062,797

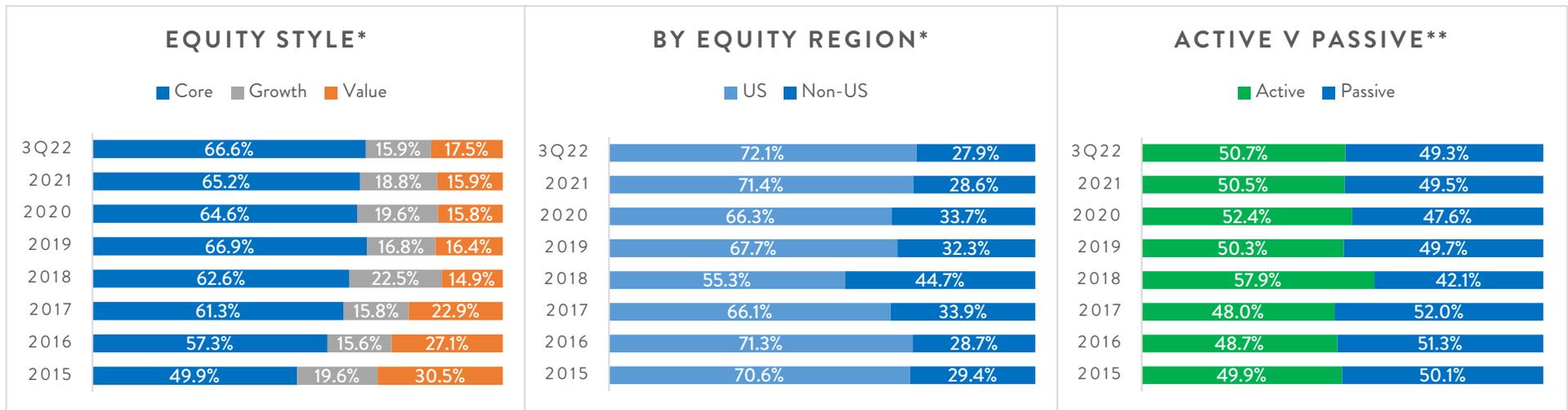
Administrative Account Balance

\$11,764



HISTORICAL PLAN ALLOCATION

Asset Class	3Q22	2021	2020	2019	2018	2017	2016	2015
Fixed Income	9.0%	7.4%	8.8%	12.0%	10.0%	7.1%	5.9%	4.6%
Large Cap	8.5%	9.3%	7.8%	8.3%	7.4%	8.4%	6.7%	5.6%
Mid Cap	1.8%	1.8%	1.7%	1.7%	2.0%	2.0%	2.0%	1.4%
Small Cap	2.9%	3.4%	3.1%	3.3%	2.9%	3.5%	2.7%	1.9%
International	5.1%	5.8%	6.4%	6.3%	10.0%	7.1%	4.6%	3.7%
Asset Allocation	72.6%	72.2%	72.1%	68.5%	67.6%	71.9%	78.1%	82.8%



*Excludes Fixed Income, SDBA and Asset Allocation assets

**Excludes Asset Allocation assets

LANE COUNTY

401(a) Defined Contribution Plan

PLAN ASSET ALLOCATION

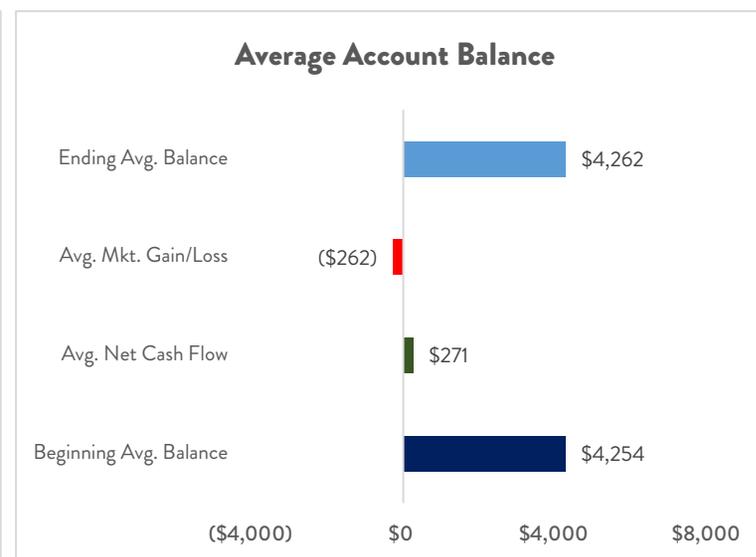
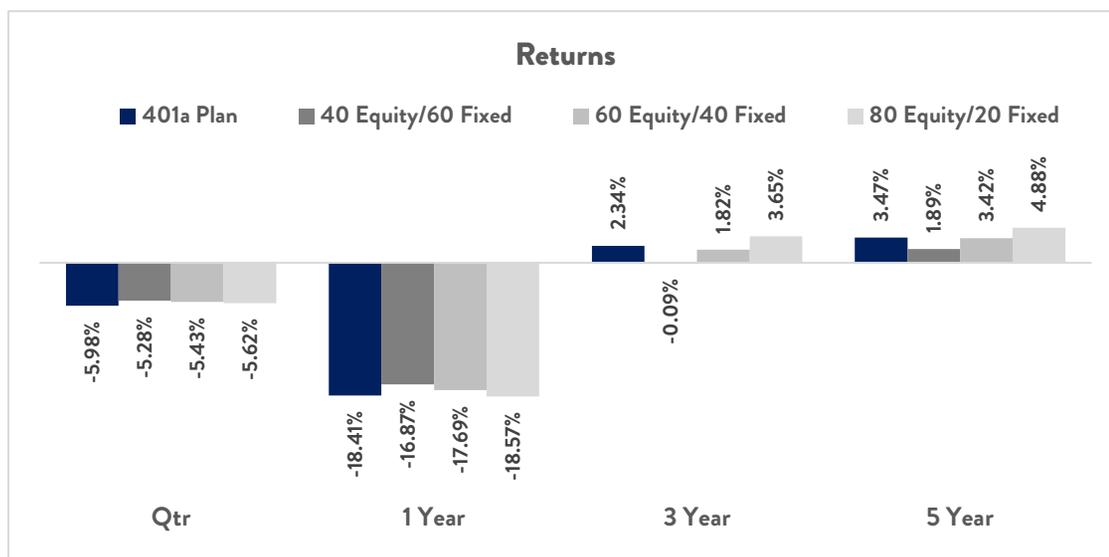
Third Quarter 2022

PLAN LEVEL CASH FLOWS

	Beginning Value	Cash Flow (+)	Cash Flow (-)	Transfer	Market Gain/Loss	Ending Value
Fixed Income	\$603,613	\$28,510	(\$23,953)	\$40,290	(\$13,442)	\$635,018
Large Cap	\$617,734	\$23,774	(\$6,745)	(\$1,523)	(\$31,746)	\$601,493
Mid Cap	\$126,428	\$5,071	(\$1,373)	\$3,434	(\$5,934)	\$127,627
Small Cap	\$214,043	\$8,011	(\$2,266)	(\$8,181)	(\$3,977)	\$207,630
International	\$391,797	\$15,352	(\$3,349)	(\$1,355)	(\$40,627)	\$361,817
Asset Allocation	\$5,095,304	\$429,004	(\$23,631)	(\$32,663)	(\$338,824)	\$5,129,190
SDBA	\$0	\$0	\$0	\$0	\$22	\$22
Total	\$7,048,920	\$509,721	(\$61,317)	\$0	(\$434,527)	\$7,062,797

HISTORICAL PLAN CASH FLOWS

	Beginning Value	Net Cash Flow	Market Gain/Loss	Ending Value
3Q22	\$7,048,920	\$448,404	(\$434,527)	\$7,062,797
YTD	\$7,802,346	\$1,084,609	(\$1,824,158)	\$7,062,797
2021	\$6,002,996	\$982,404	\$816,945	\$7,802,346
2020	\$4,517,343	\$703,216	\$782,438	\$6,002,996
2019	\$3,040,232	\$762,590	\$714,521	\$4,517,343
2018	\$2,291,281	\$980,867	(\$231,916)	\$3,040,232
2017	\$1,243,007	\$773,259	\$275,015	\$2,291,281



Equity Indices: Russell 3000, MSCI ACWI ex USA; Fixed Indices: US Treasury 3 Mo T-Bill, Bloomberg Global Aggregate Bond (rebalanced quarterly)

Section 4

Key: Ⓟ Pass / ● Fail

Investment Policy Status

	Performance Factors	Qualitative Factors	On-Watch Information	Notes
MissionSquare PLUS Fund R10	Ⓟ	Ⓟ	4Q21 (Qualitative)	On watch for significant manager change.
Western Asset Core Plus Bond I	●	Ⓟ	2Q22 (Performance)	Trailing Benchmark and Peer Group for 5 year period.
Vanguard Total Bond Market Index Adm	Ⓟ	Ⓟ	-	
PIMCO Real Return Instl	Ⓟ	Ⓟ	-	
American Beacon SiM High Yield Opps R5	Ⓟ	Ⓟ	-	
American Beacon Large Cap Value R6	Ⓟ	Ⓟ	-	
Parnassus Core Equity Instl	Ⓟ	Ⓟ	-	
Vanguard Institutional Index Instl	Ⓟ	Ⓟ	-	
T. Rowe Price Large Cap Growth I	Ⓟ	Ⓟ	-	
Allspring Special Mid Cap Value Fund	Ⓟ	Ⓟ	-	
Vanguard Mid Cap Index Adm	Ⓟ	Ⓟ	-	
JPMorgan Mid Cap Growth R6	Ⓟ	Ⓟ	-	
Westwood SmallCap Instl	●	Ⓟ	-	Trailing Benchmark and Peer Group for 5 year period.
Vanguard Small Cap Index Adm	Ⓟ	Ⓟ	-	
Artisan Small Cap Instl	Ⓟ	Ⓟ	-	
Dodge & Cox International Stock	Ⓟ	Ⓟ	-	
Vanguard Total Intl Stock Index Adm	Ⓟ	Ⓟ	-	
American Funds EuroPacific Growth R6	●	Ⓟ	1Q22 (Performance)	Trailing Benchmark and Peer Group for 5 year period.
Invesco Global Opports R6	●	Ⓟ	1Q22 (Performance)	Trailing Benchmark and Peer Group for 5 year period.
Vanguard Target Retirement Income	Ⓟ	Ⓟ	-	
Vanguard Target Retirement 2020	Ⓟ	Ⓟ	-	
Vanguard Target Retirement 2025	Ⓟ	Ⓟ	-	
Vanguard Target Retirement 2030	Ⓟ	Ⓟ	-	
Vanguard Target Retirement 2035	Ⓟ	Ⓟ	-	

Key: Ⓟ Pass / ● Fail

	Performance Factors	Qualitative Factors
Vanguard Target Retirement 2040	Ⓟ	Ⓟ
Vanguard Target Retirement 2045	Ⓟ	Ⓟ
Vanguard Target Retirement 2050	Ⓟ	Ⓟ
Vanguard Target Retirement 2055	Ⓟ	Ⓟ
Vanguard Target Retirement 2060	Ⓟ	Ⓟ
Vanguard Target Retirement 2065	●	Ⓟ
Vanguard Target Retirement 2070	Ⓟ	Ⓟ

Investment Policy Status

On-Watch Information	Notes
-	
-	
-	
-	
-	
-	Trailing Benchmark and Peer Group for 5 year period.
-	

LANE COUNTY

457 Deferred Compensation and 401(a) Defined Contribution Plans

PERFORMANCE REVIEW

Third Quarter 2022

	QTR	YTD	1Yr	Annualized			2021	2020	2019	2018	2017	2016
				3Yr	5Yr	10Yr						
MissionSquare PLUS Fund R10	0.50	1.42	1.88	2.05	2.16	2.05	1.89	2.22	2.45	2.27	2.12	1.98
US 90 Day T-Bill	0.66	1.01	1.02	0.60	1.14	0.68	0.04	0.36	2.06	1.94	0.93	0.32
+/- Index	(0.16)	0.41	0.86	1.45	1.02	1.37	1.85	1.86	0.39	0.33	1.19	1.66
US Stable Value	25	19	18	12	12	15	10	12	16	13	8	7
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
Western Asset Core Plus Bond I	-6.35	-21.30	-21.40	-5.06	-1.26	1.31	-1.90	9.39	12.28	-1.49	6.96	4.79
Bloomberg US Aggregate Bond Index	-4.75	-14.61	-14.60	-3.26	-0.27	0.89	-1.54	7.51	8.72	0.01	3.54	2.65
+/- Index	(1.60)	(6.69)	(6.80)	(1.80)	(0.99)	0.42	(0.36)	1.88	3.57	(1.50)	3.41	2.14
US Fund Intermediate Core-Plus Bond	95	99	99	97	93	36	89	24	2	76	2	23
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
Vanguard Total Bond Market Index Adm	-4.65	-14.59	-14.66	-3.27	-0.26	0.85	-1.67	7.72	8.71	-0.03	3.57	2.60
Bloomberg US Aggregate Bond Index	-4.75	-14.61	-14.60	-3.26	-0.27	0.89	-1.54	7.51	8.72	0.01	3.54	2.65
+/- Index	0.10	0.02	(0.06)	(0.01)	0.01	(0.04)	(0.13)	0.21	0.00	(0.04)	0.02	(0.05)
US Fund Intermediate Core Bond	39	36	33	52	41	47	57	54	35	29	39	49
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
PIMCO Real Return Instl	-5.42	-14.18	-12.34	0.86	1.85	0.87	5.67	12.09	8.52	-1.97	3.92	5.04
Bloomberg US TIPS Index	-5.14	-13.61	-11.57	0.79	1.95	0.98	5.96	10.99	8.43	-1.26	3.01	4.68
+/- Index	(0.28)	(0.57)	(0.77)	0.07	(0.10)	(0.11)	(0.29)	1.09	0.09	(0.71)	0.91	0.36
US Fund Inflation-Protected Bond	64	69	61	47	40	35	35	15	16	67	9	19
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
American Beacon SiM High Yield Opps R5	-0.62	-10.78	-10.92	1.86	3.11	4.99	8.81	6.52	12.35	-1.14	7.35	16.30
Bloomberg US Corp High Yield Index	-0.65	-14.74	-14.14	-0.45	1.57	3.94	5.28	7.11	14.32	-2.08	7.50	17.13
+/- Index	0.03	3.96	3.22	2.31	1.54	1.05	3.53	(0.59)	(1.96)	0.95	(0.16)	(0.83)
US Fund High Yield Bond	41	14	15	4	4	1	4	25	71	13	31	15

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	QTR	YTD	1Yr	Annualized			2021	2020	2019	2018	2017	2016
				3Yr	5Yr	10Yr						
American Beacon Large Cap Value R6	-5.39	-17.22	-10.98	5.85	5.68	9.31	27.98	3.38	29.67	-11.96	17.07	15.98
Russell 1000 Value Index	-5.62	-17.75	-11.36	4.36	5.29	9.17	25.16	2.80	26.54	-8.27	13.66	17.34
+/- Index	0.23	0.53	0.38	1.49	0.39	0.14	2.82	0.58	3.13	(3.69)	3.41	(1.36)
US Fund Large Value	44	58	66	37	51	37	28	42	9	83	39	30
Parnassus Core Equity Instl	-6.88	-25.61	-17.58	7.08	9.82	11.74	27.82	21.47	30.96	0.05	16.81	10.60
S&P 500 Index	-4.88	-23.87	-15.47	8.16	9.24	11.70	28.71	18.40	31.49	-4.38	21.83	11.96
+/- Index	(2.00)	(1.74)	(2.11)	(1.08)	0.58	0.04	(0.89)	3.07	(0.53)	4.44	(5.02)	(1.36)
US Fund Large Blend	94	78	67	50	7	10	35	12	35	1	88	51
Vanguard Institutional Index Instl	-4.89	-23.89	-15.50	8.14	9.21	11.67	28.67	18.39	31.46	-4.42	21.79	11.93
S&P 500 Index	-4.88	-23.87	-15.47	8.16	9.24	11.70	28.71	18.40	31.49	-4.38	21.83	11.96
+/- Index	(0.01)	(0.02)	(0.03)	(0.02)	(0.03)	(0.03)	(0.04)	(0.01)	(0.02)	(0.04)	(0.04)	(0.03)
US Fund Large Blend	44	46	36	20	16	12	21	33	23	23	33	28
T. Rowe Price Large Cap Growth I	-2.89	-35.07	-31.08	7.09	9.93	13.81	23.18	39.56	28.49	4.32	37.82	2.85
Russell 1000 Growth Index	-3.60	-30.66	-22.59	10.67	12.17	13.70	27.60	38.49	36.39	-1.51	30.21	7.08
+/- Index	0.71	(4.41)	(8.49)	(3.58)	(2.24)	0.11	(4.42)	1.07	(7.90)	5.83	7.61	(4.22)
US Fund Large Growth	21	69	69	46	31	7	39	31	82	7	4	52
Allspring Special Mid Cap Value Fund	-4.62	-16.28	-7.93	6.40	6.48	11.19	28.80	3.36	35.68	-13.02	11.27	21.68
Russell Mid Cap Value Index	-4.93	-20.36	-13.56	4.50	4.76	9.44	28.34	4.96	27.06	-12.29	13.34	20.00
+/- Index	0.31	4.08	5.63	1.90	1.72	1.75	0.46	(1.60)	8.62	(0.74)	(2.07)	1.69
US Fund Mid-Cap Value	41	29	10	26	11	3	47	43	2	42	80	20

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	QTR	YTD	1Yr	Annualized			2021	2020	2019	2018	2017	2016
				3Yr	5Yr	10Yr						
Vanguard Mid Cap Index Adm	-4.14	-25.43	-19.48	5.47	6.64	10.45	24.51	18.24	31.03	-9.23	19.25	11.22
Vanguard US Mid Cap Index	-4.14	-25.42	-19.47	5.48	6.66	10.48	24.52	18.24	31.09	-9.22	19.30	11.25
+/- Index	0.00	(0.01)	(0.01)	(0.01)	(0.02)	(0.03)	(0.01)	0.00	(0.06)	(0.01)	(0.04)	(0.02)
US Fund Mid-Cap Blend	52	80	73	43	25	12	45	21	20	27	20	73
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
JPMorgan Mid Cap Growth R6	-1.70	-31.12	-28.60	7.83	9.80	12.49	10.99	48.51	39.96	-4.97	29.72	0.37
Russell Mid Cap Growth Index	-0.65	-31.45	-29.50	4.26	7.62	10.85	12.73	35.59	35.47	-4.75	25.27	7.33
+/- Index	(1.05)	0.33	0.90	3.57	2.18	1.64	(1.74)	12.92	4.49	(0.22)	4.46	(6.96)
US Fund Mid-Cap Growth	45	41	41	11	12	7	61	24	9	46	17	91
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
Westwood SmallCap Instl	-5.40	-22.90	-16.70	2.07	2.60	9.28	27.93	2.16	27.13	-14.16	12.36	28.33
Russell 2000 Value Index	-4.61	-21.12	-17.69	4.72	2.87	7.94	28.27	4.63	22.39	-12.86	7.84	31.74
+/- Index	(0.79)	(1.78)	0.99	(2.65)	(0.27)	1.34	(0.34)	(2.48)	4.73	(1.30)	4.52	(3.41)
US Fund Small Value	58	82	70	87	64	18	68	60	14	38	19	29
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
Vanguard Small Cap Index Adm	-2.61	-23.70	-20.74	4.98	5.37	9.57	17.73	19.11	27.37	-9.31	16.24	18.30
Vanguard US Small Cap Index	-2.63	-23.71	-20.75	4.96	5.35	9.55	17.71	19.07	27.35	-9.33	16.24	18.26
+/- Index	0.02	0.01	0.01	0.02	0.02	0.02	0.02	0.03	0.02	0.01	0.00	0.04
US Fund Small Blend	30	48	64	42	14	18	81	18	20	20	15	76
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
Artisan Small Cap Instl	3.27	-33.52	-38.12	2.58	8.29	10.41	-8.68	61.31	40.48	2.45	27.09	5.76
Russell 2000 Growth Index	0.24	-29.28	-29.27	2.94	3.60	8.81	2.83	34.63	28.48	-9.31	22.17	11.32
+/- Index	3.03	(4.24)	(8.85)	(0.36)	4.69	1.60	(11.51)	26.68	12.00	11.76	4.93	(5.56)
US Fund Small Growth	5	71	85	77	23	31	97	12	5	12	26	83

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	QTR	YTD	1Yr	Annualized			2021	2020	2019	2018	2017	2016
				3Yr	5Yr	10Yr						
Dodge & Cox International Stock	-10.69	-19.64	-17.71	0.25	-1.48	4.17	11.03	2.10	22.78	-17.98	23.94	8.26
MSCI ACWI Ex-USA Value (Net) Index	-10.44	-21.00	-20.02	-2.15	-2.12	1.87	10.46	-0.77	15.71	-13.97	22.66	8.92
+/- Index	(0.25)	1.36	2.31	2.40	0.64	2.30	0.57	2.87	7.06	(4.01)	1.28	(0.66)
US Fund Foreign Large Value	39	12	10	9	22	9	57	52	8	73	40	17
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
Vanguard Total Intl Stock Index Adm	-10.51	-26.76	-25.21	-1.18	-0.70	3.31	8.62	11.28	21.51	-14.43	27.55	4.67
Vanguard Total International Stock Index	-9.66	-26.49	-25.20	-0.93	-0.50	3.41	8.84	11.24	21.81	-14.62	27.41	4.72
+/- Index	(0.85)	(0.27)	(0.01)	(0.25)	(0.20)	(0.10)	(0.22)	0.04	(0.30)	0.18	0.14	(0.05)
US Fund Foreign Large Blend	55	27	29	35	37	49	64	40	61	40	29	12
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
American Funds EuroPacific Growth R6	-9.33	-32.09	-32.85	-1.24	-0.23	4.52	2.84	25.27	27.40	-14.91	31.17	1.01
MSCI ACWI Ex-USA Growth (Net) Index	-9.37	-31.84	-30.22	-1.38	0.18	3.95	5.09	22.20	27.34	-14.43	32.01	0.12
+/- Index	0.04	(0.25)	(2.63)	0.14	(0.41)	0.57	(2.25)	3.06	0.06	(0.48)	(0.84)	0.89
US Fund Foreign Large Growth	48	29	47	52	54	35	77	34	63	56	48	24
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
Invesco Global Opports R6	-9.76	-46.19	-46.72	-4.21	-1.77	7.81	0.47	40.12	28.31	-17.77	53.18	11.16
MSCI World (Net) Index	-6.19	-25.42	-19.63	4.56	5.30	8.11	21.82	15.90	27.67	-8.71	22.40	7.51
+/- Index	(3.57)	(20.77)	(27.09)	(8.77)	(7.07)	(0.30)	(21.35)	24.22	0.64	(9.06)	30.78	3.65
US Fund World Small/Mid Stock	88	93	93	94	90	33	93	26	50	71	2	17
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
Vanguard Target Retirement Income	-4.64	-15.89	-14.19	-0.02	1.96	3.31	5.25	10.02	13.16	-1.99	8.47	5.25
Vanguard Retirement Income Index	-4.56	-15.77	-14.04	0.33	2.22	3.54	5.43	10.70	13.40	-1.98	8.67	5.35
+/- Index	(0.08)	(0.12)	(0.15)	(0.35)	(0.26)	(0.23)	(0.18)	(0.68)	(0.24)	(0.01)	(0.19)	(0.10)
US Fund Target-Date Retirement	51	45	44	25	24	29	64	30	48	18	50	30

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	QTR	YTD	1Yr	<i>Annualized</i>			2021	2020	2019	2018	2017	2016
				3Yr	5Yr	10Yr						
Vanguard Target Retirement 2020	-5.12	-18.21	-15.83	1.17	2.91	5.46	8.17	12.04	17.63	-4.24	14.08	6.95
Vanguard Retirement 2020 Index	-4.93	-17.97	-15.53	1.62	3.26	5.74	8.43	12.86	17.87	-4.14	14.22	7.17
+/- Index	(0.19)	(0.24)	(0.30)	(0.45)	(0.35)	(0.28)	(0.26)	(0.82)	(0.24)	(0.10)	(0.14)	(0.22)
US Fund Target-Date 2020	48	40	36	39	26	21	62	41	32	47	23	30
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
Vanguard Target Retirement 2025	-5.59	-20.35	-17.53	1.40	3.15	5.96	9.80	13.30	19.63	-5.15	15.94	7.48
Vanguard Retirement 2025 Index	-5.32	-19.95	-17.09	1.97	3.58	6.29	10.10	14.19	19.93	-5.01	16.08	7.66
+/- Index	(0.27)	(0.40)	(0.44)	(0.57)	(0.43)	(0.33)	(0.30)	(0.89)	(0.30)	(0.14)	(0.14)	(0.18)
US Fund Target-Date 2025	59	62	61	38	27	21	47	34	20	48	22	21
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
Vanguard Target Retirement 2030	-5.93	-21.60	-18.42	1.82	3.43	6.46	11.38	14.10	21.07	-5.86	17.52	7.85
Vanguard Retirement 2030 Index	-5.58	-21.16	-17.96	2.39	3.86	6.78	11.65	14.96	21.33	-5.74	17.65	8.11
+/- Index	(0.35)	(0.44)	(0.46)	(0.57)	(0.43)	(0.32)	(0.27)	(0.86)	(0.26)	(0.12)	(0.13)	(0.26)
US Fund Target-Date 2030	65	48	55	46	36	27	54	35	37	39	37	27
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
Vanguard Target Retirement 2035	-6.09	-22.40	-18.87	2.39	3.78	6.99	12.96	14.79	22.44	-6.58	19.12	8.26
Vanguard Retirement 2035 Index	-5.75	-22.00	-18.48	2.94	4.22	7.31	13.24	15.67	22.76	-6.48	19.24	8.55
+/- Index	(0.34)	(0.40)	(0.39)	(0.55)	(0.44)	(0.32)	(0.28)	(0.87)	(0.33)	(0.10)	(0.12)	(0.29)
US Fund Target-Date 2035	58	32	42	47	38	27	78	38	49	31	40	32
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
Vanguard Target Retirement 2040	-6.33	-23.27	-19.42	2.91	4.11	7.40	14.56	15.47	23.86	-7.32	20.71	8.73
Vanguard Retirement 2040 Index	-5.93	-22.86	-19.01	3.47	4.55	7.75	14.85	16.31	24.19	-7.22	20.87	8.98
+/- Index	(0.40)	(0.41)	(0.41)	(0.56)	(0.44)	(0.35)	(0.29)	(0.83)	(0.33)	(0.11)	(0.16)	(0.25)
US Fund Target-Date 2040	57	27	32	43	35	21	80	39	49	35	30	23

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	QTR	YTD	1Yr	<i>Annualized</i>			2021	2020	2019	2018	2017	2016
				3Yr	5Yr	10Yr						
Vanguard Target Retirement 2045	-6.51	-24.10	-19.93	3.46	4.42	7.61	16.16	16.30	24.94	-7.90	21.42	8.87
Vanguard Retirement 2045 Index	-6.11	-23.70	-19.54	3.99	4.85	7.96	16.45	17.03	25.36	-7.77	21.54	9.13
+/- Index	(0.40)	(0.40)	(0.39)	(0.53)	(0.43)	(0.35)	(0.29)	(0.73)	(0.42)	(0.13)	(0.11)	(0.26)
US Fund Target-Date 2045	58	28	36	28	23	18	65	34	40	41	24	26
Vanguard Target Retirement 2050	-6.64	-24.43	-20.18	3.41	4.39	7.60	16.41	16.39	24.98	-7.90	21.39	8.85
Vanguard Retirement 2050 Index	-6.21	-24.05	-19.81	3.97	4.84	7.95	16.77	17.18	25.36	-7.77	21.54	9.13
+/- Index	(0.43)	(0.38)	(0.37)	(0.56)	(0.45)	(0.35)	(0.36)	(0.79)	(0.38)	(0.13)	(0.14)	(0.28)
US Fund Target-Date 2050	59	27	37	30	25	20	70	35	45	37	31	27
Vanguard Target Retirement 2055	-6.63	-24.44	-20.17	3.40	4.38	7.58	16.44	16.32	24.98	-7.89	21.38	8.88
Vanguard Retirement 2055 Index	-6.21	-24.05	-19.81	3.97	4.84	7.95	16.77	17.18	25.36	-7.77	21.54	9.13
+/- Index	(0.42)	(0.39)	(0.36)	(0.57)	(0.46)	(0.37)	(0.33)	(0.86)	(0.38)	(0.12)	(0.16)	(0.25)
US Fund Target-Date 2055	59	27	37	33	28	28	75	40	47	35	39	26
Vanguard Target Retirement 2060	-6.64	-24.44	-20.16	3.40	4.38	7.58	16.44	16.32	24.96	-7.87	21.36	8.84
Vanguard Retirement 2060 Index	-6.21	-24.05	-19.81	3.97	4.84	7.95	16.77	17.18	25.36	-7.77	21.54	9.13
+/- Index	(0.43)	(0.39)	(0.35)	(0.57)	(0.46)	(0.37)	(0.33)	(0.85)	(0.40)	(0.10)	(0.18)	(0.28)
US Fund Target-Date 2060	61	24	35	36	30	50	77	41	56	30	43	23
Vanguard Target Retirement 2065	-6.60	-24.38	-20.10	3.38	4.36	-	16.46	16.17	24.96	-7.95	-	-
Vanguard Retirement 2065 Index	-6.21	-24.05	-19.81	3.97	4.84	-	16.77	17.18	25.36	-7.77	-	-
+/- Index	(0.39)	(0.33)	(0.29)	(0.59)	(0.48)	-	(0.31)	(1.00)	(0.39)	(0.18)	-	-
US Fund Target-Date 2065+	52	22	24	46	60	-	67	56	59	12	-	-

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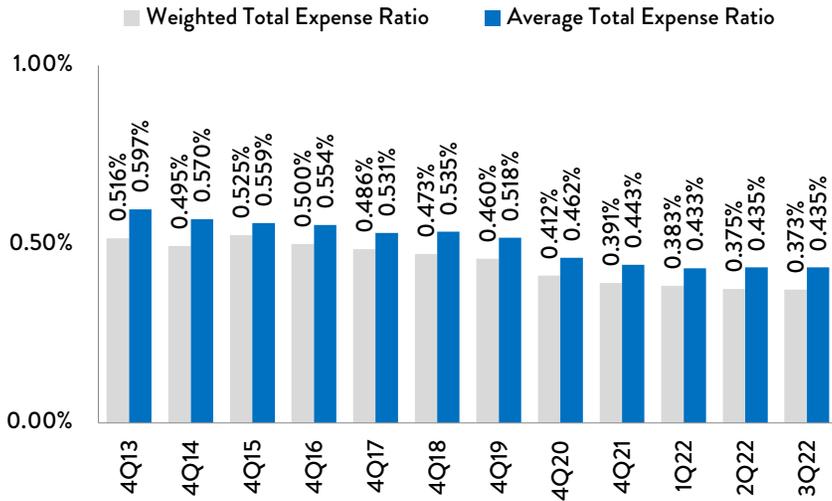
PERFORMANCE REVIEW

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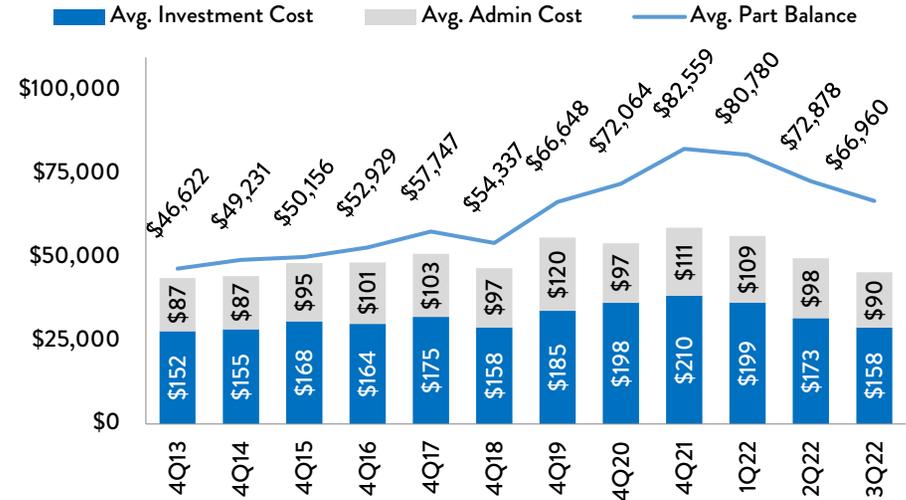
	QTR	YTD	1Yr	<i>Annualized</i>			2021	2020	2019	2018	2017	2016
				3Yr	5Yr	10Yr						
Vanguard Target Retirement 2070	-6.57	-	-	-	-	-	-	-	-	-	-	-
Vanguard Retirement 2070 Index	-6.21	-	-	-	-	-	-	-	-	-	-	-
+/- Index	(0.36)	-	-	-	-	-	-	-	-	-	-	-
US Fund Target-Date 2065+	50	-	-	-	-	-	-	-	-	-	-	-

Section 5

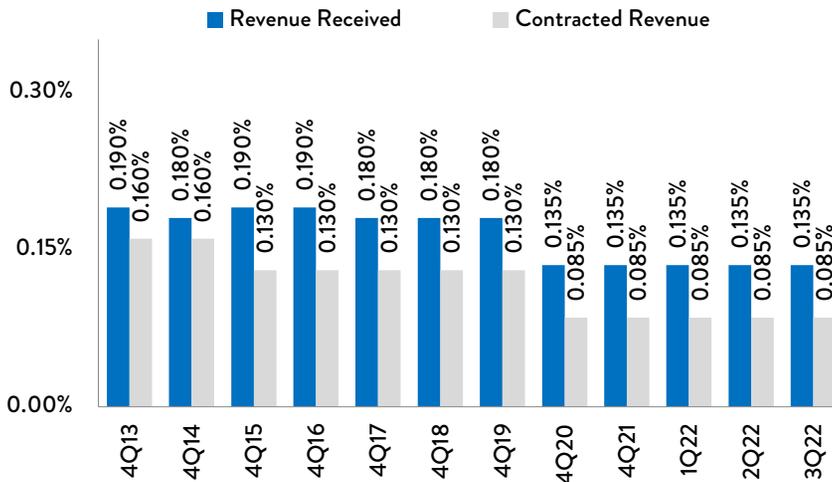
Annualized Plan Cost (%)



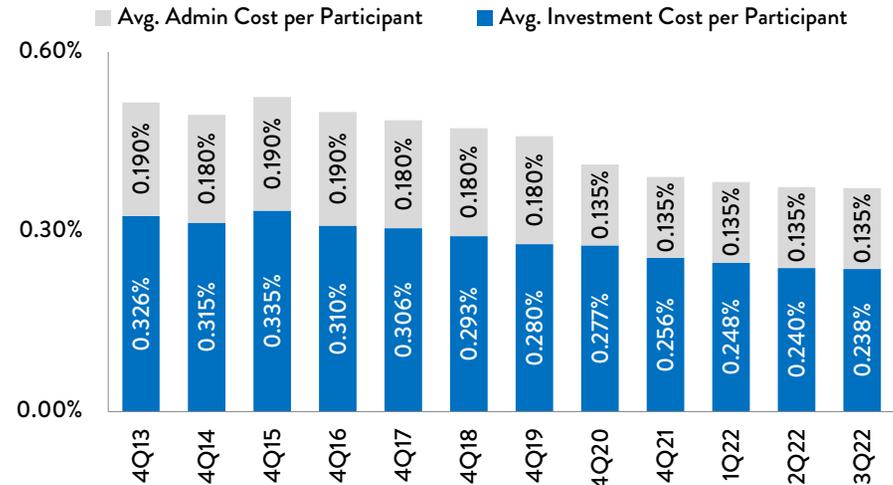
Average Participant Balance and Cost (\$)



Annualized Contracted Revenue v. Revenue Received (as a % of total assets)



Annualized Investment Cost Summary (as a % of total assets)



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PLAN FEE ANALYSIS

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Annualized

Fund	Ticker	Quarter Average Assets	Net Expense Ratio	Admin Fee	Est. Total Invest. Cost	Est. Total Admin. Cost
MissionSquare PLUS Fund R10*	-	\$26,592,677	0.31%	0.135%	\$82,437	\$35,900
Western Asset Core Plus Bond I**	WACPX	\$3,119,205	0.10%	0.135%	\$3,119	\$4,211
Vanguard Total Bond Market Index Adm	VBTLX	\$3,625,256	0.05%	0.135%	\$1,813	\$4,894
PIMCO Real Return Instl	PRRIX	\$1,518,933	0.45%	0.135%	\$6,835	\$2,051
American Beacon SiM High Yield Opps R5	SHOIX	\$1,322,103	0.74%	0.135%	\$9,784	\$1,785
American Beacon Large Cap Value R6	AALRX	\$3,131,755	0.60%	0.135%	\$18,791	\$4,228
Parnassus Core Equity Instl**	PRILX	\$2,430,923	0.51%	0.135%	\$12,398	\$3,282
Vanguard Institutional Index Instl	VINIX	\$12,004,150	0.04%	0.135%	\$4,201	\$16,206
T. Rowe Price Large Cap Growth I	TRLGX	\$9,413,512	0.55%	0.135%	\$51,774	\$12,708
Allspring Special Mid Cap Value Fund	WFPRX	\$1,744,846	0.70%	0.135%	\$12,214	\$2,356
Vanguard Mid Cap Index Adm	VIMAX	\$3,039,010	0.05%	0.135%	\$1,520	\$4,103
JPMorgan Mid Cap Growth R6	JMGMX	\$611,259	0.70%	0.135%	\$4,279	\$825
Westwood SmallCap Instl**	WHGSX	\$843,575	0.77%	0.135%	\$6,496	\$1,139
Vanguard Small Cap Index Adm	VSMAX	\$3,081,080	0.05%	0.135%	\$1,541	\$4,159
Artisan Small Cap Instl	APHSX	\$1,067,541	0.96%	0.135%	\$10,248	\$1,441
Dodge & Cox International Stock**	DODFX	\$1,700,854	0.52%	0.135%	\$8,844	\$2,296
Vanguard Total Intl Stock Index Adm	VTIAX	\$2,654,187	0.11%	0.135%	\$2,920	\$3,583
American Funds EuroPacific Growth R6	RERGX	\$2,198,979	0.46%	0.135%	\$10,115	\$2,969
Invesco Global Opports R6	OGIIX	\$1,313,875	0.68%	0.135%	\$8,934	\$1,774
Vanguard Target Retirement Income	VTINX	\$2,977,217	0.08%	0.135%	\$2,382	\$4,019
Vanguard Target Retirement 2015	VTVX	\$225,421	0.08%	0.135%	\$180	\$304
Vanguard Target Retirement 2020	VTWNX	\$5,925,200	0.08%	0.135%	\$4,740	\$7,999
Vanguard Target Retirement 2025	VTTVX	\$4,294,667	0.08%	0.135%	\$3,436	\$5,798
Vanguard Target Retirement 2030	VTHRX	\$7,583,741	0.08%	0.135%	\$6,067	\$10,238
Vanguard Target Retirement 2035	VTTX	\$1,573,878	0.08%	0.135%	\$1,259	\$2,125
Vanguard Target Retirement 2040	VFORX	\$9,373,284	0.08%	0.135%	\$7,499	\$12,654
Vanguard Target Retirement 2045	VTIVX	\$2,790,169	0.08%	0.135%	\$2,232	\$3,767
Vanguard Target Retirement 2050	VFIFX	\$4,577,309	0.08%	0.135%	\$3,662	\$6,179
Vanguard Target Retirement 2055	VFFVX	\$1,007,164	0.08%	0.135%	\$806	\$1,360
Vanguard Target Retirement 2060	VTTX	\$369,861	0.08%	0.135%	\$296	\$499
Vanguard Target Retirement 2065	VLXVX	\$75,035	0.08%	0.135%	\$60	\$101

LANE COUNTY

457 Deferred Compensation Plans

PLAN FEE ANALYSIS

Third Quarter 2022

Annualized

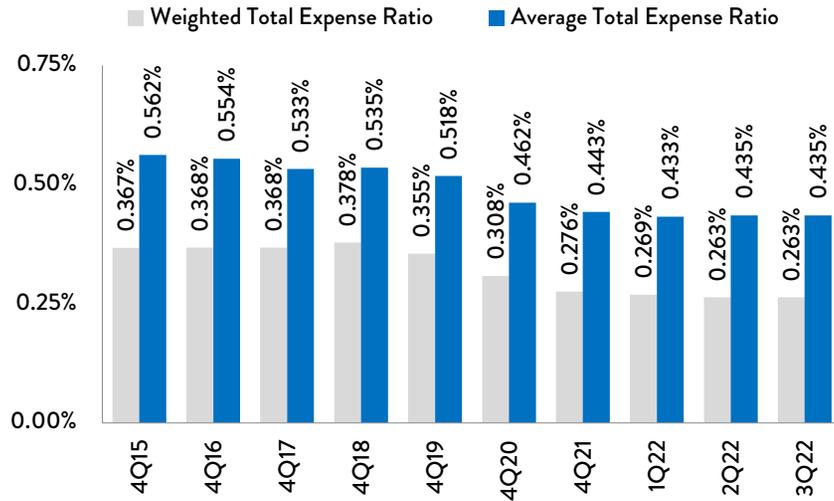
Fund	Ticker	Quarter Average Assets	Net Expense Ratio	Admin Fee	Est. Total Invest. Cost	Est. Total Admin. Cost
Vanguard Target Retirement 2070	VSVNX	\$0	0.08%	0.135%	\$0	\$0
Self-Directed Brokerage**	-	\$1,221,531	-	0.135%	-	\$1,649
TOTAL		\$123,408,197			\$290,881	\$166,601

Plan Administration Cost	Quarter	Annualized
Plan Generated Revenue (est):	\$41,993	\$166,601
Contracted Revenue (est):	\$26,440	\$104,897
Net Excess/(Deficit) (est):	\$15,553	\$61,704

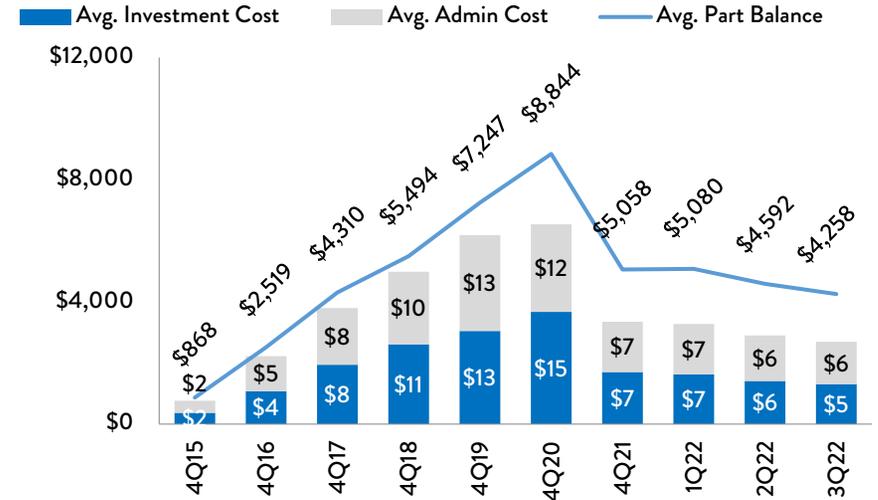
*For reporting purposes, fund level fees have been excluded from the fund expense ratio calculations.

**Revenue generated by investment options is credited back to the participants invested in those funds. This is reflected in the Net Expense Ratios.

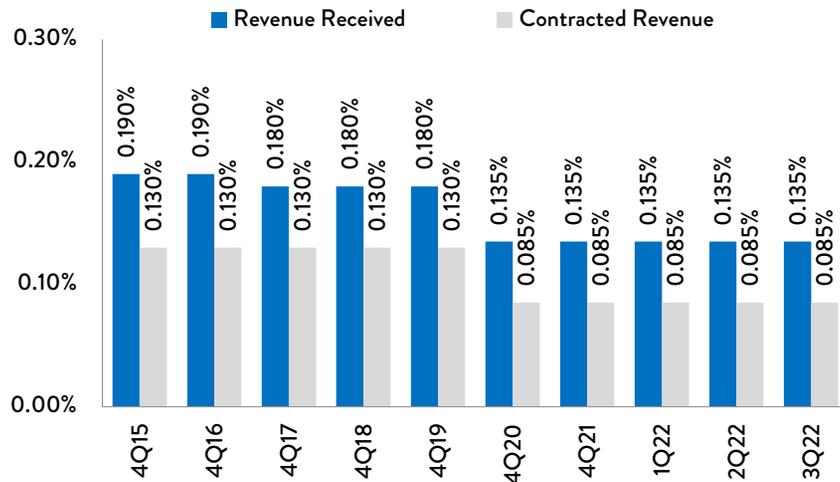
Annualized Plan Cost (%)



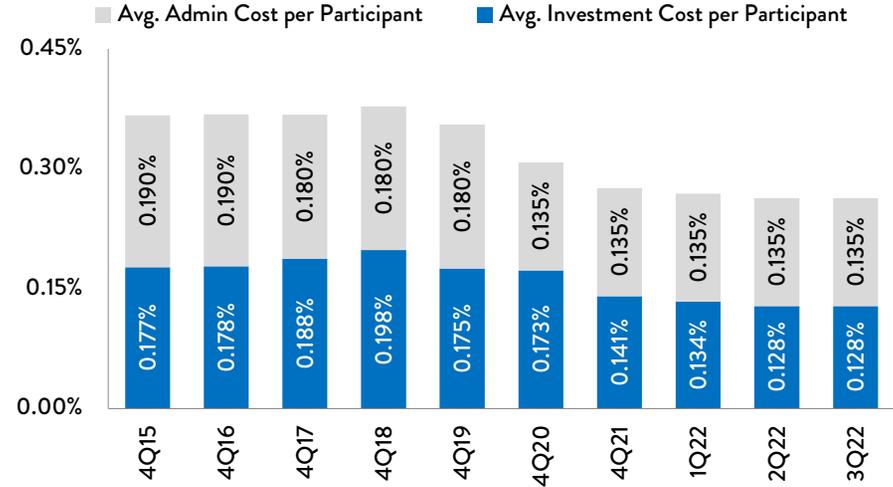
Average Participant Balance and Cost (\$)*



Annualized Contracted Revenue v. Revenue Received (as a % of total assets)



Annualized Investment Cost Summary (as a % of total assets)



*Average participant balance drop in 4Q21 due to increase in number of participants with a balance as a result of AFSCME contract negotiations.

LANE COUNTY

401(a) Defined Contribution Plan

PLAN FEE ANALYSIS

Third Quarter 2022

Annualized

Fund	Ticker	Quarter Average	Net Expense	Admin Fee	Est. Total Invest.	Est. Total Admin.
		Assets	Ratio		Cost	Cost
MissionSquare PLUS Fund R10*	-	\$312,889	0.31%	0.135%	\$970	\$422
Western Asset Core Plus Bond I**	WACPX	\$70,068	0.10%	0.135%	\$70	\$95
Vanguard Total Bond Market Index Adm	VBTLX	\$145,635	0.05%	0.135%	\$73	\$197
PIMCO Real Return Instl	PRRIX	\$54,440	0.45%	0.135%	\$245	\$73
American Beacon SiM High Yield Opps R5	SHOIX	\$36,285	0.74%	0.135%	\$269	\$49
American Beacon Large Cap Value R6	AALRX	\$75,580	0.60%	0.135%	\$453	\$102
Parnassus Core Equity Instl**	PRILX	\$38,899	0.51%	0.135%	\$198	\$53
Vanguard Institutional Index Instl	VINIX	\$452,119	0.04%	0.135%	\$158	\$610
T. Rowe Price Large Cap Growth I	TRLGX	\$43,016	0.55%	0.135%	\$237	\$58
Allspring Special Mid Cap Value Fund	WFPRX	\$74,477	0.70%	0.135%	\$521	\$101
Vanguard Mid Cap Index Adm	VIMAX	\$45,579	0.05%	0.135%	\$23	\$62
JPMorgan Mid Cap Growth R6	JMGMX	\$6,971	0.70%	0.135%	\$49	\$9
Westwood SmallCap Instl**	WHGSX	\$14,165	0.77%	0.135%	\$109	\$19
Vanguard Small Cap Index Adm	VSMAX	\$166,546	0.05%	0.135%	\$83	\$225
Artisan Small Cap Instl	APHSX	\$30,125	0.96%	0.135%	\$289	\$41
Dodge & Cox International Stock**	DODFX	\$63,825	0.52%	0.135%	\$332	\$86
Vanguard Total Intl Stock Index Adm	VTIAX	\$168,313	0.11%	0.135%	\$185	\$227
American Funds EuroPacific Growth R6	REGX	\$127,892	0.46%	0.135%	\$588	\$173
Invesco Global Opports R6	OGIIX	\$16,777	0.68%	0.135%	\$114	\$23
Vanguard Target Retirement Income	VTINX	\$64,187	0.08%	0.135%	\$51	\$87
Vanguard Target Retirement 2015	VTXVX	\$27,260	0.08%	0.135%	\$22	\$37
Vanguard Target Retirement 2020	VTWNX	\$401,572	0.08%	0.135%	\$321	\$542
Vanguard Target Retirement 2025	VTTVX	\$664,953	0.08%	0.135%	\$532	\$898
Vanguard Target Retirement 2030	VTHRX	\$726,442	0.08%	0.135%	\$581	\$981
Vanguard Target Retirement 2035	VTTHX	\$791,698	0.08%	0.135%	\$633	\$1,069
Vanguard Target Retirement 2040	VFORX	\$1,051,714	0.08%	0.135%	\$841	\$1,420
Vanguard Target Retirement 2045	VTIVX	\$655,840	0.08%	0.135%	\$525	\$885
Vanguard Target Retirement 2050	VFIFX	\$322,201	0.08%	0.135%	\$258	\$435
Vanguard Target Retirement 2055	VFFVX	\$249,796	0.08%	0.135%	\$200	\$337
Vanguard Target Retirement 2060	VTTSX	\$97,631	0.08%	0.135%	\$78	\$132
Vanguard Target Retirement 2065	VLXVX	\$58,884	0.08%	0.135%	\$47	\$79

LANE COUNTY

401(a) Defined Contribution Plan

PLAN FEE ANALYSIS

Third Quarter 2022

Annualized

Fund	Ticker	Quarter Average Assets	Net Expense Ratio	Admin Fee	Est. Total Invest. Cost	Est. Total Admin. Cost
Vanguard Target Retirement 2070	VSVNX	\$68	0.08%	0.135%	\$0	\$0
Self-Directed Brokerage	-	\$11	-	0.135%	-	\$0
TOTAL		\$7,055,858			\$9,057	\$9,525

Plan Administration Cost	Quarter	Annualized
Plan Generated Revenue (est):	\$2,401	\$9,525
Contracted Revenue (est):	\$1,512	\$5,997
Net Excess/(Deficit) (est):	\$889	\$3,528

*For reporting purposes, fund level fees have been excluded from the fund expense ratio calculations.

**Revenue generated by investment options is credited back to the participants invested in those funds. This is reflected in the Net Expense Ratios.

Section 6

Allspring Special Mid Cap Value R6 (USD)

Morningstar Quantitative Rating™
Bronze
 09-30-2022

Overall Morningstar Rating™
 ★★★★★
 387 US Fund Mid-Cap Value

Standard Index
 S&P 500 TR USD

Category Index
 Russell Mid Cap Value TR USD

Morningstar Cat
 US Fund Mid-Cap Value

Performance 10-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-31.71	19.56	5.57	19.92	3.36
2021	11.20	6.08	-0.72	9.98	28.80
2022	-2.27	-10.19	-4.62	—	-8.32
Trailing Returns					
	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly Std 09-30-2022	-4.14	9.10	8.36	—	10.43
Total Return	-4.14	9.10	8.36	12.09	10.43
+/- Std Index	10.47	-1.12	-2.08	-0.69	—
+/- Cat Index	6.03	1.80	1.87	1.67	—
% Rank Cat	33	39	17	4	—
No. in Cat	397	387	363	267	—

Performance Disclosure
 The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-222-9222 or visit www.allspringglobal.com.

Fees and Expenses

Sales Charges
Front-End Load % NA
Deferred Load % NA

Fund Expenses

Management Fees % 0.66
 12b1 Expense % 0.00
Net Expense Ratio % 0.70
Gross Expense Ratio % 0.70
Risk and Return Profile

	3 Yr	5 Yr	10 Yr
Morningstar Rating™	387 funds	363 funds	267 funds
Morningstar Risk	4★	4★	5★
Morningstar Return	+Avg	+Avg	High

	3 Yr	5 Yr	10 Yr
Standard Deviation	23.56	20.39	16.06
Mean	9.10	8.36	12.09
Sharpe Ratio	0.46	0.44	0.75

MPI Statistics	Standard Index	Best Fit Index
Alpha	-0.57	1.03
Beta	—	—
R-Squared	81.46	—

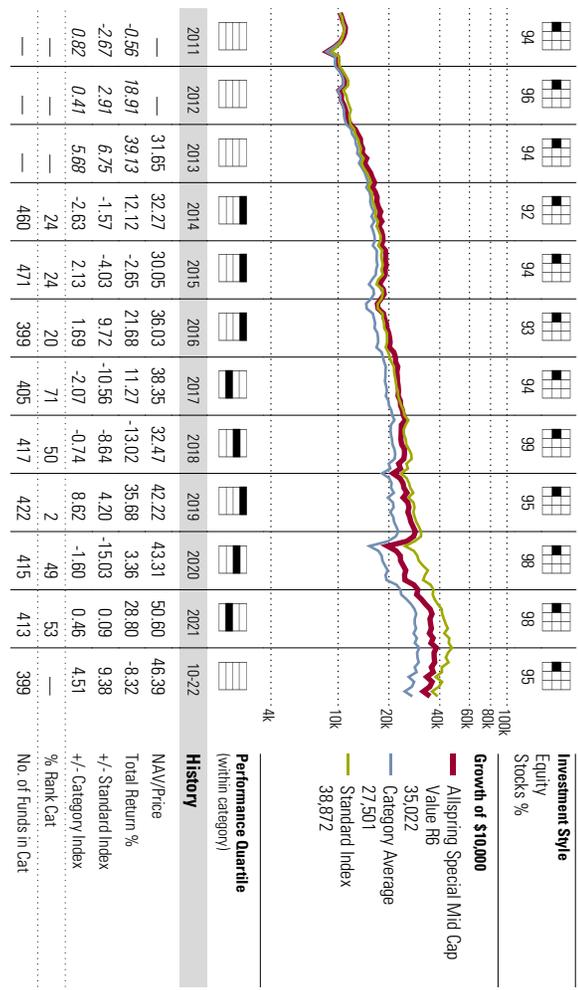
12-Month Yield —
 Potential Cap Gains Exp 32.81%

Operations

Family: Allspring Global Investments
Manager: Multiple
Tenure: 13.8 Years
Objective: Growth

Base Currency: USD
Ticker: WFPRX
SIN: US94987W5132
Minimum Initial Purchase: \$0

Purchase Constraints: A
Incept: 06-28-2013
Type: MF
Total Assets: \$11,216.58 mil



Portfolio Analysis 08-31-2022

Asset Allocation %	Net %	Long %	Short %
Cash	5.33	5.33	0.00
US Stocks	91.05	91.05	0.00
Non-US Stocks	3.62	3.62	0.00
Bonds	0.00	0.00	0.00
Other/Not Cstfd	0.00	0.00	0.00
Total	100.00	100.00	0.00

Equity Style

Value	Brand	Growth	Port	Rel	Rel	Rel
Avg	Index	Cat	Avg	Index	Cat	Index
P/E Ratio TTM	14.1	0.73	1.17	—	—	—
P/C Ratio TTM	9.6	0.67	1.17	—	—	—
P/B Ratio TTM	2.2	0.60	1.29	—	—	—
Geo Avg Mkt Cap \$mil	17347	0.10	1.47	—	—	—

Fixed-Income Style

Value	Brand	Growth	Avg Eff Maturity	Avg Eff Duration	Avg Wtd Coupon	Avg Wtd Price
Large	High	High	—	—	—	—
Med	Med	Med	—	—	—	—
Small	Low	Low	—	—	—	—

Credit Quality Breakdown —

	AAA	AA	A	BBB	BB	B	Below B	NR
Bond %	—	—	—	—	—	—	—	—

Regional Exposure

	Stocks %	Rel Std Index
Americas	96.2	0.97
Greater Europe	2.4	2.33
Greater Asia	1.5	48.33

Sector Weightings

	Stocks %	Rel Std Index
Cyclical	42.7	1.46
Basic Materials	4.0	1.78
Consumer Cyclical	14.3	1.35
Financial Services	17.2	1.26
Real Estate	7.2	2.64
Sensitive	34.6	0.77
Communication Services	0.0	0.00
Energy	6.1	1.14
Industrials	20.7	2.39
Technology	7.7	0.33
Defensive	22.7	0.88
Consumer Defensive	4.9	0.67
Healthcare	10.2	0.66
Utilities	7.6	2.57

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American Beacon Large Cap Value R6 (USD)

Morningstar Analyst Rating™
Bronze

Overall Morningstar Rating™
★★★★
1,111 US Fund Large Value

Standard Index
S&P 500 TR USD

Category Index Russell 1000 Value
Morningstar Cat US Fund Large Value TR USD

Performance 10-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-30.15	17.69	4.22	20.66	3.98
2021	13.71	5.83	-1.12	7.55	27.98
2022	-0.64	-11.95	-5.39	—	-7.12
Trailing Returns					
	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly Std 09-30-2022	-5.72	9.32	7.88	—	8.41
Total Return	-10.98	—	5.68	—	6.33
	-5.72	9.32	7.88	10.59	8.41
+/- Std Index	8.89	-0.90	-2.56	-2.19	—
+/- Cat Index	1.28	2.00	0.67	0.30	—
% Rank Cat	62	34	46	37	—
No. in Cat	1181	1111	1054	787	—

7-day Yield — Subsidized
30-day SEC Yield — Unsubsidized

Performance Disclosure
The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

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Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-658-5811 or visit www.americanbeaconfunds.com.

Fees and Expenses	
Sales Charges	NA
Front-End Load %	NA
Deferred Load %	NA
Fund Expenses	0.55
Management Fees %	0.00
12bt Expense %	0.60
Net Expense Ratio %	0.60
Gross Expense Ratio %	0.60
Risk and Return Profile	

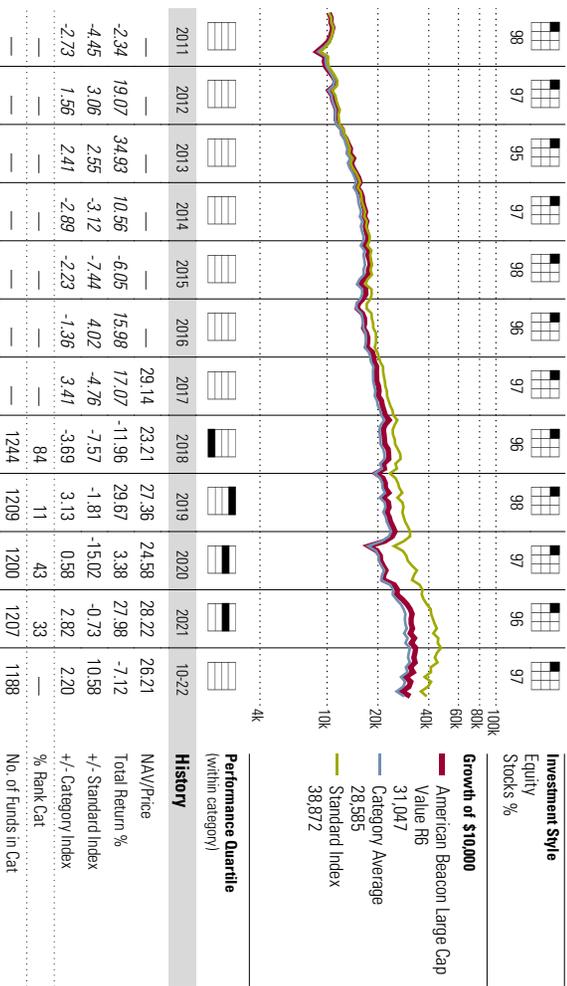
	3 Yr	5 Yr	10 Yr
Morningstar Rating™	3★	2★	3★
Morningstar Risk	+Avg	+Avg	+Avg
Morningstar Return	Avg	Avg	Avg

	3 Yr	5 Yr	10 Yr
Standard Deviation	23.73	21.08	16.79
Mean	9.32	7.88	10.59
Sharpe Ratio	0.47	0.41	0.64
MPI Statistics	Standard Index	Best Fit Index	—
Alpha	-0.68	1.05	—
Beta	1.05	84.11	—
R-Squared	—	—	—
12-Month Yield	—	—	—
Potential Cap Gains Exp	—	—	40.29%

Operations
Family: American Beacon
Manager: Multiple
Tenure: 32.9 Years
Objective: Growth and Income

Base Currency: USD
Ticker: AABRX
SIN: US0245267903
Minimum Initial Purchase: \$0

Purchase Constraints: —
Incept: 02-28-2017
Type: MF
Total Assets: \$3,227.92 mil



Portfolio Analysis 08-31-2022		Net %	Long %	Short %	Share Cng	Share Holdings:	Net Assets %
Asset Allocation %		3.37	3.37	0.00	162	Total Stocks: 47	Fixed-Income, 23% Turnover Ratio
Cash	—	89.52	89.52	0.00	07-2022		
US Stocks	—	7.11	7.11	0.00	108	State Street Inst US Govt MINT SI	3.13
Non-US Stocks	—	0.00	0.00	0.00	27,050	S+P500 Emiri Fur Sep22 Xome 202209	3.11
Bonds	—	0.00	0.00	0.00	2	Wells Fargo & Co	2.17
Other/Not Cstfd	—	0.00	0.00	0.00	138,733	Elevance Health Inc	1.95
Total	—	100.00	100.00	0.00	1	Citigroup Inc	1.91

Equity Style		Portfolio Statistics		Port	Rel	Rel
Value	Brand Growth	P/E Ratio TTM	14.2	0.73	1.12	1.86
Large	Mid	P/C Ratio TTM	11.0	0.77	1.11	1.76
Small	High	P/B Ratio TTM	2.1	0.58	0.98	1.67
	Med	Geo Avg Mkt Cap	61607	0.36	0.65	1.47
	Low					

Fixed-Income Style		Avg Eff Maturity		Avg Eff Duration		Avg Wtd Coupon		Avg Wtd Price	
High	Med	—	—	—	—	—	—	—	—
Low	High	—	—	—	—	—	—	—	—
	Low	—	—	—	—	—	—	—	—

Credit Quality Breakdown		Bond %	
AAA	AA	—	—
AAA	A	—	—
BBB	BB	—	—
BB	B	—	—
Below B	NR	—	—
	Below B	—	—
	NR	—	—

Regional Exposure		Stocks %	Rel Std Index
Americas	—	93.6	0.95
Greater Europe	—	6.4	6.24
Greater Asia	—	0.0	0.03

Sector Weightings		Stocks %	Rel Std Index
Cyclical		33.6	1.15
Basic Materials	—	4.6	2.01
Consumer Cyclical	—	5.4	0.51
Financial Services	—	22.2	1.63
Real Estate	—	1.5	0.55
Sensitive		42.2	0.94
Communication Services	—	6.4	0.86
Energy	—	9.6	1.79
Industrials	—	14.9	1.72
Technology	—	11.3	0.48
Defensive		24.1	0.94
Consumer Defensive	—	5.2	0.70
Healthcare	—	14.9	0.97
Utilities	—	4.1	1.37

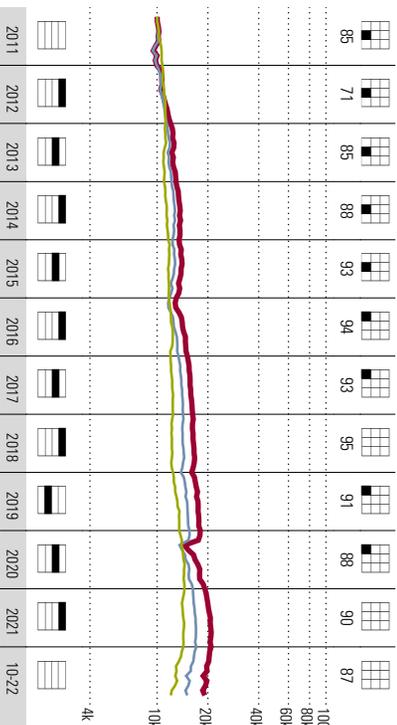
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American Beacon SIM High Yield Opps R5 (USD)

Morningstar Analyst Rating™ Overall Morningstar Rating™ Standard Index **Category Index** **Morningstar Cat**
Neutral **★★★★★** **Bloomberg US** **ICE BofA US High** **US Fund High Yield**
 03-15-2022 628 US Fund High Yield Bond Agg Bond FR USD Yield FR USD Bond

Performance 10-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-19.26	15.38	6.30	7.58	6.52
2021	3.96	3.66	1.13	-0.16	8.81
2022	-3.16	-7.30	-0.62	—	-8.15



Investment Style	
Fixed-Income	Bond %
American Beacon SIM High Yield Opps R5	19.177
Category Average	15.076
Standard Index	12.051

Trailing Returns					
	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-7.89	2.74	3.59	5.17	5.88
Std 09-30-2022	-10.92	—	3.11	4.99	5.46
Total Return	-7.89	2.74	3.59	5.17	5.88
+/- Std Index	7.80	6.52	4.13	4.44	—
+/- Cat Index	3.57	2.56	1.69	1.10	—
% Rank Cat	18	5	3	3	—
No. in Cat	673	628	579	403	—

Performance Disclosure
 The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.
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 Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-658-5811 or visit www.americanbeaconfunds.com.

7-day Yield		Subsidized	Unsubsidized
30-day SEC Yield 09-30-22	7.83	1	7.76
1. Contractual yielder. Expires 12-31-2022			

Portfolio Analysis 08-31-2022											
Asset Allocation %			Net %	Long %	Short %	Share Clng	Share Holdings:	Holdings:	NAV/Price	Total Return %	% Rank Cat
Cash	3.99	1.19	5.18	07-2022	Amount	5 Total Stocks	79 Total Fixed-Income.	62% Turnover Ratio	8.81	-8.15	—
US Stocks	3.96	3.96	0.00		28 mil	Baytex Energy Corp	8.75%		10.36	7.57	—
Non-US Stocks	0.00	0.00	0.00		30 mil	Navios South American Logistics In			4.04	4.04	—
Bonds	91.74	91.74	0.00		21 mil	Scorpio Tankers Inc	3%		3.45	4.04	—
Other/Not Clsfd	8.29	8.29	0.00		26 mil	Euronav Luxembourg SA	6.25%		—	—	—
Total	100.00	105.18	5.18		28 mil	SeaWorld Parks & Entertainment Inc			6.78	682	—

Fees and Expenses
Sales Charges
Front-End Load % NA
Deferred Load % NA
Fund Expenses
 Management Fees % 0.72
 1201 Expense % 0.00
Net Expense Ratio % 0.74
Gross Expense Ratio % 0.82
Risk and Return Profile

Equity Style		Portfolio Statistics		Port	Rel	Rel
Value	Brand	P/E Ratio	TTM	Index	Index	Cat
Large	Med	3.2	—	—	—	—
Mid	Med	1.7	—	—	—	—
Small	Med	1.7	—	—	—	—
Small	Small	10250	—	—	—	—

Fixed-Income Style		Avg Eff Maturity		Avg Eff Duration		Avg Wtd Coupon		Avg Wtd Price	
Mid	Ext	High	Med	High	Med	Low	High	Med	Low
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—

Morningstar Rating™					
	3 Yr	5 Yr	10 Yr	628 funds	579 funds
Morningstar Rating™	4★	5★	5★	403 funds	403 funds
Morningstar Risk	High	High	High	High	High
Morningstar Return	High	High	High	High	High

Credit Quality Breakdown 09-30-2022		Bond %	
AAA	AA	0.00	0.00
AAA	AA	0.00	0.00
AA	AA	0.00	0.00
A	BBB	5.74	—
BBB	BB	40.29	—
BB	B	31.93	—
Below B	NR	3.04	—
NR	NR	19.00	—

Sector Weightings		Stocks %	Rel Std Index
Cyclical	0.0	—	—
Basic Materials	0.0	—	—
Consumer Cyclical	0.0	—	—
Financial Services	0.0	—	—
Real Estate	0.0	—	—
Sensitive	100.0	—	—
Communication Services	0.0	—	—
Energy	100.0	—	—
Industrials	0.0	—	—
Technology	0.0	—	—
Defensive	0.0	—	—
Consumer Defensive	0.0	—	—
Healthcare	0.0	—	—
Utilities	0.0	—	—

M&T Statistics			
	Standard Index	Best Fit Index	—
Alpha	7.31	—	—
Beta	0.99	—	—
R-Squared	15.49	—	—
12-Month Yield	5.60%	—	—
Potential Cap Gains Exp	1.50%	—	—

Regional Exposure		Stocks %	Rel Std Index
Americas	100.0	—	—
Greater Europe	0.0	—	—
Greater Asia	0.0	—	—

Purchase Constraints:		Incept	Type:	Total Assets:
Base Currency:	USD	—	—	—
Ticker:	SHOIX	02-14-2011	MF	\$1,353.08 mil
Tenure:	11.8 Years	—	—	—
Objective:	Corporate Bond - High Yield	—	—	—

Operations
Family: American Beacon
Manager: Multiple
Tenure: 11.8 Years
Objective: Corporate Bond - High Yield

Base Currency: USD
Ticker: SHOIX
SIN: US0245242823
Minimum Initial Purchase: \$250,000

Purchase Constraints: —
Incept: 02-14-2011
Type: MF
Total Assets: \$1,353.08 mil

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American Funds Europacific Growth R6 (USD)

Morningstar Analyst Rating™ Overall Morningstar Rating™ Standard Index
Gold
 07-29-2022

374 US Fund Foreign Large Growth

MSCI ACWI EX USA NR USD

Category Index
 MSCI ACWI EX USA Growth NR USD

Morningstar Cat
 US Fund Foreign Large Growth

Performance 10-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-22.43	22.77	9.66	19.95	25.27
2021	-0.43	6.97	-2.35	-1.13	2.94
2022	-12.24	-14.65	-9.33	—	-28.73
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-30.88	-0.77	0.13	5.03	6.70
Std 09-30-2022	-32.85	—	-0.23	4.52	6.36
Total Return	-30.88	-0.77	0.13	5.03	6.70
+/- Std Index	-6.15	0.91	0.73	1.76	—
+/- Cat Index	0.12	1.14	0.04	0.89	—
% Rank Cat	51	55	65	41	—
No. in Cat	431	374	334	216	—

7-day Yield	Subsidized	Unsubsidized
30-day SEC Yield 09-30-22	0.78	0.78

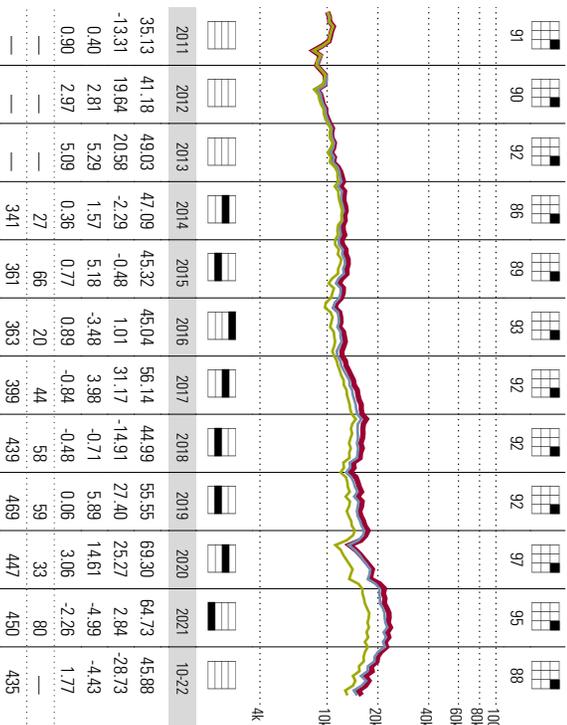
Performance Disclosure
 The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

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Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-421-4225 or visit www.americanfunds.com.

Front-End Load %	NA
Deferred Load %	NA
Fees and Expenses	
Management Fees %	0.41
12bt Expense %	NA
Net Expense Ratio %	0.46
Gross Expense Ratio %	0.46
Risk and Return Profile	
Morningstar Rating™	3★
Morningstar Risk	Avg
Morningstar Return	Avg
Standard Deviation	20.31
Mean	-0.77
Sharpe Ratio	0.03
MPI Statistics	Standard Index
Alpha	1.31
Beta	1.07
R-Squared	94.29
12-Month Yield	2.25%
Potential Cap Gains Exp	31.34%

Operations	
Family:	American Funds
Manager:	Multiple
Tenure:	21.4 Years
Objective:	Foreign Stock
Base Currency:	USD



Investment Style	
Equity	100%
Stocks %	100%
Growth of \$10,000	
American Funds Europacific Growth R6	16,037
Category Average	15,049
Standard Index	13,191
Performance Quartile (within category)	
NAV/Price	45.88
Total Return %	-28.73
+/- Standard Index	-4.43
+/- Category Index	1.77
% Rank Cat	—
No. of Funds in Cat	435

Portfolio Analysis 09-30-2022					
Asset Allocation %	Net %	Long %	Short %	Share Clng	Holdings:
Cash	11.24	11.24	0.00	06-2022	361 Total Stocks; 0 Total Fixed-Income, 29% Turnover Ratio
US Stocks	2.18	2.18	0.00		130 mil Reliance Industries Ltd
Non-US Stocks	86.19	86.19	0.00		5 mil Novo Nordisk A/S Class B
Bonds	0.00	0.00	0.00		35 mil LVMH Moët Hennessy Louis Vuitton SE
Other/Not Clsfd	0.39	0.39	0.00		7 mil ASML Holding NV
Total	100.00	100.00	0.00		95 mil Daicichi Sanryo Co Ltd

Equity Style		Portfolio Statistics	
Value	Brand Growth	Port Avg	Rel Index
Large	Med	15.9	1.43
Med	Small	11.1	1.39
		2.6	1.76
		46728	1.34
			1.09

Fixed-Income Style		Credit Quality Breakdown	
High	Med	—	
Med	Low	—	
Low		—	
		—	
		—	

Regional Exposure		Bond %	
Americas	14.7	1.26	—
Greater Europe	43.4	1.00	—
Greater Asia	41.9	0.93	—
Below B	—	—	—
NR	—	—	—

Sector Weightings		Sector Weightings	
Cyclical	34.6	Defensive	23.8
Basic Materials	8.0	Consumer Defensive	7.4
Consumer Cyclical	12.7	Healthcare	15.1
Financial Services	13.2	Utilities	1.3
Real Estate	0.7		
Sensitive	41.6		
Communication Services	2.9		
Energy	9.9		
Industrials	13.0		
Technology	15.8		

Purchase Constraints:	
Incept	A
Type:	05-01-2009
Total Assets:	MIF \$125,713.46 mil

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Artisan Small Cap Institutional (USD)

Morningstar Analyst Rating™ Overall Morningstar Rating™ Standard Index Category Index Morningstar Cat
Silver 09-15-2022 **★★★★** 571 US Fund Small Growth **S&P 500 TR USD** Russell 2000 Growth TR USD **US Fund Small Growth**

Performance 10-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-14.94	37.30	8.63	27.15	61.31
2021	-4.95	4.41	-1.13	-6.93	-8.68
2022	-18.02	-21.47	3.27	—	-29.77
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-37.01	3.85	8.77	11.53	11.15
Std 09-30-2022	-38.12	—	8.29	10.41	10.66
Total Return	-37.01	3.85	8.77	11.53	11.15
+/- Std Index	-22.40	-6.36	-1.67	-1.25	—
+/- Cat Index	-10.99	-1.26	3.61	1.39	—
% Rank Cat	83	86	37	36	—
No. in Cat	596	571	517	389	—

7-day Yield — Subsidized
 30-day SEC Yield — Unsubsidized

Performance Disclosure
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Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 866-773-7233 or visit www.artisanfunds.com.

Fees and Expenses	
Sales Charges	NA
Front-End Load %	NA
Deferred Load %	NA
Fund Expenses	0.94
Management Fees %	NA
12bt Expense %	0.96
Net Expense Ratio %	0.96
Gross Expense Ratio %	0.96
Risk and Return Profile	

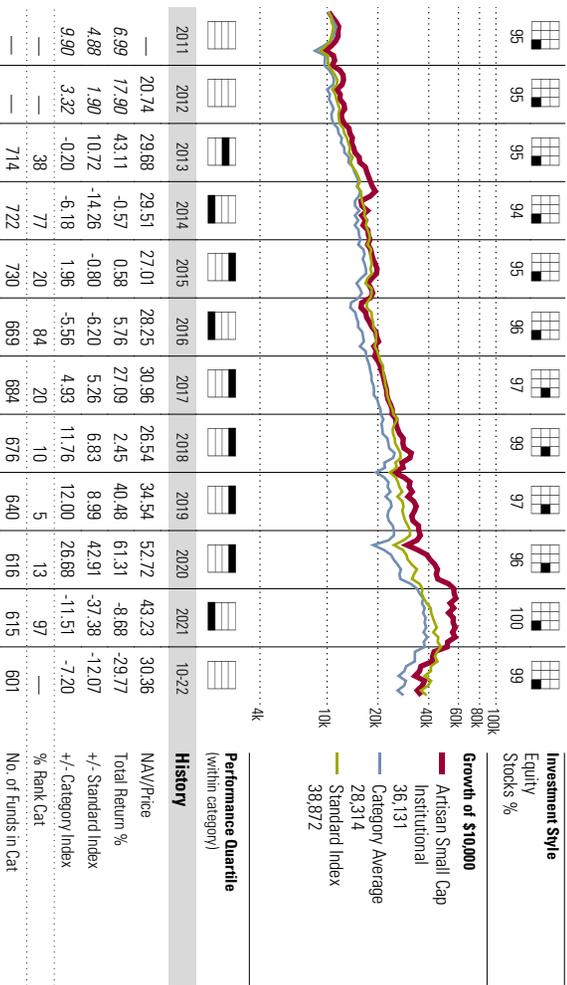
	3 Yr	5 Yr	10 Yr
Morningstar Rating™	571 funds	517 funds	389 funds
	2★	4★	3★
Morningstar Risk	Avg	+Avg	+Avg
Morningstar Return	-Avg	+Avg	+Avg

	3 Yr	5 Yr	10 Yr
Standard Deviation	27.42	24.86	20.32
Mean	3.85	8.77	11.53
Sharpe Ratio	0.25	0.41	0.61
MPI Statistics	Standard Index	Best Fit Index	—
Alpha	-5.16	—	—
Beta	1.07	—	—
R-Squared	65.27	—	—
12-Month Yield	—	—	—
Potential Cap Gains Exp	—	35.22%	—

Operations
 Family: Artisan Partners Funds
 Manager: Multiple
 Tenure: 18.2 Years
 Objective: Small Company

Base Currency: USD
 Ticker: APHSX
 SIN: US04314H7585
 Minimum Initial Purchase: \$1 mil

Purchase Constraints: —
 Incept: 05-07-2012
 Type: MF
 Total Assets: \$1,822.74 mil



Portfolio Analysis 09-30-2022		
Asset Allocation %	Net %	Long %
Cash	0.82	0.82
US Stocks	93.89	93.89
Non-US Stocks	5.29	5.29
Bonds	0.00	0.00
Other/Not Cstfd	0.00	0.00
Total	100.00	100.00

Equity Style		Portfolio Statistics	
Value	Brand Growth	Port Avg	Rel Index
Large	Med	P/E Ratio TTM	1.60
Med	Small	P/C Ratio TTM	2.11
Small	—	P/B Ratio TTM	5.3
—	—	Geo Avg Mkt Cap	5722
—	—	Geo Avg Mkt Cap	0.03
—	—	—	1.30

Fixed-Income Style		Ang Eff Maturity	
Ltd	Med	Ext	—
High	Med	Low	—
Med	Low	—	—
Low	—	—	—

Credit Quality Breakdown —

	Bond %
AAA	—
AA	—
A	—
BBB	—
BB	—
B	—
Below B	—
NR	—

Regional Exposure		Stocks %	Rel Std Index
Americas	94.7	0.96	
Greater Europe	0.8	0.74	
Greater Asia	4.6	152.47	

Share Cng	Share Amount	Holdings : 59 Total Stocks, 0 Total Fixed-Income, 40% Turnover Ratio	Net Assets %
06-2022	3 mil	Halozyme Therapeutics Inc	7.52
	397,306	ShockWave Medical Inc	6.06
	2 mil	Lattice Semiconductor Corp	5.18
	263,906	argenx SE ADR	5.11
	308,309	Valmont Industries Inc	4.55
	717,829	Ascendis Pharma A/S ADR	4.07
	183,910	Monolithic Power Systems Inc	3.67
	1 mil	Blackline Inc	3.33
	1 mil	Ingersoll Rand Inc	3.15
	404,844	Wingstop Inc	2.79
	432,071	Novanta Inc	2.74
	385,569	Advanced Drainage Systems Inc	2.63
	562,991	Workiva Inc Class A	2.40
	118,228	Tyler Technologies Inc	2.25
	2 mil	Veracyte Inc	1.99

Sector Weightings	Stocks %	Rel Std Index
Cyclical	12.7	0.43
Basic Materials	0.0	0.00
Consumer Cyclical	9.4	0.89
Financial Services	3.3	0.24
Real Estate	0.0	0.00
Sensitive	51.6	1.15
Communication Services	0.0	0.00
Energy	0.0	0.00
Industrials	11.7	1.34
Technology	40.0	1.70
Defensive	35.7	1.39
Consumer Defensive	2.3	0.31
Healthcare	33.4	2.17
Utilities	0.0	0.00

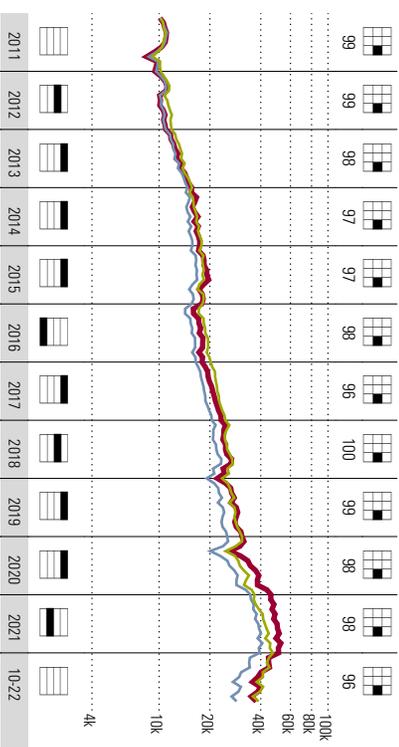
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JPMorgan Mid Cap Growth R6 (USD)

Morningstar Analyst Rating™ Overall Morningstar Rating™ Standard Index **Category Index** **Morningstar Cat**
Bronze **★★★★★** **US Fund Mid-Cap Growth** **Russell Mid Cap Growth TR USD** **US Fund Mid-Cap Growth**
 08-12-2022 529 US Fund Mid-Cap Growth S&P 500 TR USD

Performance 10-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-15.56	32.50	10.14	20.51	48.51
2021	1.34	7.25	-1.50	3.66	10.99
2022	-11.75	-20.60	-1.70	—	-26.33



Investment Style		Performance Quartile (within category)	
Equity	Stocks %	NAV/Price	History
JPMorgan Mid Cap Growth R6	37.608	53.85	39.67
Category Average	28.746	10.99	-26.33
Standard Index	38.872	-8.63	-0.27

Performance Disclosure
 The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

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Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-489-4111 or visit www.jpmorganfunds.com.

Fees and Expenses	
Sales Charges	NA
Front-End Load %	NA
Deferred Load %	NA
Fund Expenses	0.65
Management Fees %	NA
12bt Expense %	NA
Net Expense Ratio %	0.70
Gross Expense Ratio %	0.74
Risk and Return Profile	

Morningstar Rating™	3 Yr	5 Yr	10 Yr
Morningstar Rating™	4★	5★	5★
Morningstar Risk	Avg	Avg	Avg
Morningstar Return	+Avg	+Avg	High

Standard Deviation	3 Yr	5 Yr	10 Yr
Standard Deviation	23.94	21.40	17.50
Mean	9.50	10.81	13.48
Sharpe Ratio	0.47	0.53	0.77

MPI Statistics	Standard Index	Best Fit Index
Alpha	-0.43	—
Beta	1.04	—
R-Squared	81.39	—
12-Month Yield	—	4.61%
Potential Cap Gains Exp	—	—

Credit Quality Breakdown		Bond %	
AAA	AA	AAA	AA
AAA	—	AAA	—
AA	—	AA	—
BBB	—	BBB	—
BB	—	BB	—
Below B	—	Below B	—
NR	—	NR	—

Regional Exposure		Stocks %		Rel Std Index	
Americas	Greater Europe	99.6	0.4	1.01	0.42
Greater Europe	0.0	0.0	0.00	—	—
Greater Asia	0.0	0.0	0.00	—	—

Sector Weightings		Stocks %		Rel Std Index	
Cyclical	24.2	0.5	0.21	1.7	0.23
Basic Materials	0.5	12.6	1.19	24.0	1.56
Consumer Cyclical	11.1	0.0	0.00	—	—
Financial Services	0.0	0.0	0.00	—	—
Real Estate	0.0	0.0	0.00	—	—
Sensitive	50.1	1.8	0.24	25.7	1.00
Communication Services	1.8	3.8	0.71	1.7	0.23
Energy	3.8	15.9	1.84	24.0	1.56
Industrials	15.9	28.6	1.21	25.7	1.00
Technology	28.6	1.7	0.23	1.7	0.23
Consumer Defensive	1.7	24.0	1.56	24.0	1.56
Healthcare	24.0	0.0	0.00	—	—
Utilities	0.0	0.0	0.00	—	—

Purchase Constraints:		A	
Incept	11-01-2011	MF	—
Total Assets:	\$7,521.91 mil	—	—

Portfolio Analysis 09-30-2022		Net %		Long %		Short %	
Asset Allocation %	08-31-2022	3.07	3.07	3.07	0.00	0.00	0.00
Cash	—	96.52	96.52	0.00	0.00	0.00	0.00
US Stocks	—	0.41	0.41	0.00	0.00	0.00	0.00
Non-US Stocks	—	0.00	0.00	0.00	0.00	0.00	0.00
Bonds	—	0.00	0.00	0.00	0.00	0.00	0.00
Other/Not Cstfd	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	100.00	100.00	100.00	0.00	0.00	0.00

Top Holdings 08-31-2022		Share Cng		Share		Holdings		Net Assets	
Since 08-2022	Amount	106	45%	106	45%	Total	Turnover	Ratio	%
—	234 mil	—	—	—	—	JPMorgan Prime Money Market Inst	—	—	3.07
—	466,857	—	—	—	—	Synopsis Inc	—	—	2.12
—	100,690	—	—	—	—	Chipotle Mexican Grill Inc	—	—	2.11
—	1 mil	—	—	—	—	Quanta Services Inc	—	—	1.91
—	1 mil	—	—	—	—	Copart Inc	—	—	1.90
—	1 mil	—	—	—	—	Hilton Worldwide Holdings Inc	—	—	1.89
—	640,418	—	—	—	—	LPL Financial Holdings Inc	—	—	1.86
—	883,494	—	—	—	—	Cheniere Energy Inc	—	—	1.86
—	904,355	—	—	—	—	Trane Technologies PLC Class A	—	—	1.83
—	798,839	—	—	—	—	Cadence Design Systems Inc	—	—	1.82
—	702,156	—	—	—	—	CrowdStrike Holdings Inc Class A	—	—	1.68
—	1 mil	—	—	—	—	Centene Corp	—	—	1.62
—	949,518	—	—	—	—	Agilent Technologies Inc	—	—	1.60
—	215,565	—	—	—	—	Palo Alto Networks Inc	—	—	1.57
—	1 mil	—	—	—	—	DexCom Inc	—	—	1.51

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MissionSquare PLUS Fund

Fund profile & characteristics

Fund Net Assets	\$11.7 Billion
Inception Date	January 2, 1991
Credit Quality ¹	A3/AA-/AA
Effective Duration ²	3.03
Market/Book Value Ratio	92.36%
# of Holdings	over 4,000
# of Investment Managers	12
# of Synthetic & Separate Account GIC Issuers	8
# of Traditional GIC providers	8

Sector allocation

Agencies	0.68%
Asset-Backed	6.09%
Cash & Cash Equivalents	4.73%
Credits	25.84%
Maturing GICs	22.65%
Mortgage-Backed	20.32%
Municipals	0.57%
Other	0.09%
Treasuries	11.40%
Wrap Providers	7.64%

Structure

Tier 1 - Cash Buffer	6.3%
Tier 2 - Shorter Duration Focus	8.6%
Tier 3 - Laddered Maturity Focus	22.7%
Tier 4 - Total Return Focus	62.4%

Maturity allocation

0-1 Yrs	16.0%
1-2 Yrs	10.9%
2-3 Yrs	12.4%
3-4 Yrs	7.9%
4-5 Yrs	13.3%
5+ Yrs	39.5%

Portfolio management

Investment Adviser:

MissionSquare Investments

Portfolio Managers:

Karen Chong-Wulff, CFA, CAIA, Managing Vice President,

Managed Fund Since 2007

Oliver Meng, CFA, CAIA, FRM, Director, Senior Fund Manager,

Managed Fund Since 2021

Wayne Wicker, CFA, Senior Vice President and Chief Investment

Officer, Managed Fund Since 2004

Investment objective

The PLUS Fund's investment objective is to seek to offer a competitive level of income consistent with providing capital preservation and meeting liquidity needs.

Fund goals

Key goals are to seek to preserve capital, by limiting risk of loss of principal and delivering stable returns, and to meet liquidity needs of those who invest in the PLUS Fund.

Investment strategy

MissionSquare Investments employs a structured, multi-product, multi-manager approach in managing the Fund. The Fund invests primarily in a diversified and tiered portfolio of stable value investment contracts and in fixed income securities, fixed income mutual funds, and fixed income commingled trust funds ("fixed income assets") that back certain stable value investment contracts. In addition, the Fund invests in money market mutual funds, as well as cash and cash equivalents. The Fund's portfolio may include different types of investments with a variety of negotiated terms and maturities and is diversified across sectors and issuers. The composition of the Fund's portfolio and its allocations to various stable value investments and fixed income investment sectors, across the fund's multiple tiers, is determined based on prevailing economic and capital market conditions, relative value analysis, liquidity needs, and other factors. The Fund invests in stable value investment contracts to seek to achieve, over the long run, returns higher than those of money market funds and short-term bank rates and relatively stable returns compared to short-to-intermediate term fixed income funds. The Fund generally will not track shorter-term interest rates as closely as money market mutual funds, because of its longer maturity, potential adverse market changes, and provisions in stable value contracts held by the Fund. In addition, while the Fund's returns are generally expected to follow interest rate trends over time, they typically will do so on a lagged basis.

Performance as of 09/30/2022

Share Class/CUSIP	Creditting Rate ³	Performance					Total estimated expenses
		YTD	1 Year	3 Year	5 Year	10 Year	
PLUS Fund (Gross) / -	2.47%	1.64%	2.19%	2.36%	2.47%	2.45%	0.21%
Morningstar US CIT Stable Value Peer Percentile ⁴	-	-	7%	7%	7%	1%	-
Morningstar US CIT Stable Value Number of Funds ⁴	-	-	16	16	16	16	-
R10 ⁵ /922081J709	2.15%	1.42%	1.88%	2.05%	2.16%	2.14%	0.52%
R9 ⁵ /922081J600	2.10%	1.38%	1.83%	2.00%	2.11%	2.09%	0.57%
R8 ⁵ /922081J501	2.06%	1.34%	1.78%	1.95%	2.06%	2.04%	0.62%
R7 ⁵ /922081J402	2.00%	1.30%	1.73%	1.90%	2.01%	1.99%	0.67%
R5 ⁵ /922081J303	1.91%	1.23%	1.62%	1.79%	1.91%	1.88%	0.77%
R3 ⁵ /922081J204	1.61%	1.01%	1.33%	1.50%	1.61%	1.59%	1.06%
R1 ⁵ /922081J105	1.35%	0.81%	1.07%	1.24%	1.35%	1.33%	1.32%
ICE BofA US 3 Month Treasury Bill Index	-	0.61%	0.62%	0.59%	1.15%	0.68%	-
Morningstar US CIT Stable Value Index ^{6,7}	-	1.31%	1.74%	1.98%	2.11%	1.96%	-
Standard Deviation (Gross)	-	-	0.03	0.06	0.07	0.06	-

PLUS Fund Gross total fee is 0.21% of assets. The fees included in the gross return consist of: (i) third-party manager fees of 0.08% of assets; (ii) third-party wrap provider fees of 0.11% of assets; (iii) third-party custody fees of 0.01% of assets; and (iv) third-party acquired fund fees of 0.01% of assets. The gross return is reported in a manner consistent with stable value industry reporting practices. Fees are subject to change due to fixed income manager, wrap, allocation, or other changes. Periods greater than one year represent annualized performance and past performance, as shown, is no guarantee of future results. Current performance may be lower or higher than the performance shown. For current performance, contact MissionSquare Retirement by calling 800-669-7400 or by visiting www.missionssquare.org if you are a plan administration client, or www.investments.missionssquare.org for institutions.

* The PLUS Fund includes additional share classes that are made available to clients based on asset size. For additional information, please contact the MissionSquare Investment Only team by calling us at 833-747-5601 or emailing us at io@missionssquare.org.

When Funds are marketed to institutional clients, the Funds are offered by MissionSquare Investment Services, an SEC registered broker-dealer and FINRA member firm. MissionSquare Investment Services is a wholly-owned subsidiary of MissionSquare Retirement and is an affiliate of AdvantageTrust Company, LLC and MissionSquare Investments.

Fund information

The Fund is an investment option of VantageTrust, a group trust established and maintained by VantageTrust Company, LLC, a wholly owned subsidiary of MissionsSquare Retirement. VantageTrust provides for the commingling of assets of certain trusts and plans as described in its Declaration of Trust, and is only available for investment by such eligible trusts and plans. The Fund is not a mutual fund. Its units are not deposits of VantageTrust Company and are not insured by the Federal Deposit Insurance Corporation or any other agency. The Fund is a security that has not been registered under the Securities Act of 1933 and is exempt from investment company registration under the Investment Company Act of 1940. For additional information regarding the Fund, including a description of the principal risks, please consult the Funds Disclosure Memorandum, which is available when plan administration clients log in at www.missionsq.org, at www.investments.missionsq.org for institutions, or upon request by calling 800-669-7400.

Before investing in the Fund you should carefully consider your investment goals, tolerance for risk, investment time horizon, and personal circumstances. There is no guarantee that the Fund will meet its investment objective and you can lose money.

Investment risks

Stable Value Risk, Interest Rate Risk, Credit Risk, Stable Value Issuer Risk, Liquidity Risk, Reinvestment Risk, Call Risk, Mortgage-Backed Securities Risk, Asset-Backed Securities Risk, Securities Lending Risk, Derivative Instruments Risk, Large Investor Risk.

Restrictions related to employer withdrawals

In the event an Employer initiates withdrawal of all or part of its Plan's assets from the PLUS Fund, the payout of such assets may be deferred for a period of up to twelve months. In the case of a total withdrawal, participant transfers of PLUS Fund assets to other investment options will be restricted and participants will not be able to make additional investments in the PLUS Fund during this twelve-month period.

Transfer restrictions

Direct transfers from the PLUS Fund to competing funds are restricted. Competing funds include, but are not limited to, the following types of investment options: (1) cash management funds, money market mutual funds, bank collective short-term investment funds, bank accounts or certificates of deposit, stable value funds or substantially similar investment options that offer guarantees of principal or income, such as guaranteed annuity contracts or similar arrangements with financial institutions; (2) short-term bond funds that invest in fixed income securities and seek to maintain or have an average portfolio duration of less than two years; and (3) any investment option that invests 80% or more of its assets in (i) fixed income securities or funds with a duration of less than two years, or (ii) instruments that seek to provide capital preservation such as stable value funds, bank certificates of deposit or bank accounts, and cash or cash equivalents. To transfer money from the PLUS Fund to a competing fund, you must first transfer the amount to a non-competing fund for a period of at least 90 days. For example, if you want to transfer money from the PLUS Fund to a money market fund, you will first need to transfer the money to a non-competing fund and then, 90 days later or any time thereafter, transfer that amount of money to the money market fund.

Contact information

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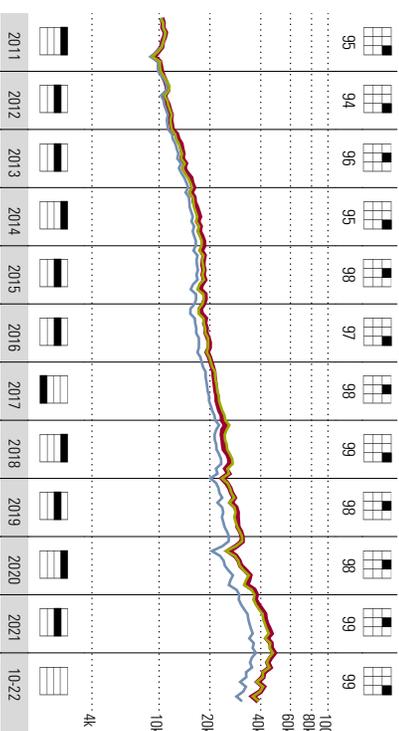
1. Credit Quality is calculated by MissionsSquare Investments (MSOI) and is only one factor that may be considered in assessing the risks of a fixed income portfolio, and it does not provide a complete picture of the credit risks or the dispersion of those risks within a portfolio. MSOI calculates the average based on the Moody's, S&P, Fitch (MS&P/F) or a combination of the three credit ratings of the underlying securities or wrap providers. Moody's, S&P, and Fitch are Nationally Recognized Statistical Rating Organizations and are not affiliated with MSOI.
2. Effective duration measures the interest rate sensitivity of the underlying portfolio. For the portion of the Fund invested in Maturing GICs, effective duration is not applicable and a duration of zero is assigned since their current values are not impacted by interest rate changes. If a duration based on weighted average maturity or cash flows is assigned to the Maturing GICs, the Fund's overall September 30, 2022 duration would be 3.70.
3. Annualized crediting rate for the last day of the month.
4. The Morningstar US CIT Stable Value universe represents the majority of the U.S. collective investment trust stable-value fund pooled universe and was named the Huebel Analytics Stable Value Pooled Fund Comparative Universe prior to January 31, 2021. The percentile ranks shown are derived by MissionsSquare Investments (MSOI) using gross returns from Morningstar. MSOI does not independently verify Morningstar data. Gross returns do not include plan administration fees, advisor expenses, or other stable value fund costs. Actual performance experienced by participants would be commensurately lower. The highest (or most favorable) percentile rank is 1 and the lowest (or least favorable) percentile rank is 100. The top-performing fund in a universe will always receive a rank of 1. Past performance is no guarantee of future results.
5. Performance information for this class prior to its inception date is the performance of the Fund adjusted to reflect the estimated fees and expenses of this class.
6. The Morningstar US CIT Stable Value Index measures the performance of approximately 75% of the U.S. collective investment trust stable-value fund pooled universe and is the stable value industry benchmark used by many institutional investors, consultants, advisers, and plan sponsors for monitoring stable value pooled funds.
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Parnassus Core Equity Institutional (USD)

Morningstar Analyst Rating™ Overall Morningstar Rating™ Standard Index Category Index Morningstar Cat
Gold **★★★★★** **1,186 US Fund Large Blend** **SP500 TR USD** **Russell 1000 TR** **US Fund Large Blend**
 08-10-2022

Performance 10-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-16.82	17.90	11.46	11.13	21.47
2021	7.18	7.44	0.18	10.79	27.82
2022	-5.70	-15.29	-6.88	—	-19.75



Investment Style	
Equity	Stocks %
Growth of \$10,000	
Parnassus Core Equity	38,670
Institutional	31,018
Category Average	38,972
Standard Index	38,972

Trailing Returns	
1 Yr	3 Yr
5 Yr	10 Yr
Incept	

Performance Disclosure
 The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.
 The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate, thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.
 Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-999-3505 or visit www.parnassus.com.

Fees and Expenses	
7-day Yield	Subsidized
30-day SEC Yield	Unsubsidized

Sales Charges	
Front-End Load %	NA
Deferred Load %	NA

Fund Expenses	
Management Fees %	0.57
12b1 Expense %	NA
Net Expense Ratio %	0.61
Gross Expense Ratio %	0.61

Risk and Return Profile	
Morningstar Rating™	3 Yr: 3★, 5 Yr: 5★, 10 Yr: 5★
Morningstar Risk	Avg -Avg
Morningstar Return	Avg High

MPT Statistics	
Alpha	Standard Index: 0.21, Best Fit Index: 0.91
Beta	0.91
R-Squared	97.55
12-Month Yield	—
Potential Cap Gains Exp	37.47%

Portfolio Analysis 09-30-2022	
Asset Allocation %	Net %
Cash	0.62
US Stocks	93.72
Non-US Stocks	5.66
Bonds	0.00
Other/Not Cstfd	0.00
Total	100.00

Equity Style	
Value	Brand
Small	Small
Mid	Mid
Large	Large

Fixed-Income Style	
Lat	Med
Med	Ext
High	High
Low	Low

Credit Quality Breakdown	
AAA	—
AA	—
A	—
BBB	—
BB	—
B	—
Below B	—
NR	—

Regional Exposure	
Americas	97.1
Greater Europe	2.9
Greater Asia	0.0

Performance Quartile (within category)	
2011	2012
2013	2014
2015	2016
2017	2018
2019	2020
2021	10-22
NAV/Price	63.55
Total Return %	-19.75
+/- Standard Index	-2.04
+/- Category Index	-1.20
% Rank Cat	—
No. of Funds in Cat	1317

Portfolio Statistics	
P/E Ratio TTM	21.9
P/C Ratio TTM	14.7
P/B Ratio TTM	3.9
Geo Avg Mkt Cap	15,404.9
Avg Eff Maturity	—
Avg Eff Duration	—
Avg Wtd Coupon	—
Avg Wtd Price	—

Sector Weightings	
Cyclical	28.0
Basic Materials	4.5
Consumer Cyclical	3.0
Financial Services	17.6
Real Estate	3.0
Sensitive	50.8
Communication Services	13.5
Energy	0.0
Industrials	13.5
Technology	23.7
Defensive	21.2
Consumer Defensive	7.3
Healthcare	13.9
Utilities	0.0

Operations	
Family:	Parnassus
Manager:	Multiple
Tenure:	21.5 Years
Objective:	Equity-Income
Base Currency:	USD

Ticker:	
PRIX	US7017694081
Minimum Initial Purchase:	\$100,000
Min Auto Investment Plan:	\$100,000
Purchase Constraints:	—

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PIMCO Real Return Instl (USD)

Morningstar Analyst Rating™ Overall Morningstar Rating™ Standard Index **Category Index** **Morningstar Cat**
Silver **★★★★** **196 US Fund Inflation-Protected Bond** **Bloomberg US Agg Bond TR USD** **Bloomberg US Treasury US TIPS** **US Fund Inflation-Protected Bond TR USD**

Performance 10-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	0.77	5.38	3.44	2.04	12.09
2021	-1.34	3.22	1.59	2.14	5.67
2022	-3.03	-6.42	-5.42	—	-12.82
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-11.56	1.36	2.12	0.95	5.16
Std 09-30-2022	-12.34	—	1.85	0.87	5.11
Total Return	-11.56	1.36	2.12	0.95	5.16
+/- Std Index	4.13	5.13	2.66	0.21	—
+/- Cat Index	-0.08	0.24	-0.04	-0.07	—
% Rank Cat	57	38	36	38	—
No. in Cat	207	196	187	130	—

7-day Yield	Subsidized	Unsubsidized
30-day SEC Yield 09-30-22	2.07	2.07

Performance Disclosure
 The overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 888-877-4626 or visit www.pimco.com.

Fees and Expenses

Sales Charges	
Front-End Load %	NA
Deferred Load %	NA

Fund Expenses	
Management Fees %	0.45
12b1 Expense %	NA

Net Expense Ratio %	0.47
Gross Expense Ratio %	0.47

Risk and Return Profile

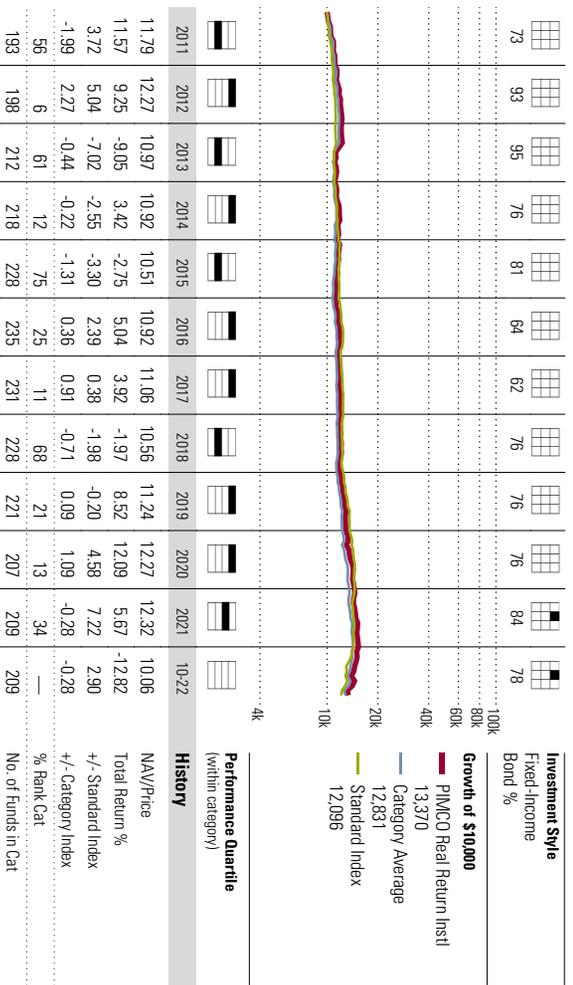
Morningstar Rating™	3★	3★	3★
Morningstar Risk	+Avg	+Avg	+Avg
Morningstar Return	Avg	Avg	Avg

Standard Deviation	7.25	5.95	5.56
Mean	1.36	2.12	0.95
Shapero Ratio	0.13	0.17	0.06

MPT Statistics	Standard Index	Best Fit Index
Alpha	5.86	—
Beta	1.13	—
R-Squared	70.34	—

12-Month Yield	8.68%
Potential Cap Gains Exp	-0.77%

Operations	
Family:	PIMCO
Manager:	Multiple
Tenure:	3.8 Years
Objective:	Growth and Income



Portfolio Allocation %		Net %	Long %	Short %	Share Clng	Share Holdings:	Amount	Holdings:	Net Assets %
Cash	18.22	30.23	48.45	0.00	03-2022	0 Total Stocks; 873 Total Fixed-Income.	10,959	Euro Schatz Future Sept 22	-11.62
US Stocks	0.00	0.00	0.00	0.00	10-086	10 Year Treasury Note Future Sept	730	Fin Fut 10Yr Jpb Ose 09/12/22	-11.09
Non-US Stocks	0.00	0.00	0.00	0.00	6,469	5 Year Treasury Note Future Sept 22	4,245	US Treasury Bond Future Sept 22	6.74
Bonds	101.11	172.30	71.19	0.00	557 mil	United States Treasury Notes 0.625%	435 mil	United States Treasury Bonds 3.625%	4.72
Other/Not Clsfd	17.11	17.11	0.00	0.00	510 mil	United States Treasury Notes 0.125%	3,615	Long-Term Euro BTP Future Sept 22	-4.32
Total	100.00	219.64	119.64	0.00	430 mil	United States Treasury Notes 0.5%	371 mil	United States Treasury Bonds 1.375%	3.88

Equity Style		Portfolio Statistics		Port	Rel	Rel
Value	Brand	P/E Ratio TTM	P/C Ratio TTM	Index	Index	Cat
Large	Mid	—	—	—	—	—
Mid	Small	—	—	—	—	—
Small	—	—	—	—	—	—

Fixed-Income Style		Avg Eff Maturity		Avg Eff Duration		Avg Wtd Coupon		Avg Wtd Price	
Ltd	Med	Ext	High	Med	Low	High	Med	Low	High
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—

Credit Quality Breakdown 06-30-2022

AAA	98.89
AA	0.56
A	0.11
BBB	0.15
BB	0.08
B	0.05
Below B	0.16
NR	0.00

Regional Exposure	Stocks %	Rel Std Index
Americas	—	—
Greater Europe	—	—
Greater Asia	—	—

Denotive	→	Consumer Defensive	—
Healthcare	+	Healthcare	—
Utilities	+	Utilities	—

Sector Weightings	Stocks %	Rel Std Index
Cyclical	—	—
Basic Materials	—	—
Consumer Cyclical	—	—
Financial Services	—	—
Real Estate	—	—
Sensitive	—	—
Communication Services	—	—
Energy	—	—
Industrials	—	—
Technology	—	—

Purchase Constraints:	A
Incept	01-29-1997
Type:	MF
Total Assets:	\$10,014.75 mil

Base Currency:	USD
Ticker:	PRRIX
SIN:	US6933911041
Minimum Initial Purchase:	\$1 mil

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T. Rowe Price Lrg Cp Gr I (USD)

Morningstar Analyst Rating™ Overall Morningstar Rating™ Standard Index Category Index Morningstar Cat
Silver **★★★★** **S&P 500 TR USD** **Russell 1000** **US Fund Large Growth**
 08-12-2022 1,119 US Fund Large Growth

Performance 10-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-13.87	28.60	11.46	13.05	39.56
2021	3.66	12.53	-0.50	6.14	23.18
2022	-13.25	-22.92	-2.89	—	-31.81
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-31.49	7.97	9.95	14.88	10.22
Std 09-30-2022	-31.08	—	9.93	13.81	10.00
Total Return	-31.49	7.97	9.95	14.88	10.22
+/- Std Index	-16.88	-2.24	-0.49	2.10	—
+/- Cat Index	-6.89	-3.77	-2.63	0.19	—
% Rank Cat	71	58	46	7	—
No. in Cat	1212	1119	1041	778	—

7-day Yield 11-01-22 0.00 Unsubsidized
 30-day SEC Yield —

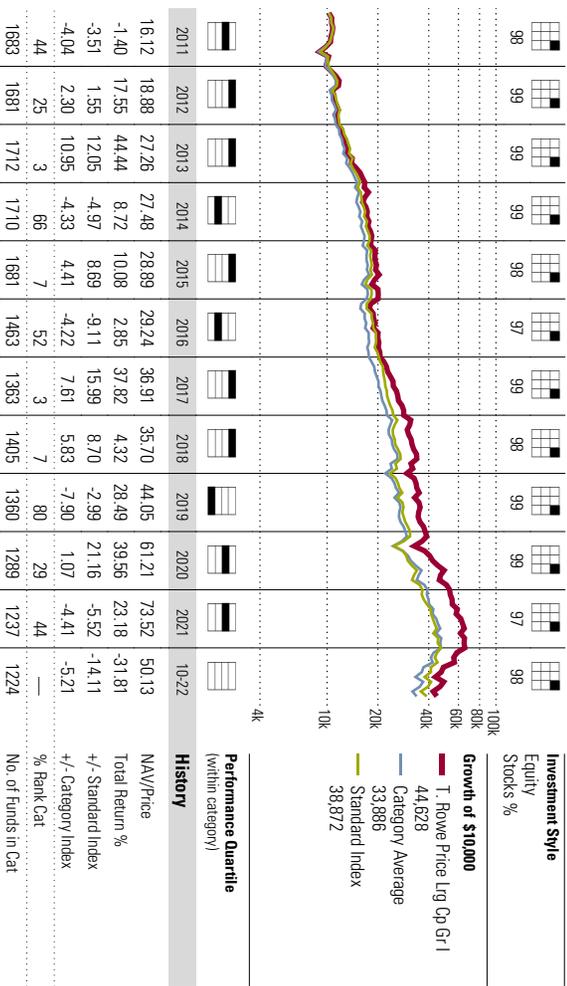
Performance Disclosure
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Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-638-6660 or visit www.troweprice.com.

Fees and Expenses	
Sales Charges	NA
Front-End Load %	NA
Deferred Load %	NA
Fund Expenses	0.54
Management Fees %	NA
12B1 Expense %	NA
Net Expense Ratio %	0.55
Gross Expense Ratio %	0.55
Risk and Return Profile	
Morningstar Rating™	3 Yr 3★ 5 Yr 3★ 10 Yr 5★
Morningstar Risk	Avg Avg Avg +Avg
Morningstar Return	Avg Avg High High
Standard Deviation	3 Yr 23.31 5 Yr 20.48 10 Yr 16.74
Mean	7.97 9.95 14.88
Sharpe Ratio	0.41 0.51 0.87
MPI Statistics	Standard Index Best Fit Index
Alpha	-2.13 1.05
Beta	— 1.05
R-Squared	87.93
12-Month Yield	—
Potential Cap Gains Exp	59.77%

Operations
 Family: T. Rowe Price
 Manager: Taymour Tamaddon
 Tenure: 5.8 Years
 Objective: Growth



Portfolio Analysis 09-30-2022		Net %	Long %	Short %	Share Clng	Share Holdings:	NAV/Price	History
Asset Allocation %		2.11	2.11	0.00	59	Total Stocks, 0 Total Fixed-Income.	NAV/Price	History
Cash	US Stocks	95.51	95.51	0.00	06-2022	18% Turnover Ratio	Total Return %	—
Non-US Stocks	Bonds	2.38	2.38	0.00	—	—	+/- Standard Index	—
Other/Not Clsfd	Geo Avg Mkt Cap	0.00	0.00	0.00	—	—	+/- Category Index	—
Total	Smll	100.00	100.00	0.00	—	—	% Rank Cat	—

Equity Style		Portfolio Statistics		Port	Rel	Rel	Net Assets
Value	Brand	P/E Ratio TTM	P/C Ratio TTM	Avg Index	Index	Cat	%
Large	Small	19.7	1.37	28.1	1.44	1.21	3.53
Med	Med	5.2	1.44	19.7	1.07	1.07	3.49
Small	Small	Geo Avg Mkt Cap	245186	1.43	0.92	—	3.03

Fixed-Income Style		Credit Quality Breakdown		Sector Weightings			
Ltd	Med	Ext	High	Med	Low	Stocks %	Rel Std Index
—	—	—	—	—	—	24.0	0.82
—	—	—	—	—	—	0.7	0.32
—	—	—	—	—	—	19.3	1.82
—	—	—	—	—	—	4.0	0.29
—	—	—	—	—	—	0.0	0.00
—	—	—	—	—	—	55.4	1.23
—	—	—	—	—	—	13.1	1.76
—	—	—	—	—	—	0.0	0.00
—	—	—	—	—	—	2.9	0.34
—	—	—	—	—	—	39.4	1.67
—	—	—	—	—	—	20.6	0.80
—	—	—	—	—	—	2.2	0.30
—	—	—	—	—	—	18.4	1.19
—	—	—	—	—	—	0.0	0.00

Regional Exposure		Stocks %	Rel Std Index
Americas	Greater Europe	97.6	0.99
Greater Europe	Greater Asia	1.4	1.39
Greater Asia		1.0	34.03

Base Currency: USD
TRLGX
ISIN: US45775L4086
Minimum Initial Purchase: \$500,000
Purchase Constraints: A
Incept: 10-31-2001
Type: MF
Total Assets: \$15,175.74 mil

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Vanguard Institutional Index I (USD)

Morningstar Analyst Rating™ Overall Morningstar Rating™ Standard Index Category Index Morningstar Cat
Gold **★★★★** S&P 500 TR USD Russell 1000 TR US Fund Large Blend
 02-22-2022 1,186 US Fund Large Blend USD

Performance 10-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-19.60	20.55	8.92	12.15	18.39
2021	6.18	8.54	0.57	11.02	28.67
2022	-4.60	-16.11	-4.89	—	-17.73
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-14.64	10.19	10.41	12.76	9.92
Std 09-30-2022	-15.50	—	9.21	11.67	9.88
Total Return	-14.64	10.19	10.41	12.76	9.92
+/- Std Index	-0.03	-0.03	-0.03	-0.03	—
+/- Cat Index	1.74	0.20	0.22	0.10	—
% Rank Cat	46	27	19	12	—
No. in Cat	1302	1186	1087	794	—

	Subsidized	Unsubsidized
7-day Yield	—	—
30-day SEC Yield 11-01-22	1.75	1.75

Performance Disclosure
 The overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate, thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 888-809-8102 or visit www.vanguard.com.

Fees and Expenses

Sales Charges	NA
Front-End Load %	NA
Deferred Load %	NA

Fund Expenses

Management Fees %	0.03
12b1 Expense %	NA
Net Expense Ratio %	0.04
Gross Expense Ratio %	0.04

Risk and Return Profile

	3 Yr	5 Yr	10 Yr
Morningstar Rating™	4★	4★	4★
Morningstar Risk	Avg	Avg	Avg
Morningstar Return	+Avg	+Avg	+Avg

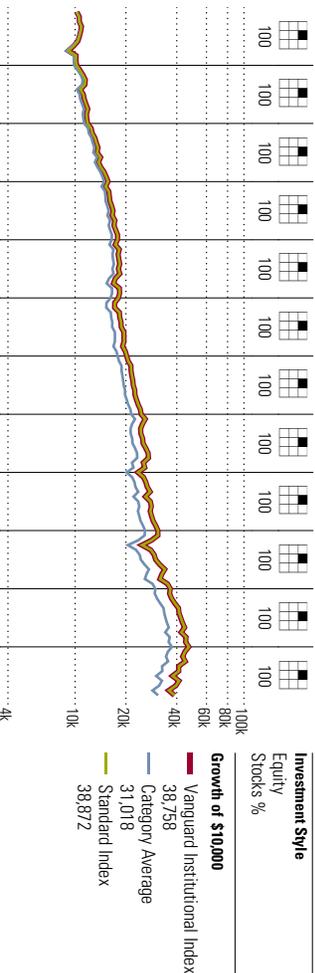
	3 Yr	5 Yr	10 Yr
Standard Deviation	20.72	18.35	14.54
Mean	10.19	10.41	12.76
Sharpe Ratio	0.54	0.57	0.85

MPT Statistics	Standard Index	Best Fit Index
Alpha	-0.02	—
Beta	1.00	—
R-Squared	100.00	—

	12-Month Yield	Potential Cap Gains Exp
	1.60%	68.18%

Operations

Family:	Vanguard
Manager:	Multiple
Tenure:	21.9 Years
Objective:	Growth and Income



Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	10-22
NAV/Price	115.04	130.52	169.28	188.67	186.62	203.83	243.46	227.55	290.23	331.47	405.79	328.16
Total Return %	2.09	15.98	32.35	13.65	1.37	11.93	21.79	-4.42	31.46	18.39	28.67	-17.73
+/- Standard Index	-0.02	-0.02	-0.04	-0.04	-0.01	-0.03	-0.04	-0.04	-0.02	-0.01	-0.04	-0.02
+/- Category Index	0.59	-0.44	-0.76	0.41	0.45	-0.12	0.10	0.36	0.04	-2.57	2.21	0.81
% Rank Cat	17	35	42	18	20	27	29	27	24	37	23	—
No. of Funds in Cat	1786	1686	1559	1568	1606	1409	1396	1402	1387	1363	1382	1317

Portfolio Analysis 09-30-2022			Net %	Long %	Short %	Share Clng	Share Holdings	Net Assets %
Asset Allocation %	Cash	0.44	0.44	0.00	0.00	08-2022	505 Total Stocks, 0 Total Fixed-Income, 3% Turnover Ratio	1.70
	US Stocks	98.54	98.54	0.00	0.00		110 mil Apple Inc	6.90
	Non-US Stocks	1.02	1.02	0.00	0.00		54 mil Microsoft Corp	5.74
	Bonds	0.00	0.00	0.00	0.00		64 mil Amazon.com Inc	3.31
	Other/Not Clsfd	0.00	0.00	0.00	0.00		19 mil Tesla Inc	2.33
	Total	100.00	100.00	0.00	0.00		43 mil Alphabet Inc Class A	1.89

Equity Style	Value	Share	Weight	Port	Rel	Rel	Rel	Rel
	Value	Share	Weight	Avg	Index	Index	Index	Index
	Large	Med	Small	P/E Ratio TTM	180	0.92	0.98	13 mil Alphabet Inc Class C
				P/B Ratio TTM	13.6	0.95	0.98	13 mil Berkshire Hathaway Inc Class B
				P/B Ratio TTM	3.4	0.94	0.94	7 mil Unitedhealth Group Inc
				Geo Avg Mkt Cap	163963	0.96	0.78	19 mil Johnson & Johnson
				Geo Avg Mkt Cap	163963	0.96	0.78	30 mil Exxon Mobil Corp

Fixed-Income Style			Avg Eff Maturity	Avg Eff Duration	Avg Wtd Coupon	Avg Wtd Price
Lat	Med	Ext	—	—	—	—
			—	—	—	—
			—	—	—	—
			—	—	—	—

Credit Quality Breakdown	—	Bond %
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Sector Weightings	Stocks %	Rel Std Index
Cyclical	29.6	1.02
Basic Materials	2.2	0.99
Consumer Cyclical	11.4	1.08
Financial Services	13.1	0.96
Real Estate	2.9	1.05
Sensitive	44.8	0.99
Communication Services	8.1	1.08
Energy	4.6	0.86
Industrials	8.3	0.96
Technology	23.8	1.01
Defensive	25.6	1.00
Consumer Defensive	7.3	0.99
Healthcare	15.2	0.99
Utilities	3.1	1.06

Regional Exposure	Stocks %	Rel Std Index
Americas	99.0	1.00
Greater Europe	1.0	0.98
Greater Asia	0.0	1.17

Base Currency:	USD	Purchase Constraints:	—
Ticker:	VFINX	Incept:	07-31-1990
ISIN:	US9220401007	Type:	MF
Minimum Initial Purchase:	\$5 mil	Total Assets:	\$219,663.16 mil

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Vanguard Mid Cap Index Admiral (USD)

Morningstar Analyst Rating™ Overall Morningstar Rating™ Standard Index Category Index Morningstar Cat
Gold **★★★★** S&P 500 TR USD Russell Mid Cap TR US Fund Mid-Cap Blend
 08-07-2022 360 US Fund Mid-Cap Blend USD Blend

Performance 10-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-25.72	24.96	7.95	18.02	18.24
2021	7.18	7.58	0.00	7.97	24.51
2022	-6.32	-16.96	-4.14	—	-19.08
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-18.04	7.99	8.09	11.48	9.61
Std 09-30-2022	-19.48	—	6.64	10.45	9.22
Total Return	-18.04	7.99	8.09	11.48	9.61
+/- Std Index	-3.43	-2.22	-2.35	-1.30	—
+/- Cat Index	-0.87	0.16	0.14	0.13	—
% Rank Cat	87	53	27	13	—
No. in Cat	398	360	332	216	—

7-day Yield	Subsidized	Unsubsidized
30-day SEC Yield 11-01-22	1.68	1.68

Performance Disclosure
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Fees and Expenses

Sales Charges	
Front-End Load %	NA
Deferred Load %	NA

Fund Expenses	
Management Fees %	0.05
12b1 Expense %	NA
Net Expense Ratio %	0.05
Gross Expense Ratio %	0.05
Risk and Return Profile	

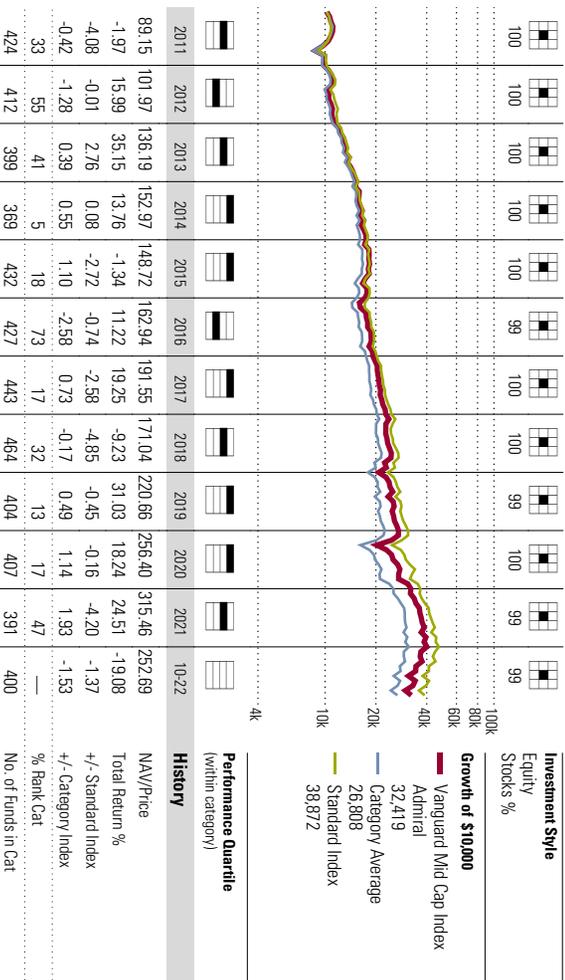
Morningstar Rating™	3 Yr 3★	5 Yr 4★	10 Yr 4★
Morningstar Risk	Avg	Avg	Avg
Morningstar Return	Avg	+Avg	+Avg

Standard Deviation	3 Yr 23.18	5 Yr 20.36	10 Yr 16.11
Mean	7.99	8.09	11.48
Shapero Ratio	0.42	0.42	0.71

MPT Statistics	Standard Index	Best Fit Index
Alpha	-2.38	—
Beta	1.08	—
R-Squared	93.41	—

12-Month Yield	1.49%
Potential Cap Gains Exp	36.64%

Operations	
Family:	Vanguard
Manager:	Multiple
Tenure:	24.5 Years
Objective:	Growth



Portfolio Analysis 09-30-2022			
Asset Allocation %	Net %	Long %	Short %
Cash	1.12	1.12	0.00
US Stocks	97.42	97.42	0.00
Non-US Stocks	1.46	1.46	0.00
Bonds	0.00	0.00	0.00
Other/Not Cstfd	0.00	0.00	0.00
Total	100.00	100.00	0.00

Equity Style			
Value	Brand	Growth	Portfolio Statistics
Large	Med	Small	P/E Ratio TTM 15.9
Med	Med	Small	P/C Ratio TTM 12.6
Small	Med	Small	P/B Ratio TTM 2.6
			Geo Avg Mkt Cap 20468 \$mil

Fixed-Income Style			
Ltd	Med	Ext	Ang Eff Maturity
			Ang Eff Duration
			Ang Wtd Coupon
			Ang Wtd Price

Credit Quality Breakdown	—	Bond %
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Regional Exposure			
	Stocks %	Rel Std Index	
Americas	99.2	1.00	
Greater Europe	0.6	0.63	
Greater Asia	0.2	6.50	

Base Currency:	USD	Purchase Constraints:	—
Ticker:	VIMAXX	Incept:	11-12-2001
SIN:	US9229086452	Type:	MF
Minimum Initial Purchase:	\$3,000	Total Assets:	\$49,616.05 mil

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Vanguard Small Cap Index Adm (USD)

Morningstar Analyst Rating™ Overall Morningstar Rating™ Standard Index
Silver
 06-23-2022

Category Index S&P 500 TR USD
Morningstar Cat Russell 2000 TR
Investment Style US Fund Small Blend

Performance 10-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-30.07	26.66	5.79	27.10	19.11
2021	10.22	5.60	-2.62	3.87	17.73
2022	-5.74	-16.88	-2.61	—	-16.13
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly Std 09-30-2022	-16.96	7.77	7.05	10.77	8.77
Total Return	-20.74	—	5.37	9.57	8.34
+/- Std Index	-16.96	7.77	7.05	10.77	8.77
+/- Cat Index	-2.35	-2.45	-3.39	-2.01	—
% Rank Cat	1.58	0.72	1.49	0.84	—
No. in Cat	73	55	25	24	—
	609	580	537	359	—

7-day Yield — Subsidized
 30-day SEC Yield 11-01-22 1.56 Unsubsidized 1.56

Performance Disclosure
 The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

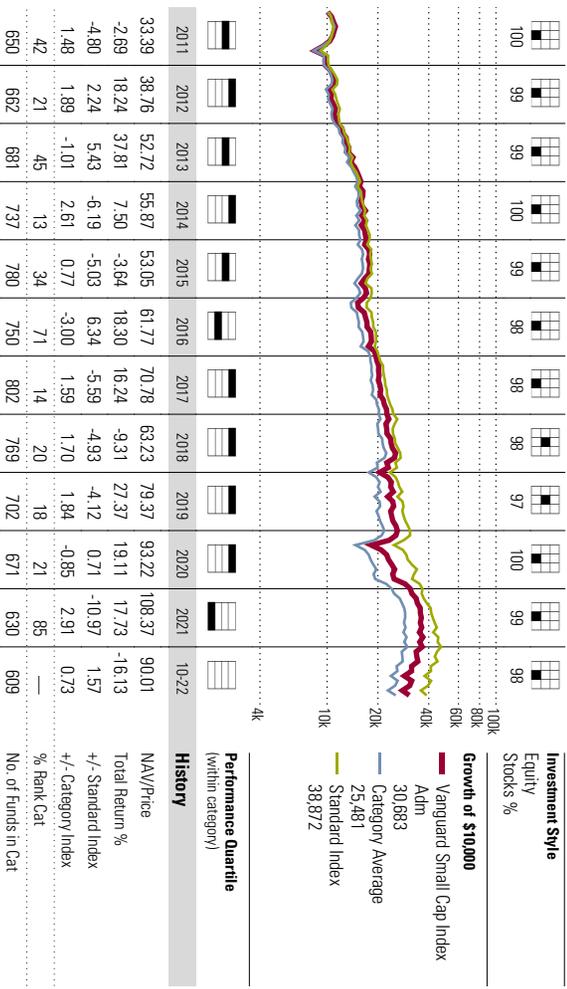
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Sales Charges	NA
Front-End Load %	NA
Deferred Load %	NA
Fund Expenses	
Management Fees %	0.04
12b1 Expense %	NA
Net Expense Ratio %	0.05
Gross Expense Ratio %	0.05
Risk and Return Profile	
Morningstar Rating™	3★
Morningstar Risk	4★
Morningstar Return	4★

	3 Yr	5 Yr	10 Yr
Standard Deviation	25.21	22.39	17.96
Mean	7.77	7.05	10.77
Shapero Ratio	0.40	0.36	—
MPT Statistics	Standard Index	Best Frt Index	
Alpha	-2.58	—	—
Beta	1.13	—	—
R-Squared	85.74	—	—
12-Month Yield	—	1.54%	—
Potential Cap Gains Exp	—	27.88%	—

Operations
 Family: Vanguard
 Manager: Multiple
 Tenure: 6.6 Years
 Objective: Small Company



Portfolio Analysis 09-30-2022

Asset Allocation %	Net %	Long %	Short %
Cash	2.36	2.36	0.00
US Stocks	96.98	96.98	0.00
Non-US Stocks	0.66	0.66	0.00
Bonds	0.00	0.00	0.00
Other/Not Cstfd	0.00	0.00	0.00
Total	100.00	100.00	0.00

Equity Style

Value	Brand	Growth	Port	Rel	Rel
Large	Mid	Small	Avg Index	Index	Cat
■	■	■	11.4	0.59	0.95
■	■	■	9.6	0.67	0.96
■	■	■	2.0	0.55	1.02
■	■	■	4542	0.03	1.22

Fixed-Income Style

Ltd	Med	Ext	Avg Eff Maturity
High	Med	Low	Avg Eff Duration
■	■	■	—
■	■	■	—
■	■	■	—

Credit Quality Breakdown

AAA	AA	A	BBB	BB	B	Below B	NR
—	—	—	—	—	—	—	—

Regional Exposure

Stocks %	Rel Std Index
Americas 99.6	1.01
Greater Europe 0.2	0.15
Greater Asia 0.2	8.23

Share Cng since 08-2022

Share Cng	Share Holdings	Amount	Holdings	1,497 Total Stocks	0 Total Fixed-Income	17% Turnover Ratio	Net Assets %
⊖	2 mil	IDEX Corp	0.36				
⊖	1 mil	Carlisle Companies Inc	0.35				
⊕	4 mil	Atmos Energy Corp	0.34				
⊖	6 mil	Targa Resources Corp	0.33				
⊖	3 mil	Wolfspeed Inc	0.31				
⊕	2 mil	First Solar Inc	0.30				
⊕	4 mil	Bunge Ltd	0.30				
⊕	4 mil	Entegris Inc	0.30				
⊖	4 mil	Steel Dynamics Inc	0.30				
⊕	14 mil	First Horizon Corp	0.29				
⊕	3 mil	Booz Allen Hamilton Holding Corp C	0.29				
⊖	6 mil	Ovintiv Inc	0.28				
⊖	9 mil	Howmet Aerospace Inc	0.28				
⊕	5 mil	Liberty Formula One Group C	0.27				
⊕	16 mil	Kimco Realty Corp	0.27				

Sector Weightings

Sector	Stocks %	Rel Std Index
Cyclical	39.3	1.35
Basic Materials	4.1	1.81
Consumer Cyclical	11.6	1.10
Financial Services	14.5	1.07
Real Estate	9.1	3.30
Sensitive	40.6	0.90
Communication Services	2.3	0.31
Energy	5.3	0.99
Industrials	17.6	2.02
Technology	15.4	0.65
Defensive	20.1	0.78
Consumer Defensive	4.0	0.54
Healthcare	13.0	0.84
Utilities	3.1	1.05

Purchase Constraints:
 Incept: 11-13-2000
 Type: MF
 Total Assets: \$41,635.60 mil

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Vanguard Target Retirement 2020 Fund (USD)

Morningstar Analyst Rating™ Overall Morningstar Rating™ Standard Index Category Index Morningstar Cat
Silver **★★★★** **143 US Fund Target-Date** **Morningstar Mod** **US Fund Target-Date**
 02-24-2022 **Tgt Risk TR USD** **Lifetime Mod 2020** **2020**
 2020 **TR USD**

Performance 10-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-10.76	11.40	4.48	7.86	12.04
2021	1.28	4.20	-0.41	2.91	8.17
2022	-5.06	-9.20	-5.12	—	-16.25
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-15.73	1.51	3.14	5.78	5.42
Std 09-30-2022	-15.83	—	2.91	5.46	5.30
Total Return	-15.73	1.51	3.14	5.78	5.42
+/- Std Index	1.77	-0.19	-0.23	0.21	—
+/- Cat Index	2.94	0.83	0.32	0.82	—
% Rank Cat	37	47	38	25	—
No. in Cat	152	143	118	56	—

7-day Yield	Subsidized	Unsubsidized
30-day SEC Yield 11-01-22	2.49	2.49

Performance Disclosure
 The overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

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Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-662-7447 or visit www.vanguard.com.

Fees and Expenses

Sales Charges	
Front-End Load %	NA
Deferred Load %	NA

Fund Expenses	
Management Fees %	0.00
12b1 Expense %	NA
Net Expense Ratio %	0.08
Gross Expense Ratio %	0.08

Risk and Return Profile

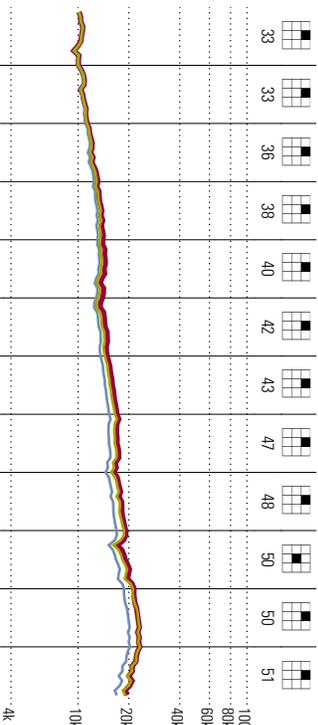
Morningstar Rating™	3★	4★	4★
Morningstar Risk	Avg	Avg	Avg
Morningstar Return	Avg	Avg	+Avg

Standard Deviation	3 Yr	5 Yr	10 Yr
Mean	11.04	9.63	7.98
Sharpe Ratio	1.51	3.14	5.78
	0.13	0.24	0.65

MPT Statistics	Standard Index	Best Fit Index
Alpha	-0.13	—
Beta	0.83	—
R-Squared	98.83	—

12-Month Yield	2.52%
Potential Cap Gains Exp	43.35%

Operations	
Family:	Vanguard
Manager:	Multiple
Tenure:	9.8 Years
Objective:	Asset Allocation



Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	10-22	History
NAV/Price	21.69	23.83	27.11	28.46	27.15	28.26	31.38	28.63	32.53	34.29	31.02	25.98	NAV/Price
Total Return %	0.60	12.35	15.65	7.11	-0.68	6.95	14.08	-4.24	17.63	12.04	8.17	-16.25	Total Return %
+/- Standard Index	0.01	0.31	1.54	2.22	1.11	-1.62	-0.58	0.52	-1.39	-0.78	-2.02	2.02	+/- Standard Index
+/- Category Index	-1.14	-0.18	2.87	1.24	1.20	-0.71	1.29	-0.08	-0.10	-1.28	-0.87	3.31	+/- Category Index
% Rank Cat	32	36	18	1	23	29	17	42	28	46	68	—	% Rank Cat
No. of Funds in Cat	205	208	222	228	237	221	234	250	233	178	171	152	No. of Funds in Cat

Portfolio Analysis 09-30-2022		Net %	Long %	Short %	Share Clng	Share Holdings:	Net Assets %
Asset Allocation %		2.48	11.92	9.43	08-2022	10,700 Total Stocks , 18,749 Total Fixed-Income, 5% Turnover Ratio	
Cash		24.44	24.44	0.00	Amount		
US Stocks		16.51	16.51	0.00	1,357 mil	Vanguard Total Bond Market II ldx	31.61
Non-US Stocks		56.01	56.05	0.04	60 mil	Vanguard Total Stock Mkt ldx Instl	24.80
Bonds		0.55	0.55	0.00	458 mil	Vanguard Total Intl Stock Index Inv	16.89
Other/Not Clsfd		100.00	109.47	9.47	225 mil	Vanguard Total Intl Bnd II ldx Instl	14.42
Total					185 mil	Vanguard Shrt-Term Intl-Prot Sec I	10.98

Equity Style	Value	Blend	Growth	Port	Rel	Index	Rel	Cat
	Large	Mid	Small	13.9	1.00	0.96	0.96	Basic Materials
				10.5	0.98	0.96	2.1	Consumer Cyclical
				1.03	0.95	0.95	1.39	Financial Services
				1.39	0.92	0.92		Real Estate

Fixed-Income Style

	High	Med	Ext	Avg Eff Maturity	7.65
				Avg Eff Duration	5.98
				Avg Wtd Coupon	1.93
				Avg Wtd Price	89.23

Credit Quality Breakdown 09-30-2022

AAA	65.22	Bond %
AA	8.01	
A	14.09	
BBB	12.23	
BB	0.00	
B	0.00	
Below B	0.33	
NR	0.12	

Regional Exposure	Stocks %	Rel Std Index
Americas	64.0	1.01
Greater Europe	17.0	0.94
Greater Asia	19.0	1.01

Base Currency:	USD
Ticker:	VTWVX
ISIN:	US92202E8057
Minimum Initial Purchase:	\$1,000

Purchase Constrains:	—
Incept:	06-07-2006
Type:	M/F
Total Assets:	\$39,834.77 mil

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Vanguard Target Retirement 2025 Fund (USD)

Morningstar Analyst Rating™
Silver
02-24-2022

Overall Morningstar Rating™
★★★★★
197 US Fund Target-Date 2025

Standard Index Morningstar Mod Tgt Risk TR USD
Category Index Morningstar US Fund Target-Date Lifetime Mod 2025 TR USD
Morningstar Cat US Fund Target-Date 2025

Performance 10-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-12.95	13.20	5.17	9.33	13.30
2021	1.86	4.79	-0.65	3.55	9.80
2022	-5.51	-10.72	-5.59	—	-17.90
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-17.30	1.90	3.49	6.36	6.03
Std 09-30-2022	-17.53	—	3.15	5.96	5.88
Total Return	-17.30	1.90	3.49	6.36	6.03
+/- Std Index	0.20	0.21	0.12	0.80	—
+/- Cat Index	2.32	1.08	0.47	0.76	—
% Rank Cat	50	41	35	20	—
No. in Cat	220	197	167	91	—

	Subsidized	Unsubsidized
7-day Yield	—	2.38
30-day SEC Yield 11-01-22	2.38	2.38

Performance Disclosure
The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate, thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-662-7447 or visit www.vanguard.com.

Fees and Expenses

Sales Charges	
Front-End Load %	NA
Deferred Load %	NA

Fund Expenses	
Management Fees %	0.00
12b1 Expense %	NA

Net Expense Ratio %	0.08
Gross Expense Ratio %	0.08

Risk and Return Profile

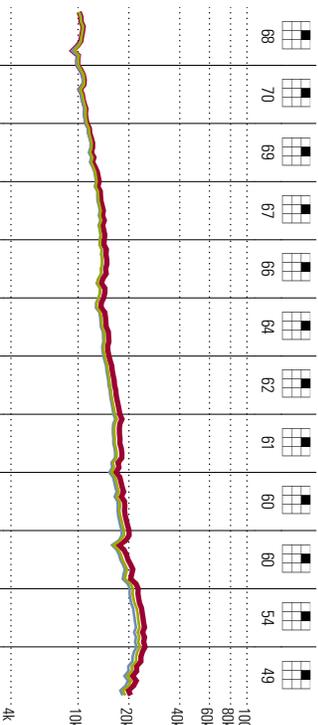
Morningstar Rating™	3★	3★	4★
Morningstar Risk	Avg	Avg	Avg
Morningstar Return	Avg	Avg	+Avg

Standard Deviation	12.87	11.23	9.20
Mean	1.90	3.49	6.36
Sharpe Ratio	0.16	0.25	0.64

MPT Statistics	Standard Index	Best Fit Index
Alpha	0.22	—
Beta	0.97	—
R-Squared	99.25	—

12-Month Yield	2.25%
Potential Cap Gains Exp	46.16%

Operations	
Family:	Vanguard
Manager:	Multiple
Tenure:	9.8 Years
Objective:	Asset Allocation



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	10-22	History
NAV/Price	12.27	13.59	15.75	16.53	15.62	16.35	18.50	17.01	19.84	21.54	20.34	16.70	NAV/Price
Total Return %	-0.37	13.29	18.14	7.17	-0.85	7.48	15.94	-5.15	19.63	13.30	9.80	-17.90	Total Return %
+/- Standard Index	-0.96	1.25	3.83	2.28	0.94	-1.09	1.28	-0.39	0.60	0.47	-0.39	0.37	+/- Standard Index
+/- Category Index	-0.61	-0.37	1.87	1.13	1.21	-0.91	1.40	-0.25	0.26	-0.37	-0.30	2.64	+/- Category Index
% Rank Cat	16	43	24	4	24	23	21	42	22	40	57	—	% Rank Cat
No. of Funds in Cat	145	154	181	185	206	195	208	226	232	214	220	220	No. of Funds in Cat

Portfolio Analysis 09-30-2022		Net %	Long %	Short %	Share Clng	Share Holdings:	Net Assets
Asset Allocation %		2.59	11.06	8.47	since	10,954 Total Stocks, 18,623 Total Fixed-Income,	%
Cash		31.92	31.92	0.00	08-2022	7% Turnover Ratio	
US Stocks		20.85	20.85	0.00	137 mil	Vanguard Total Stock Mkt Idx Instl	32.39
Non-US Stocks		44.14	44.18	0.04	2,150 mil	Vanguard Total Bond Market II Idx	28.76
Bonds		0.50	0.50	0.00	1,006 mil	Vanguard Total Intl Stock Index Inv	21.31
Other/Not Cstfd		108.51	108.51	8.51	351 mil	Vanguard Total Intl Bnd II Idx Instl	12.92
Total					99 mil	Vanguard Shrt-Term Intl-Prot Sec I	3.36

Value	Brand	Growth	Port	Rel	Index	Rel	Index	Rel	Index
Large	Med	Small	Index						
■	■	■	■	■	■	■	■	■	■

Sector Weightings	Stocks %	Rel Std Index
Cyclical	35.4	0.91
Basic Materials	4.8	0.93
Consumer Cyclical	11.3	1.09
Financial Services	15.7	0.95
Real Estate	3.6	0.52

Equity Style	Portfolio Statistics	P/E Ratio TTM	P/C Ratio TTM	P/B Ratio TTM	Geo Avg Mkt Cap
Value	13.9	1.00	0.96	2.1	1.04
Blend	10.6	0.99	0.95	2.1	1.04
Growth	8.1	0.94	0.86	5.4249	1.41

Sensitive	Stocks %	Rel Std Index
Sensitive	41.2	1.12
Communication Services	6.8	1.23
Energy	5.1	0.85
Industrials	10.8	0.95
Technology	18.5	1.32

Fixed-Income Style	Ang Eff Maturity	Ang Eff Duration	Ang Wtd Coupon	Ang Wtd Price
Lat	8.41	6.50	2.16	88.17
Med	6.50	2.16	88.17	
Ext	2.16	88.17		

Defensive	Stocks %	Rel Std Index
Defensive	23.4	0.97
Consumer Defensive	7.4	0.96
Healthcare	12.9	1.00
Utilities	3.1	0.87

Credit Quality Breakdown 09-30-2022	Bond %
AAA	60.19
AA	9.14
A	16.13
BBB	14.04
BB	0.00
B	0.00
Below B	0.37
NR	0.14

Regional Exposure	Stocks %	Rel Std Index
Americas	64.7	1.02
Greater Europe	16.7	0.92
Greater Asia	18.6	0.99

Base Currency:	USD
Ticker:	VTTVX
ISIN:	US92202E4098
Minimum Initial Purchase:	\$1,000

Purchase Constrains:	—
Incept:	10-27-2003
Type:	M/F
Total Assets:	\$69,386.40 mil

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Vanguard Target Retirement 2030 Fund (USD)

Morningstar Analyst Rating™
Silver
 02-24-2022

Overall Morningstar Rating™ **Standard Index** **Category Index** **Morningstar Cat**
 Morningstar Mod Morningstar US Fund Target-Date
 Tgt Risk TR USD Lifetime Mod 2030 2030
 196 US Fund Target-Date
 2030 TR USD

Performance 10-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-14.76	14.58	5.70	10.52	14.10
2021	2.49	5.25	-0.78	4.06	11.38
2022	-5.65	-11.67	-5.93	—	-18.71
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-18.05	2.45	3.86	6.93	5.89
Std 09-30-2022	-18.42	—	3.43	6.46	5.89
Total Return	-18.05	2.45	3.86	6.93	5.89
+/- Std Index	-0.56	0.75	0.49	1.37	—
+/- Cat Index	2.05	1.16	0.49	0.59	—
% Rank Cat	45	47	45	27	—
No. in Cat	220	196	167	96	—

7-day Yield	Subsidized	Unsubsidized
30-day SEC Yield 10-31-22	2.36	2.36

Performance Disclosure
 The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate, thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-662-7447 or visit www.vanguard.com.

Fees and Expenses

Sales Charges	
Front-End Load %	NA
Deferred Load %	NA

Fund Expenses	
Management Fees %	0.00
12b1 Expense %	NA
Net Expense Ratio %	0.08
Gross Expense Ratio %	0.08

Risk and Return Profile

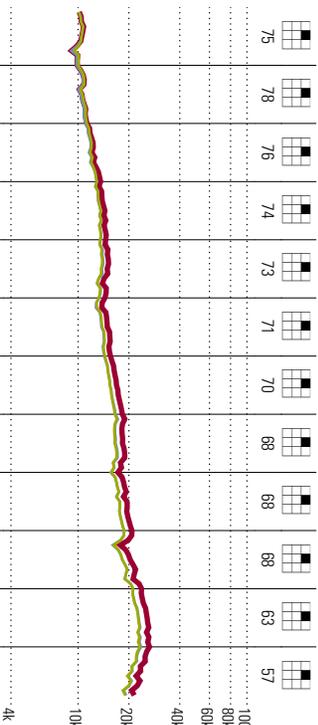
Morningstar Rating™	3★	3★	4★
Morningstar Risk	Avg	Avg	Avg
Morningstar Return	Avg	Avg	+Avg

Standard Deviation	14.22	12.45	10.18
Mean	2.45	3.86	6.33
Sharpe Ratio	0.19	0.27	0.64

MPT Statistics	Standard Index	Best Fit Index
Alpha	0.74	—
Beta	1.07	—
R-Squared	99.34	—

12-Month Yield	2.21%
Potential Cap Gains Exp	50.16%

Operations	
Family:	Vanguard
Manager:	Multiple
Tenure:	9.8 Years
Objective:	Asset Allocation



Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	10-22
NAV/Price	20.92	23.38	27.64	29.04	27.72	29.20	33.63	30.82	36.45	40.55	38.42	31.23
Total Return %	-1.27	14.24	20.49	7.17	-1.03	7.85	17.52	-5.86	21.07	14.10	11.38	-18.71
+/- Standard Index	-1.86	2.20	6.18	2.28	0.76	-0.72	2.87	-1.10	2.05	1.28	1.19	-0.45
+/- Category Index	-0.04	-0.43	0.95	1.16	1.27	-1.41	0.93	-0.03	-0.17	0.41	-0.31	2.32
% Rank Cat	22	38	25	5	31	32	34	37	32	38	61	—
No. of Funds in Cat	205	208	222	228	237	221	234	239	241	224	221	220

Portfolio Analysis 09-30-2022

Asset Allocation %	Net %	Long %	Short %
Cash	2.72	10.04	7.32
US Stocks	37.11	37.11	0.00
Non-US Stocks	24.13	24.13	0.00
Bonds	35.60	35.63	0.03
Other/Not Cstfd	0.44	0.44	0.00
Total	100.00	107.35	7.35

Equity Style	Value	Small	Govt
	Large	Mid	Small
	High	Med	Low
	Mid	Ext	

Portfolio Statistics	P/E Ratio TTM	13.9	1.00	0.95
	P/C Ratio TTM	10.6	0.99	0.95
	P/B Ratio TTM	2.1	1.04	0.92
	Geo Avg Mkt Cap	54334	1.41	0.84
	Rel Index Cat	8.90	6.83	2.31
	Avg Eff Duration	6.83	2.31	87.50
	Avg Wtd Coupon	2.31	87.50	2.31
	Avg Wtd Price	2.31	87.50	2.31

Credit Quality Breakdown 09-30-2022

AAA	57.10	Bond %
AA	9.80	
A	17.38	
BBB	15.17	
BB	0.00	
B	0.00	
Below B	0.40	
NR	0.15	

Regional Exposure	Stocks %	Rel Std Index
Americas	64.8	1.03
Greater Europe	16.7	0.92
Greater Asia	18.5	0.99

Base Currency:	USD
Ticker:	VTHR
ISIN:	US92202E8983
Minimum Initial Purchase:	\$1,000

Share Clng	Share	Holdings	Net Assets %
08-2022	Amount	11,068 Total Stocks , 19,445 Total Fixed-Income, 6% Turnover Ratio	
⊕	166 mil	Vanguard Total Stock Mkt Idx Instl	37.65
⊖	1,961 mil	Vanguard Total Bond Market II Idx	25.25
⊕	1,210 mil	Vanguard Total Intl Stock Index Inv	24.67
⊕	314 mil	Vanguard Total Intl Bd II Idx Instl	11.13

Sector Weightings	Stocks %	Rel Std Index
Cyclical	35.4	0.91
Basic Materials	4.8	0.93
Consumer Cyclical	11.3	1.09
Financial Services	15.7	0.95
Real Estate	3.6	0.52
Sensitive	41.2	1.12
Communication Services	6.8	1.24
Energy	5.1	0.85
Industrials	10.8	0.95
Technology	18.5	1.32
Defensive	23.4	0.97
Consumer Defensive	7.3	0.96
Healthcare	12.9	1.00
Utilities	3.1	0.87

Purchase Constraints:	—
Incept:	06-07-2006
Type:	M/F
Total Assets:	\$72,115.54 mil

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Vanguard Target Retirement 2035 Fund (USD)

Morningstar Analyst Rating™ Overall Morningstar Rating™ Standard Index Category Index Morningstar Cat
Silver **★★★★** Morningstar Mod US Fund Target-Date
 02-24-2022 190 US Fund Target-Date Tgt Risk TR USD Lifetime Mod 2035 2035 TR USD

Performance 10-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-16.52	15.90	6.29	11.62	14.79
2021	3.17	5.65	-0.87	4.55	12.96
2022	-5.66	-12.41	-6.09	—	-19.17
Trailing Returns					
	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-18.46	3.11	4.29	7.52	6.72
Std 09-30-2022	-18.87	—	3.78	6.99	6.52
Total Return	-18.46	3.11	4.29	7.52	6.72
+/- Std Index	-0.96	1.42	0.92	1.96	—
+/- Cat Index	1.58	1.08	0.46	0.52	—
% Rank Cat	39	54	48	30	—
No. in Cat	214	190	164	88	—

7-day Yield Subsidized Unsubsidized
 30-day SEC Yield 11-01-22 2.43 2.43

Performance Disclosure
 The overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate, thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-662-7447 or visit www.vanguard.com.

Sales Charges
Front-End Load % **NA**
Deferred Load % **NA**

Fund Expenses
 Management Fees % 0.00
 12b1 Expense % NA
Net Expense Ratio % **0.08**
Gross Expense Ratio % **0.08**

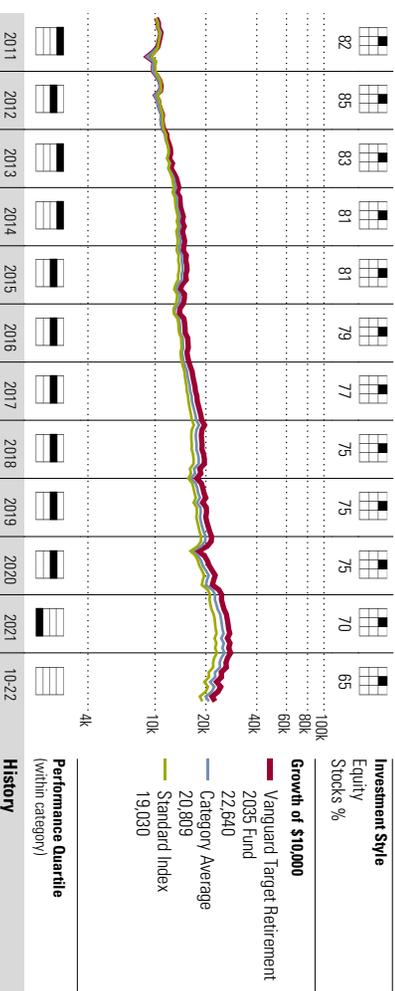
Risk and Return Profile				
	3 Yr	5 Yr	10 Yr	
Morningstar Rating™	3★	3★	4★	
Morningstar Risk	-Avg	-Avg	-Avg	
Morningstar Return	Avg	Avg	+Avg	

Standard Deviation 15.49 13.61 11.15
 Mean 3.11 4.29 7.52
 Sharpe Ratio 0.23 0.29 0.64

MPT Statistics Standard Index Best Fit Index
 Alpha 1.40 1.16 —
 Beta 1.16 —
 R-Squared 99.23 —

12-Month Yield 2.39%
 Potential Cap Gains Exp 55.22%

Operations
 Family: Vanguard
 Manager: Multiple
 Tenure: 9.8 Years
 Objective: Asset Allocation



Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	10-22	History
NAV/Price	12.51	14.09	16.98	17.84	16.94	17.74	20.69	18.82	22.52	25.22	23.84	19.27	NAV/Price
Total Return %	-2.24	15.16	22.82	7.24	-1.26	8.26	19.12	-6.58	22.44	14.79	12.96	-19.17	Total Return %
+/- Standard Index	-2.83	3.12	8.52	2.35	0.53	-0.31	4.46	-1.82	3.41	1.97	2.77	-0.90	+/- Standard Index
+/- Category Index	0.04	-0.20	0.79	1.44	1.32	-1.80	0.60	0.24	-0.60	1.41	-0.67	1.79	+/- Category Index
% Rank Cat	19	40	23	10	37	32	35	32	42	43	79	—	% Rank Cat
No. of Funds in Cat	139	154	181	185	205	195	208	221	229	207	213	214	No. of Funds in Cat

Portfolio Analysis 09-30-2022				
Asset Allocation %	Net %	Long %	Short %	Share Clng
Cash	2.84	8.63	5.79	11,153 Total Stocks , 18,102 Total Fixed-Income, 6% Turnover Ratio
US Stocks	41.33	41.33	0.00	180 mil Vanguard Total Stock Mkt Idx Instl
Non-US Stocks	27.23	27.23	0.00	1,330 mil Vanguard Total Intl Stock Index Inv
Bonds	28.24	28.27	0.03	1,521 mil Vanguard Total Bond Market II Idx
Other/Not Clsfd	0.36	0.36	0.00	241 mil Vanguard Total Intl Bd II Idx Instl
Total	100.00	105.81	5.81	

Equity Style				
Value	Brand	Growth	Port	Rel
Large	Med	Small	Index	Cat

Fixed-Income Style				
Value	Brand	Growth	Port	Rel
Large	Med	Small	Index	Cat

Credit Quality Breakdown 09-30-2022				
	AAA	AA	A	Bond %
AAA	57.20	9.75	17.34	
AA	—	—	—	
A	—	—	—	
BBB	—	—	—	
BB	—	—	—	
B	—	—	—	
Below B	—	—	—	
NR	—	—	—	

Regional Exposure				
	Stocks %	Rel Std Index		
Americas	64.5	1.02		
Greater Europe	16.8	0.93		
Greater Asia	18.7	1.00		

Base Currency: USD
Tickers: VTHX
ISIN: USS92202E5087
Minimum Initial Purchase: \$1,000
Purchase Constraints: 10-27-2003
Type: M/F
Total Assets: \$70,249,96 mil

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Vanguard Target Retirement 2040 Fund (USD)

Morningstar Analyst Rating™
Silver
 02-24-2022

Overall Morningstar Rating™
★★★★
 191 US Fund Target-Date
 2040

Standard Index
 Morningstar Mod
 Tgt Risk TR USD

Category Index
 Morningstar
 Lifetime Mod 2040
 TR USD

Morningstar Cat
 US Fund Target-Date
 2040

Performance 10-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-18.25	17.29	6.80	12.76	15.47
2021	3.82	6.11	-0.98	5.02	14.56
2022	-5.66	-13.17	-6.33	—	-19.63
Trailing Returns					
	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-18.85	3.77	4.70	8.01	6.44
Std 09-30-2022	-19.42	—	4.11	7.40	6.18
Total Return	-18.85	3.77	4.70	8.01	6.44
+/- Std Index	-1.36	2.07	1.33	2.44	—
+/- Cat Index	0.87	1.00	0.46	0.59	—
% Rank Cat	37	51	48	25	—
No. in Cat	215	191	167	96	—

	Subsidized	Unsubsidized
7-day Yield	—	2.49
30-day SEC Yield 10-31-22	2.49	2.49

Performance Disclosure
 The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-662-7447 or visit www.vanguard.com.

Fees and Expenses

Sales Charges	
Front-End Load %	NA
Deferred Load %	NA

Fund Expenses	
Management Fees %	0.00
12b1 Expense %	NA
Net Expense Ratio %	0.08
Gross Expense Ratio %	0.08

Risk and Return Profile

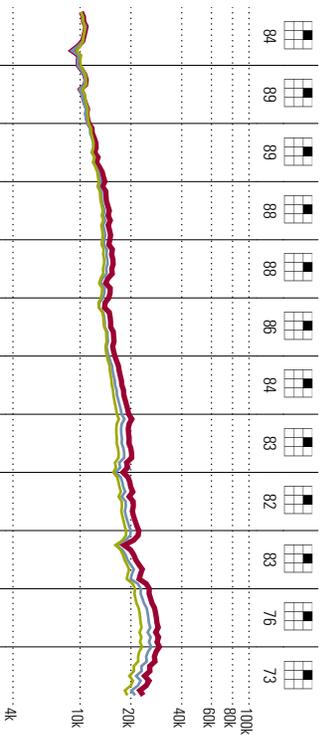
	3 Yr	5 Yr	10 Yr
Morningstar Rating™	3★	4★	4★
Morningstar Risk	-Avg	Avg	-Avg
Morningstar Return	Avg	Avg	+Avg

	3 Yr	5 Yr	10 Yr
Standard Deviation	16.77	14.80	12.08
Mean	3.77	4.70	8.01
Sharpe Ratio	0.26	0.30	0.64

MPT Statistics	Standard Index	Best Fit Index
Alpha	2.06	—
Beta	1.26	—
R-Squared	98.99	—

12-Month Yield	2.42%
Potential Cap Gains Exp	23.59%

Operations	
Family:	Vanguard
Manager:	Multiple
Tenure:	9.8 Years
Objective:	Asset Allocation



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	10-22	History
NAV/Price	20.50	23.18	28.32	29.76	28.45	30.21	35.77	32.31	39.13	44.27	42.03	33.78	NAV/Price
Total Return %	-2.55	15.56	24.37	7.15	-1.59	8.73	20.71	-7.32	23.86	15.47	14.56	-19.63	Total Return %
+/- Standard Index	-3.14	3.52	10.07	2.26	0.21	0.16	6.05	-2.57	4.83	2.65	4.37	-1.36	+/- Standard Index
+/- Category Index	0.30	-0.15	1.32	1.63	1.25	-1.88	0.84	0.33	-0.49	2.38	-0.80	1.03	+/- Category Index
% Rank Cat	19	31	15	12	43	27	25	37	43	40	81	—	% Rank Cat
No. of Funds in Cat	202	204	218	227	237	221	234	239	241	218	215	216	No. of Funds in Cat

Portfolio Analysis 09-30-2022			Net %	Long %	Short %	Share Clng	Share Holdings	Net Assets
Asset Allocation %			2.89	7.17	4.27	since	11,202 Total Stocks , 17,520 Total Fixed-Income,	%
Cash			45.79	45.79	0.00	08-2022	7% Turnover Ratio	
US Stocks			30.18	30.18	0.00	⊕	171 mil Vanguard Total Stock Mkt Idx Instl	46.45
Non-US Stocks			20.87	20.89	0.02	⊕	1,267 mil Vanguard Total Intl Stock Index Inv	30.85
Bonds			0.27	0.27	0.00	⊕	969 mil Vanguard Total Bond Market II Idx	14.91
Other/Not Clsfd			104.29	104.29	4.29	⊕	152 mil Vanguard Total Intl Bd II Idx Instl	6.43

Equity Style		Portfolio Statistics	
Value	Small Growth	P/E Ratio TTM	13.9
Large	Mid Small	P/C Ratio TTM	10.5
		P/B Ratio TTM	2.1
		Geo Avg Mkt Cap	54070
		Smll	1.41
			0.90

Fixed-Income Style		Avg Eff Maturity	
High	Med	Avg Eff Duration	6.83
Low	Med	Avg Wtd Coupon	2.31
		Avg Wtd Price	87.52

Credit Quality Breakdown 09-30-2022

	Bond %
AAA	57.31
AA	9.69
A	17.30
BBB	15.15
BB	0.00
B	0.00
Below B	0.39
NR	0.15

Regional Exposure		Stocks %	Rel Std Index
Americas		64.5	1.02
Greater Europe		16.8	0.93
Greater Asia		18.7	1.00

Base Currency:	USD
Ticker:	VFORX
ISIN:	US92202E8701
Minimum Initial Purchase:	\$1,000

Purchase Constraints:	—
Incept:	06-07-2006
Type:	M/F
Total Assets:	\$60,363.33 mil

Sector Weightings		Stocks %	Rel Std Index
Cyclical		35.4	0.91
Basic Materials		4.8	0.93
Consumer Cyclical		11.3	1.09
Financial Services		15.7	0.95
Real Estate		3.6	0.52
Sensitive		41.2	1.12
Communication Services		6.8	1.23
Energy		5.1	0.85
Industrials		10.8	0.95
Technology		18.5	1.32
Defensive		23.4	0.97
Consumer Defensive		7.4	0.96
Healthcare		12.9	1.00
Utilities		3.1	0.87

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Vanguard Target Retirement 2045 Fund (USD)

Morningstar Analyst Rating™
Silver
 02-24-2022

Overall Morningstar Rating™ **Standard Index** **Category Index** **Morningstar Cat**
 Morningstar Mod Morningstar US Fund Target-Date
 Tgt Risk TR USD Lifetime Mod 2045 2045
 2045 190 US Fund Target-Date TR USD

Performance 10-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-19.88	18.70	7.36	13.90	16.30
2021	4.47	6.55	-1.08	5.49	16.16
2022	-5.67	-13.93	-6.51	—	-20.12
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-19.30	4.42	5.10	8.27	7.28
Std 09-30-2022	-19.93	—	4.42	7.61	7.02
Total Return	-19.30	4.42	5.10	8.27	7.28
+/- Std Index	-1.80	2.73	1.73	2.71	—
+/- Cat Index	0.22	1.21	0.64	0.71	—
% Rank Cat	39	42	40	22	—
No. in Cat	214	190	164	87	—

	Subsidized	Unsubsidized
7-day Yield	—	—
30-day SEC Yield 11-01-22	2.55	2.55

Performance Disclosure
 The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

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Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-662-7447 or visit www.vanguard.com.

Fees and Expenses

Sales Charges

Front-End Load % **NA**
Deferred Load % **NA**

Fund Expenses
 Management Fees % 0.00
 1201 Expense % NA
Net Expense Ratio % **0.08**
Gross Expense Ratio % **0.08**

Risk and Return Profile

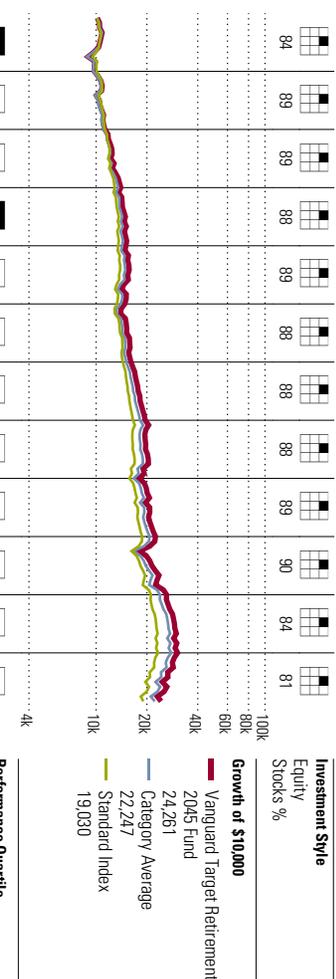
	3 Yr	5 Yr	10 Yr
Morningstar Rating™	4★	4★	4★
Morningstar Risk	Avg	Avg	-Avg
Morningstar Return	Avg	+Avg	+Avg

	3 Yr	5 Yr	10 Yr
Standard Deviation	18.06	15.89	12.77
Mean	4.42	5.10	8.27
Sharpe Ratio	0.29	0.31	0.63

MPT Statistics	Standard Index	Best Fit Index
Alpha	2.74	—
Beta	1.35	—
R-Squared	98.68	—

	12-Month Yield	Potential Cap Gains Exp
	2.38%	24.72%

Operations
 Family: Vanguard
 Manager: Multiple
 Tenure: 9.8 Years
 Objective: Asset Allocation



Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	10-22
NAV/Price	12.87	14.55	17.76	18.65	17.78	18.89	22.50	20.21	24.70	28.19	28.38	22.67
Total Return %	-2.51	15.58	24.37	7.16	-1.57	8.87	21.42	-7.90	24.94	16.30	16.16	-20.12
+/- Standard Index	-3.11	3.54	10.06	2.27	0.22	0.30	6.77	-3.14	5.91	3.48	5.97	-1.85
+/- Category Index	0.67	-0.26	1.30	1.91	1.45	-1.97	0.89	0.27	-0.03	3.35	-0.20	0.32
% Rank Cat	14	43	26	12	42	28	26	43	43	36	68	—
No. of Funds in Cat	139	145	180	185	206	195	208	221	229	207	213	214

Portfolio Analysis 09-30-2022

Asset Allocation %	Net %	Long %	Short %
Cash	2.96	5.81	2.84
US Stocks	50.28	50.28	0.00
Non-US Stocks	33.21	33.21	0.00
Bonds	13.37	13.38	0.01
Other/Not Cstfd	0.19	0.19	0.00
Total	100.00	102.86	2.86

Equity Style

Value	Small	Mid	Large
Stk	■	■	■
Bond	■	■	■

Portfolio Statistics

Metric	Value
P/E Ratio TTM	13.9
P/C Ratio TTM	10.5
P/B Ratio TTM	2.1
Geo Avg Mkt Cap	54027
Avg Eff Maturity	8.90
Avg Eff Duration	6.83
Avg Wtd Coupon	2.31
Avg Wtd Price	—

Fixed-Income Style

Value	Med	Ext
Stk	■	■
Bond	■	■

Sector Weightings

Sector	Weighting
Basic Materials	4.8
Consumer Cyclical	11.3
Financial Services	15.7
Real Estate	3.6
Communication Services	6.8
Energy	5.1
Industrials	10.8
Technology	18.5
Consumer Defensive	7.4
Healthcare	12.9
Utilities	3.1

Credit Quality Breakdown 09-30-2022

Rating	Percentage
AAA	56.98
AA	9.86
A	17.43
BBB	15.19
BB	0.00
B	0.00
Below B	0.40
NR	0.15

Regional Exposure

Region	Stocks %	Rel Std Index
Americas	64.5	1.02
Greater Europe	16.8	0.93
Greater Asia	18.7	1.00

Base Currency: USD
Tickers: VTIVX
ISIN: US92202E6077
Minimum Initial Purchase: \$1,000

Purchase Constraints: 10-27-2003
Type: M/F
Total Assets: \$55,921.32 mil

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Vanguard Target Retirement 2050 Fund (USD)

Morningstar Analyst Rating™ Overall Morningstar Rating™ Standard Index Category Index Morningstar Cat
Silver **★★★★** **191 US Fund Target-Date** **Morningstar Mod** **US Fund Target-Date**
 02-24-2022 **191 US Fund Target-Date** **Tgt Risk TR USD** **Lifetime Mod 2050 2050**
 2050 **TR USD**

Performance 10-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-19.86	18.67	7.35	14.01	16.39
2021	4.53	6.61	-1.11	5.63	16.41
2022	-5.65	-14.21	-6.64	—	-20.28
Trailing Returns					
	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-19.44	4.47	5.12	8.28	6.64
Std 09-30-2022	-20.18	—	4.39	7.60	6.33
Total Return	-19.44	4.47	5.12	8.28	6.64
+/- Std Index	-1.94	2.77	1.75	2.72	—
+/- Cat Index	0.03	1.13	0.64	0.74	—
% Rank Cat	39	45	44	25	—
No. in Cat	215	191	167	95	—

7-day Yield		
30-day SEC Yield	11-01-22	2.59
Subsidized	—	2.59
Unsubsidized	—	2.59

Performance Disclosure
 The overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate, thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-662-7447 or visit www.vanguard.com.

Fees and Expenses

Sales Charges

Front-End Load % **NA**
Deferred Load % **NA**

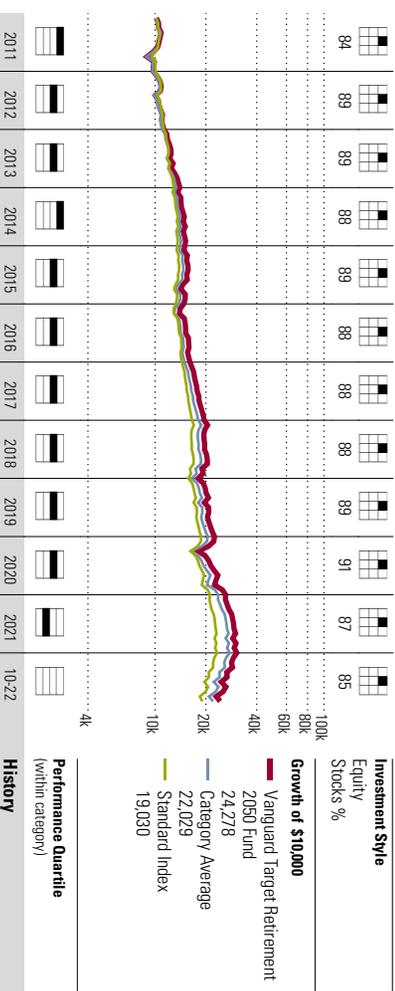
Fund Expenses

Management Fees % 0.00
 12b1 Expense % NA
Net Expense Ratio % **0.08**
Gross Expense Ratio % **0.08**
Risk and Return Profile

	3 Yr	5 Yr	10 Yr
Morningstar Rating™	4★	4★	4★
Morningstar Risk	-Avg	-Avg	-Avg
Morningstar Return	Avg	Avg	+Avg

	3 Yr	5 Yr	10 Yr
Standard Deviation	18.22	16.01	12.84
Mean	4.47	5.12	8.28
Sharpe Ratio	0.29	0.31	0.63
MPT Statistics			
Alpha	2.79	—	—
Beta	1.36	—	—
R-Squared	98.74	—	—
12-Month Yield	—	2.42%	—
Potential Cap Gains Exp	—	22.99%	—

Operations
 Family: Vanguard
 Manager: Multiple
 Tenure: 9.8 Years
 Objective: Asset Allocation



Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	10-22
NAV/Price	20.41	23.09	28.19	29.62	28.49	30.39	36.20	32.52	39.77	45.45	46.90	37.39
Total Return %	-2.54	15.58	24.34	7.18	-1.58	8.85	21.39	-7.90	24.98	16.39	16.41	-20.28
+/- Standard Index	-3.13	3.54	10.04	2.29	0.22	0.28	6.73	-3.14	5.96	3.57	6.22	-2.01
+/- Category Index	0.93	-0.35	1.51	2.18	1.62	-2.04	0.61	0.51	-0.10	3.48	-0.19	0.10
% Rank Cat	14	44	30	16	45	29	38	37	47	37	74	—
No. of Funds in Cat	168	177	202	212	226	213	230	239	241	217	215	215

Portfolio Analysis 09-30-2022

Asset Allocation %	Net %	Long %	Short %
Cash	2.96	5.16	2.20
US Stocks	52.05	52.05	0.00
Non-US Stocks	34.81	34.81	0.00
Bonds	10.03	10.04	0.01
Other/Not Cstfd	0.15	0.15	0.00
Total	100.00	102.21	2.21

Equity Style

Value	Brand	Growth
Large	Med	Small

Portfolio Statistics

Value	Brand	Growth
Large	Med	Small

Fixed-Income Style

Value	Brand	Growth
Large	Med	Small

Credit Quality Breakdown 09-30-2022

Value	Brand	Growth
Large	Med	Small

Regional Exposure

Value	Brand	Growth
Large	Med	Small

Base Currency: USD
 Ticker: VFHX
 ISIN: US92202E8628
 Minimum Initial Purchase: \$1,000

Share Class

Share Class	Share Amount	Holdings: 11,264 Total Stocks, 15,506 Total Fixed-Income, 5% Turnover Ratio	Net Assets %
08-2022	144 mil	Vanguard Total Stock Mkt Idx Instl	52.81
⊕	1,083 mil	Vanguard Total Intl Stock Index Inv	35.60
⊕	339 mil	Vanguard Total Bond Market II Idx	7.04
⊕	56 mil	Vanguard Total Intl Bd II Idx Instl	3.21

Sector Weightings

Sector	Stocks %	Rel Std Index
Cyclical	35.5	0.91
Basic Materials	4.9	0.94
Consumer Cyclical	11.3	1.09
Financial Services	15.7	0.95
Real Estate	3.6	0.52
Sensitive	41.2	1.12
Communication Services	6.8	1.23
Energy	5.1	0.85
Industrials	10.8	0.95
Technology	18.4	1.31
Defensive	23.4	0.97
Consumer Defensive	7.4	0.96
Healthcare	12.9	1.00
Utilities	3.1	0.87

Purchase Constraints: —
 Incept: 06-07-2006
 Type: M/F
 Total Assets: \$44,736.23 mil

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Vanguard Target Retirement 2055 Fund (USD)

Morningstar Analyst Rating™ Overall Morningstar Rating™ Standard Index Category Index Morningstar Cat
Silver **★★★★** **US Fund Target-Date**
 02-24-2022 190 US Fund Target-Date **US Fund Target-Date** **2055** **2055**
 Tgt Risk TR USD Lifetime Mod 2055 2055
 TR USD

Performance 10-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-19.89	18.64	7.38	13.97	16.32
2021	4.54	6.61	-1.11	5.65	16.44
2022	-5.69	-14.19	-6.63	—	-20.28
Trailing Returns					
	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-19.42	4.45	5.12	8.27	8.79
Std 09-30-2022	-20.17	—	4.38	7.58	8.37
Total Return	-19.42	4.45	5.12	8.27	8.79
+/- Std Index	-1.93	2.76	1.75	2.70	—
+/- Cat Index	0.19	1.19	0.72	0.82	—
% Rank Cat	37	49	44	28	—
No. in Cat	214	190	164	69	—

7-day Yield — Subsidized Unsubsidized
 30-day SEC Yield 11-01-22 2.59 2.59

Performance Disclosure
 The overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-662-7447 or visit www.vanguard.com.

Fees and Expenses

Sales Charges
Front-End Load % NA
Deferred Load % NA

Fund Expenses
 Management Fees % 0.00
 12b1 Expense % NA
Net Expense Ratio % 0.08
Gross Expense Ratio % 0.08

Risk and Return Profile

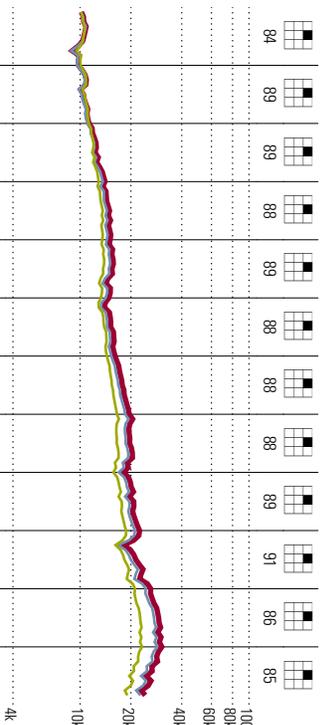
	3 Yr	5 Yr	10 Yr
Morningstar Rating™	4★	4★	4★
Morningstar Risk	-Avg	-Avg	-Avg
Morningstar Return	Avg	Avg	+Avg

	3 Yr	5 Yr	10 Yr
Standard Deviation	18.23	16.00	12.83
Mean	4.45	5.12	8.27
Sharpe Ratio	0.29	0.31	0.63

MPT Statistics	Standard Index	Best Fit Index
Alpha	2.78	—
Beta	1.36	—
R-Squared	98.75	—

12-Month Yield 2.40%
 Potential Cap Gains Exp 20.49%

Operations
 Family: Vanguard
 Manager: Multiple
 Tenure: 9.8 Years
 Objective: Asset Allocation



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	10-22	History
NAV/Price	21.86	24.80	30.35	31.98	30.83	32.91	39.23	35.30	43.19	49.34	52.22	41.63	NAV/Price
Total Return %	-2.27	15.58	24.33	7.19	-1.72	8.88	21.38	-7.89	24.98	16.32	16.44	-20.28	Total Return %
+/- Standard Index	-2.86	3.54	10.02	2.31	0.07	0.31	6.72	-3.13	5.95	3.50	6.25	-2.01	+/- Standard Index
+/- Category Index	1.48	-0.42	1.84	2.45	1.62	-2.03	0.43	0.68	-0.07	3.41	-0.06	0.21	+/- Category Index
% Rank Cat	9	48	36	16	53	27	48	37	51	41	78	—	% Rank Cat
No. of Funds in Cat	235	102	130	156	238	193	206	221	229	207	213	214	No. of Funds in Cat

Portfolio Analysis 09-30-2022					
Asset Allocation %			Net %	Long %	Short %
Cash	2.98	5.15	2.17		
US Stocks	52.03	52.03	0.00		
Non-US Stocks	34.89	34.89	0.00		
Bonds	9.95	9.95	0.01		
Other/Not Cstfd	0.15	0.15	0.00		
Total	100.00	102.17	2.17		

Equity Style		Portfolio Statistics	
Value	Brand Growth	P/E Ratio TTM	P/C Ratio TTM
Large	Med	2.1	1.04
Med	Small	Geo Avg Mkt Cap	53736
Small			140

Fixed-Income Style		Avg Eff Maturity	
Ltd	Med	Ext	Avg Eff Duration
High	Med	Low	Avg Wtd Price
Low			

Credit Quality Breakdown 09-30-2022

	Bond %
AAA	56.86
AA	9.92
A	17.47
BBB	15.20
BB	0.00
B	0.00
Below B	0.40
NR	0.15

Regional Exposure		Stocks %	Rel Std Index
Americas	64.2	1.02	
Greater Europe	17.0	0.94	
Greater Asia	18.9	1.01	

Base Currency: USD
 Ticker: VFFVX
 ISIN: US92202E8479
 Minimum Initial Purchase: \$1,000

Investment Style		Sector Weightings	
Equity	Stocks %	Basic Cyclical	Rel Std Index
Vanguard Target Retirement 2055 Fund	24.305	Consumer Cyclical	3.6
Category Average	22.786	Financial Services	15.7
Standard Index	19.030	Real Estate	0.52

Sensitive		Sector Weightings	
Communication Services	Healthcare <th>Utilities <th>Defensive</th> </th>	Utilities <th>Defensive</th>	Defensive
41.2	6.8	23.4	7.4
6.8	1.23	0.96	0.96
5.1	0.85	12.9	1.00
10.8	0.95	3.1	0.87
18.4	1.31		

Sector Weightings		Share Clng	
Basic Cyclical	Amount	Share	Holdings
Basic Materials	89 mil	Vanguard Total Stock Mkt Idx Instl	52.78
Consumer Cyclical	669 mil	Vanguard Total Int'l Stock Index Inv	35.68
Financial Services	208 mil	Vanguard Total Bond Market II Idx	7.01
Real Estate	34 mil	Vanguard Total Intl Bd II Idx Instl	3.16

Share Clng: 11,264 Total Stocks, 15,484 Total Fixed-Income, 5% Turnover Ratio
 Net Assets %
 Purchase Constraints: —
 Incept: 08-18-2010
 Type: M/F
 Total Assets: \$27,570.03 mil

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Vanguard Target Retirement 2060 Fund (USD)

Morningstar Analyst Rating™ Overall Morningstar Rating™ Standard Index Category Index Morningstar Cat
Silver 02-24-2022 182 US Fund Target-Date Tgt Risk TR USD Lifetime Mod 2060 2060 US Fund Target-Date
 2060

Performance 10-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-19.86	18.61	7.39	13.96	16.32
2021	4.54	6.61	-1.11	5.66	16.44
2022	-5.68	-14.19	-6.64	—	-20.27
Trailing Returns					
	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-19.40	4.45	5.12	8.26	8.38
Std 09-30-2022	-20.16	—	4.38	7.58	7.91
Total Return	-19.40	4.45	5.12	8.26	8.38
+/- Std Index	-1.91	2.76	1.75	2.70	—
+/- Cat Index	0.38	1.31	0.84	0.93	—
% Rank Cat	36	53	51	1	—
No. in Cat	214	182	151	1	—

7-day Yield	
Subsidized	—
Unsubsidized	2.59

30-day SEC Yield 11-01-22	
Subsidized	2.59
Unsubsidized	2.59

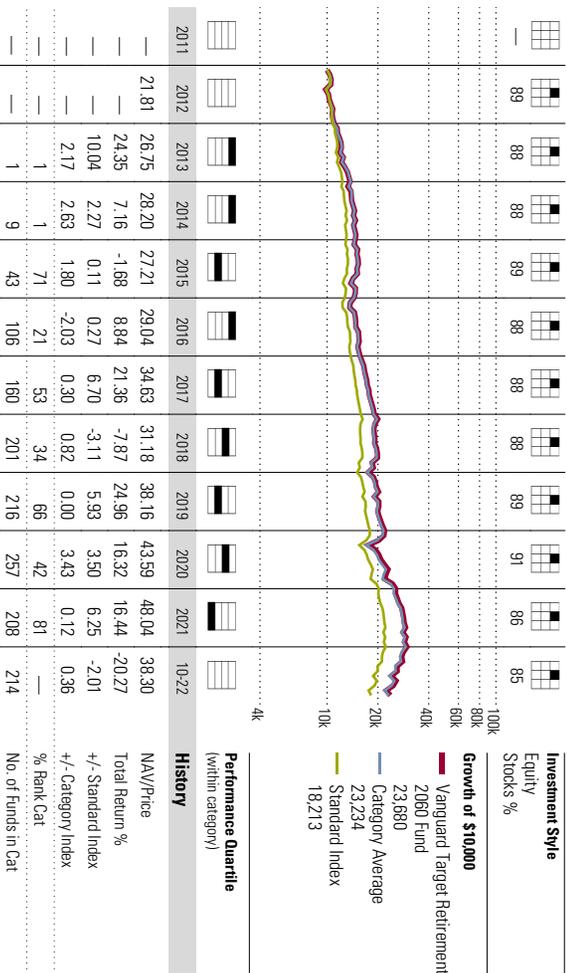
Performance Disclosure
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Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-662-7447 or visit www.vanguard.com.

Sales Charges	
Front-End Load %	NA
Deferred Load %	NA
Fund Expenses	
Management Fees %	0.00
12b1 Expense %	NA
Net Expense Ratio %	0.08
Gross Expense Ratio %	0.08
Risk and Return Profile	
Morningstar Rating™	3 Yr 4★ 5 Yr 4★ 10 Yr —
Morningstar Risk	-Avg -Avg -Avg
Morningstar Return	Avg Avg Avg
Standard Deviation	3 Yr 182 funds 5 Yr 151 funds 10 Yr 1 funds
Mean	18.20 15.99 12.83
Beta	4.45 5.12 8.26
Sharpe Ratio	0.29 0.31 0.63
MPT Statistics	
Alpha	Standard Index 2.78 Best Fit Index —
Beta	1.36 —
R-Squared	98.75 —
12-Month Yield	2.33%
Potential Cap Gains Exp	17.41%

Operations	
Family:	Vanguard
Manager:	Multiple
Tenure:	9.8 Years
Objective:	Asset Allocation



Portfolio Analysis 09-30-2022	
Asset Allocation %	Net %
Cash	2.94
US Stocks	51.99
Non-US Stocks	35.00
Bonds	9.92
Other/Not Cstfd	0.15
Total	100.00

Sector Weightings	
Cyclical	35.5
Basic Materials	4.9
Consumer Cyclical	11.3
Financial Services	15.7
Real Estate	3.6
Sensitive	41.2
Communication Services	6.8
Energy	5.1
Industrials	10.8
Technology	18.4
Defensive	23.4
Consumer Defensive	7.4
Healthcare	12.9
Utilities	3.1

Equity Style	
Value	Small Growth
Large	Mid Small
High	Mid Low
Low	Mid High

Portfolio Statistics	
P/E Ratio TTM	13.9
P/C Ratio TTM	10.5
P/B Ratio TTM	2.1
Geo Avg Mkt Cap	53657
Avg Eff Maturity	8.90
Avg Eff Duration	6.84
Avg Wtd Coupon	2.30
Avg Wtd Price	—

Fixed-Income Style	
AAA	56.76
AA	9.96
A	17.51
BBB	15.21
BB	0.00
B	0.00
Below B	0.41
NR	0.15

Credit Quality Breakdown 09-30-2022	
AAA	Bond % 56.76
AA	9.96
A	17.51
BBB	15.21
BB	0.00
B	0.00
Below B	0.41
NR	0.15

Regional Exposure	
Americas	64.1
Greater Europe	17.0
Greater Asia	18.9

Performance Quartile (within category)	
NAV/Price	38.30
Total Return %	-20.27
+/- Standard Index	-2.01
+/- Category Index	0.36
% Rank Cat	81
No. of Funds in Cat	214

Base Currency: USD	
Ticker:	VTSX
ISIN:	US92202E8396
Minimum Initial Purchase:	\$1,000

Purchase Constraints:	
Incept:	01-19-2012
Type:	M/F
Total Assets:	\$13,679,56 mil

Sector Weightings	
Stocks %	35.5
Rel Std Index	0.91

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Vanguard Target Retirement 2070 Fund (USD)

Standard Index Morningstar Mod Tgt Risk TR USD
Category Index Morningstar US Fund Target-Date Lifetime Mod 2060 2065+ TR USD
Morningstar Cat US Fund Target-Date

Performance 10-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	—	—	—	—	—
2021	—	—	—	—	—
2022	—	—	-6.57	—	—
Trailing Returns					
1 Yr	3 Yr	5 Yr	10 Yr	Incept	
Load-adj Mthly	—	—	—	-2.40	
Std 09-30-2022	—	—	—	-7.50	
Total Return	—	—	—	-2.40	
+/- Std Index	—	—	—	—	
+/- Cat Index	—	—	—	—	
% Rank Cat	—	—	—	—	
No. in Cat	—	—	—	—	
7-day Yield	Subsidized				
30-day SEC Yield	Unsubsidized				

Performance Disclosure
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 Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-662-7447 or visit www.vanguard.com.

Front-End Load % NA
Deferred Load % NA
Fund Expenses 0.00
Management Fees % 0.00
12b1 Expense % NA
Net Expense Ratio % 0.08
Gross Expense Ratio % 0.08
Risk and Return Profile

	3 Yr	5 Yr	10 Yr
Morningstar Rating™	24 funds	8 funds	10 Yr
Morningstar Risk	—	—	—
Morningstar Return	—	—	—
Standard Deviation	3 Yr	5 Yr	10 Yr
Mean	—	—	—
Sharpe Ratio	—	—	—
MPT Statistics	Standard Index		
Alpha	—	—	—
Beta	—	—	—
R-Squared	—	—	—
12-Month Yield	—		
Potential Cap Gains Exp	—		

Operations
 Family: Vanguard
 Manager: Multiple
 Tenure: 0.4 Year
 Objective: Asset Allocation

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	10-22	History
NAV/Price	—	—	—	—	—	—	—	—	—	—	—	19.52	NAV/Price
Total Return %	—	—	—	—	—	—	—	—	—	—	—	—	Total Return %
+/- Standard Index	—	—	—	—	—	—	—	—	—	—	—	—	+/- Standard Index
+/- Category Index	—	—	—	—	—	—	—	—	—	—	—	—	+/- Category Index
% Rank Cat	—	—	—	—	—	—	—	—	—	—	—	—	% Rank Cat
No. of Funds in Cat	—	—	—	—	—	—	—	—	—	—	—	—	No. of Funds in Cat

Portfolio Analysis 09-30-2022

Asset Allocation %	Net %	Long %	Short %
Cash	1.20	3.72	2.52
US Stocks	53.36	53.36	0.00
Non-US Stocks	35.43	35.43	0.00
Bonds	9.87	9.88	0.01
Other/Not Cstfd	0.15	0.15	0.00
Total	100.00	102.53	2.53

Equity Style

Value	Brand	Growth	P/E Ratio TTM	P/C Ratio TTM	P/B Ratio TTM	Geo Avg Mkt Cap
Large	—	—	—	—	—	—
Mid	—	—	—	—	—	—
Small	—	—	—	—	—	—

Fixed-Income Style

Value	Brand	Growth	Avg Eff Maturity	Avg Eff Duration	Avg Wtd Coupon	Avg Wtd Price
High	—	—	—	—	—	—
Mid	—	—	—	—	—	—
Low	—	—	—	—	—	—

Credit Quality Breakdown 09-30-2022

AAA	AA	A	BBB	BB	B	NR
57.39	9.66	17.27	15.15	0.00	0.00	0.39
Below B	—	—	—	—	—	0.15

Regional Exposure

Stocks %	Rel Std Index
Americas	64.4
Greater Europe	16.9
Greater Asia	18.8

Base Currency: USD
Tickers: VSVNX
ISIN: US92202E6648
Minimum Initial Purchase: \$1,000

Share Clg

Share Clg	Share Amount	Holdings : 11,269 Total Stocks , 15,435 Total Fixed-Income, — Turnover Ratio	Net Assets %
08-2022	104,990	Vanguard Total Stock Mkt Idx Instl	54.13
⊖	782,743	Vanguard Total Intl Stock Index Inv	36.23
⊕	241,720	Vanguard Total Bond Market II Idx	7.06
⊖	37,558	Vanguard Total Intl Bd II Idx Instl	3.02

Sector Weightings

Sector	Stocks %	Rel Std Index
Cyclical	35.4	0.91
Basic Materials	4.8	0.94
Consumer Cyclical	11.3	1.09
Financial Services	15.7	0.95
Real Estate	3.6	0.52
Sensitive	41.2	1.12
Communication Services	6.8	1.23
Energy	5.1	0.85
Industrials	10.8	0.95
Technology	18.5	1.32
Defensive	23.4	0.97
Consumer Defensive	7.4	0.96
Healthcare	12.9	1.00
Utilities	3.1	0.87

Purchase Constraints: —
Incept: 06-29-2022
Type: M/F
Total Assets: \$31,90 mil

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Vanguard Target Retirement Income Fund (USD)

Morningstar Analyst Rating™
 Silver
 02-24-2022

Overall Morningstar Rating™
 ★★★★★
 144 US Fund Target-Date Retirement

Standard Index
 Morningstar Mod Tgt Risk TR USD

Category Index
 Morningstar Lifetime Mod Incm TR USD

Morningstar Cat
 US Fund Target-Date Retirement

Performance 10-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-5.91	7.84	3.12	5.15	10.02
2021	0.08	3.23	-0.13	2.01	5.25
2022	-4.77	-7.37	-4.64	—	-14.55
Trailing Returns					
	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-14.13	0.24	2.12	3.49	4.50
Std 09-30-2022	-14.19	—	1.96	3.31	4.43
Total Return	-14.13	0.24	2.12	3.49	4.50
+/- Std Index	3.37	-1.46	-1.25	-2.07	—
+/- Cat Index	-0.35	-1.08	-0.63	-0.14	—
% Rank Cat	49	34	33	36	—
No. in Cat	161	144	121	80	—

	Subsidized	Unsubsidized
7-day Yield	—	2.55
30-day SEC Yield 11-01-22	2.55	2.55

Performance Disclosure
 The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

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Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-662-7447 or visit www.vanguard.com.

Fees and Expenses

Sales Charges	
Front-End Load %	NA
Deferred Load %	NA

Fund Expenses	
Management Fees %	0.00
12b1 Expense %	NA
Net Expense Ratio %	0.08
Gross Expense Ratio %	0.08

Risk and Return Profile

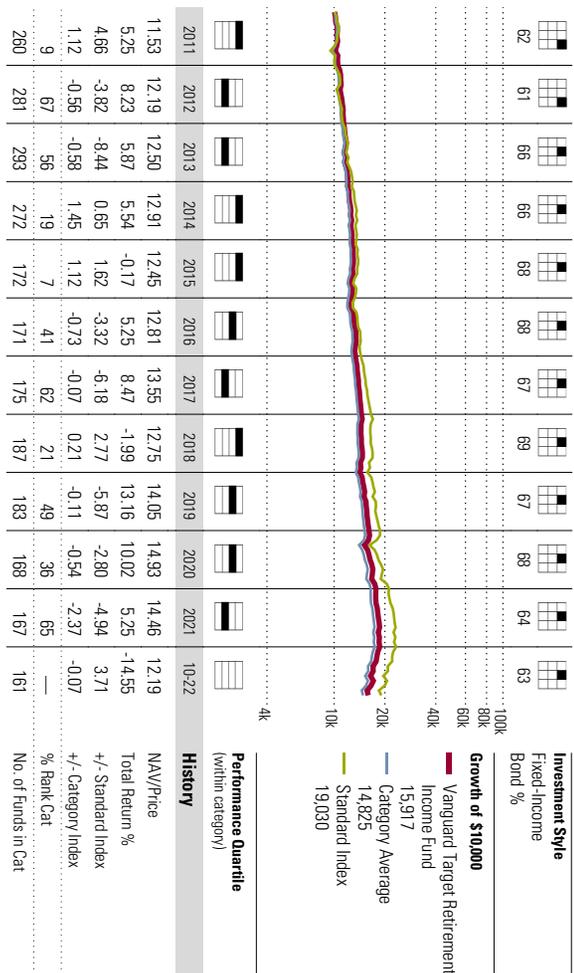
	3 Yr	5 Yr	10 Yr
Morningstar Rating™	4★	4★	4★
Morningstar Risk	Avg	Avg	Avg
Morningstar Return	+Avg	+Avg	Avg

Standard Deviation	8.14	6.84	5.41
Mean	0.24	2.12	3.49
Sharpe Ratio	-0.02	0.16	0.32

MPT Statistics	Standard Index	Best Fit Index
Alpha	-1.24	—
Beta	0.60	—
R-Squared	94.75	—

12-Month Yield	2.92%
Potential Cap Gains Exp	27.85%

Operations	
Family:	Vanguard
Manager:	Multiple
Tenure:	9.8 Years
Objective:	Asset Allocation



Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
NAV/Price	11.53	12.19	12.50	12.91	12.45	12.81	13.55	12.75	14.05	14.93	14.46	12.19
Total Return %	5.25	8.23	5.87	5.54	-0.17	5.25	8.47	-1.99	13.16	10.02	5.25	-14.55
+/- Standard Index	4.66	-3.82	-8.44	0.65	1.62	-3.32	-6.18	2.77	-5.87	-2.80	-4.94	3.71
+/- Category Index	1.12	-0.56	-0.88	1.45	1.12	-0.73	-0.07	0.21	-0.11	-0.54	-2.37	-0.07
% Rank Cat	9	67	56	19	7	41	62	21	49	36	65	—
No. of Funds in Cat	260	281	293	272	172	171	175	187	183	168	167	161

Asset Allocation %	Net %	Long %	Short %
Cash	2.28	12.89	10.61
US Stocks	16.66	16.66	0.00
Non-US Stocks	11.22	11.22	0.00
Bonds	69.21	69.26	0.05
Other/Not Cstfd	0.63	0.63	0.00
Total	100.00	110.66	10.66

Equity Style

Portfolio Statistics	P/E Ratio TTM	P/C Ratio TTM	P/B Ratio TTM	Geo Avg Mkt Cap
Value Based Growth	13.9	1.00	0.99	53654
Large	10.5	0.98	1.02	1.40
Mid	2.1	1.03	1.00	0.98
Small				

Fixed-Income Style

Ang Eff Maturity	Ang Eff Duration	Ang Wtd Coupon	Ang Wtd Price
7.32	5.76	1.84	89.69
AAA	67.70	7.37	13.09
AA	7.37	13.09	
A	13.09		
BBB	11.43		
BB	0.00		
B	0.00		
Below B	0.30		
NR	0.12		

Credit Quality Breakdown 09-30-2022

Credit Quality	Bond %
AAA	67.70
AA	7.37
A	13.09
BBB	11.43
BB	0.00
B	0.00
Below B	0.30
NR	0.12

Share Cng since 08-2022	Share Amount	Holdings: 10,108 Total Stocks, 18,875 Total Fixed-Income, 6% Turnover Ratio	Net Assets %
1,458 mil	Vanguard Total Bond Market II ldx		37.05
263 mil	Vanguard Shrt-Term Intl-Prot Sec I		17.06
383 mil	Vanguard Total Stock Mkt ldx Inst		16.90
232 mil	Vanguard Total Int'l Bd II ldx Inst		16.25
285 mil	Vanguard Total Int'l Stock Index Inv		11.47

Sector Weightings	Stocks %	Rel Std Index
Cyclical	35.5	0.91
Basic Materials	4.9	0.94
Consumer Cyclical	11.3	1.09
Financial Services	15.7	0.96
Real Estate	3.6	0.52
Sensitive	41.2	1.12
Communication Services	6.8	1.23
Energy	5.1	0.85
Industrials	10.8	0.95
Technology	18.4	1.31
Defensive	23.4	0.97
Consumer Defensive	7.4	0.96
Healthcare	12.9	1.00
Utilities	3.1	0.87

Regional Exposure	Stocks %	Rel Std Index
Americas	64.1	1.01
Greater Europe	17.0	0.94
Greater Asia	18.9	1.01

Base Currency:	USD
Ticker:	VTINX
ISIN:	US92202E1029
Minimum Initial Purchase:	\$1,000

Purchase Constrains:	—
Incept:	10-27-2003
Type:	M/F
Total Assets:	\$36,518.22 mil

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Vanguard Total Intl Stock Index Admiral (USD)

Morningstar Analyst Rating™ Overall Morningstar Rating™ **Standard Index** **Category Index** **Morningstar Cat**
Gold 12-08-2021 **★★★★** 693 US Fund Foreign Large **USA NR USD** **USA NR USD** **USA NR USD** **Blend**

Performance 10-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-24.30	18.11	6.48	16.90	11.28
2021	3.94	5.52	-3.00	2.11	8.62
2022	-6.08	-12.86	-10.51	—	-24.25
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-24.65	-1.18	-0.41	3.60	3.18
Std 09-30-2022	-25.21	—	-0.70	3.31	2.91
Total Return	-24.65	-1.18	-0.41	3.60	3.18
+/- Std Index	0.07	0.50	0.18	0.33	—
+/- Cat Index	0.07	0.50	0.18	0.33	—
% Rank Cat	57	45	50	57	—
No. in Cat	737	693	604	417	—

7-day Yield Subsidized Unsubsidized
 30-day SEC Yield — —

Performance Disclosure
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Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-662-7447 or visit www.vanguard.com.

Fees and Expenses

Sales Charges
Front-End Load % **NA**
Deferred Load % **NA**

Fund Expenses
 Management Fees % 0.10
 1201 Expense % NA
Net Expense Ratio % **0.11**
Gross Expense Ratio % **0.11**

Risk and Return Profile

	3 Yr	5 Yr	10 Yr
Morningstar Rating™	4★	3★	3★
Morningstar Risk	Avg	Avg	Avg
Morningstar Return	+Avg	Avg	Avg

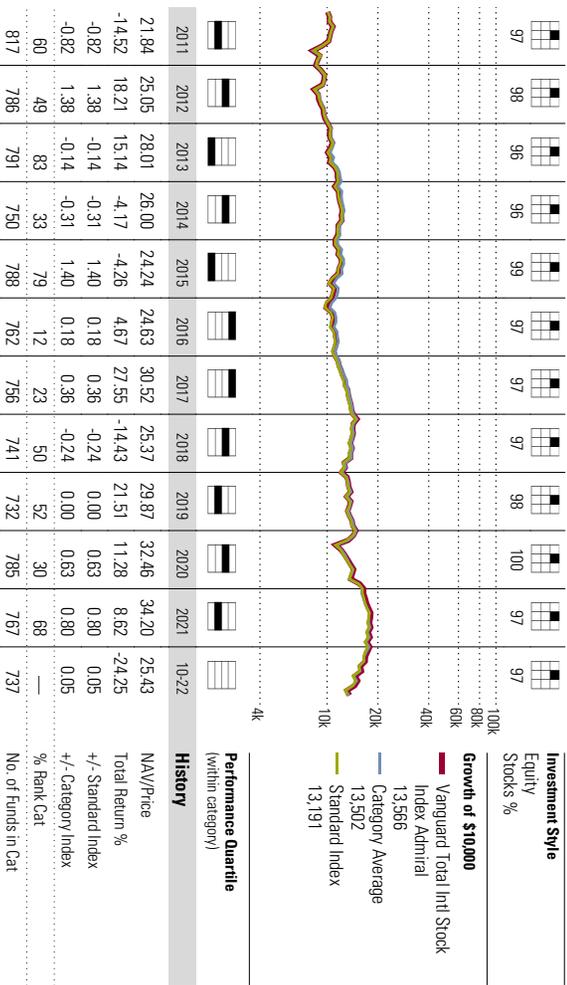
Standard Deviation 18.90 16.76 14.24
 Mean -1.18 -0.41 3.60
 Sharpe Ratio -0.01 -0.01 0.27

MPT Statistics Standard Index Best Fit Index
 Alpha 0.61
 Beta 1.02
 R-Squared 98.87

12-Month Yield —
 Potential Cap Gains Exp 16.50%

Operations

Family: Vanguard
 Manager: Multiple
 Tenure: 14.3 Years
 Objective: Foreign Stock



Portfolio Analysis 09-30-2022						
Asset Allocation %	Net %	Long %	Short %	Share Cng since 08-2022	Share Holdings: Amount 8% Turnover Ratio	Net Assets %
Cash	2.73	3.03	0.30	0.71	0.00	1.36
US Stocks	0.71	0.71	0.00	0.71	0.00	1.25
Non-US Stocks	96.48	96.48	0.00	0.00	0.00	0.96
Bonds	0.00	0.00	0.00	0.00	0.00	0.86
Other/Not Cstfd	0.08	0.08	0.00	0.08	0.00	0.78
Total	100.00	100.30	0.30	0.30	0.00	0.74

Equity Style	Value	Share	Gain/Loss	Portfolio Statistics	Port	Rel	Rel
	Size	Count	%		Index	Index	Cat
P/E Ratio TTM	108	0.98	0.96	P/B Ratio TTM	1.4	0.95	0.94
P/C Ratio TTM	7.9	0.98	0.96	Geo Avg Mkt Cap	22032	0.63	0.53
Non-US Stocks	96.48	96.48	0.00				
Bonds	0.00	0.00	0.00				
Other/Not Cstfd	0.08	0.08	0.00				
Total	100.00	100.30	0.30				

Fixed-Income Style	Ltd	Med	Ext	High	Med	Low
	Med	Ext	High	Med	Low	Low
Ang Eff Maturity						
Ang Eff Duration						
Ang Wtd Coupon						
Ang Wtd Price						

Credit Quality Breakdown	AAA	AA	A	BBB	BB	B	Below B	NR
AAA	—	—	—	—	—	—	—	—
AA	—	—	—	—	—	—	—	—
A	—	—	—	—	—	—	—	—
BBB	—	—	—	—	—	—	—	—
BB	—	—	—	—	—	—	—	—
B	—	—	—	—	—	—	—	—
Below B	—	—	—	—	—	—	—	—
NR	—	—	—	—	—	—	—	—

Regional Exposure	Stocks %	Rel Std Index
Americas	11.2	0.96
Greater Europe	41.5	0.96
Greater Asia	47.2	1.05

Base Currency: USD
 Ticker: VTIAX
 ISIN: US9219098186
 Minimum Initial Purchase: \$3,000
 Purchase Constraints: 11-29-2010
 Incept: MF
 Type: \$44,905.62 mil
 Total Assets:

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Western Asset Core Plus Bond I (USD)

Morningstar Analyst Rating™ Overall Morningstar Rating™ Standard Index **Category Index** **Morningstar Cat**
Gold **557 US Fund Intermediate** **Bloomberg US** **Bloomberg US** **US Fund Intermediate**
 12-23-2021 **Core-Plus Bond** **Agg Bond TR USD** **Universal TR USD** **Core-Plus Bond**

Performance 10-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-2.24	6.58	1.80	3.13	9.39
2021	-4.53	2.88	0.00	-0.13	-1.90
2022	-8.83	-7.83	-6.37	—	-22.28
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Lead-adj Mthly	-22.29	-5.74	-1.46	1.13	4.58
Std 09-30-2022	-21.42	—	-1.27	1.31	4.65
Total Return	-22.29	-5.74	-1.46	1.13	4.58
+/- Std Index	-6.60	-1.97	-0.92	0.39	—
+/- Cat Index	-6.50	-2.17	-1.03	0.11	—
% Rank Cat	99	97	92	37	—
No. in Cat	600	557	500	358	—

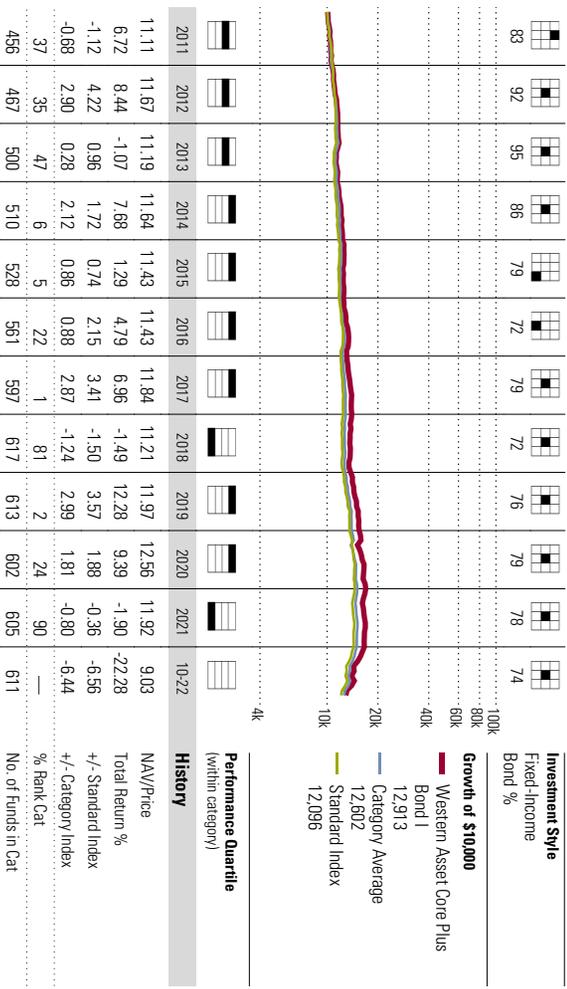
7-day Yield 11-01-22 3.82 1
 30-day SEC Yield 09-30-22 4.49 1
 1. Contractual waiver Expires 12-31-2023

Performance Disclosure
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Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 877-656-3863 or visit www.leggimason.com.

Fees and Expenses	
Sales Charges	NA
Front-End Load %	NA
Deferred Load %	NA
Fund Expenses	0.40
Management Fees %	NA
1201 Expense %	0.45
Net Expense Ratio %	0.52
Gross Expense Ratio %	0.52
Risk and Return Profile	
Morningstar Rating™	3★
Morningstar Risk	High
Morningstar Return	Avg
Standard Deviation	5.49
Mean	1.13
Shapre Ratio	0.10
MFT Statistics	Standard Index Best Fit Index
Alpha	-0.04
Beta	1.41
R-Squared	85.24
12-Month Yield	3.43%
Potential Cap Gains Exp	1.32%



Portfolio Analysis 09-30-2022										
Asset Allocation %			Net %	Long %	Short %	Share Cng	Share	Holdings :	Net Assets %	
Cash	US Stocks	Non-US Stocks	-3.45	34.01	37.45	since	Amount	2 Total Stocks	3,222 Total Fixed-Income,	%
0.00	0.00	0.00	-0.05	0.42	0.48 <td>06-2022</td> <td>530 mil</td> <td>79% Turnover Ratio</td> <td>2,875%</td> <td>1.65</td>	06-2022	530 mil	79% Turnover Ratio	2,875%	1.65
0.00	0.00	0.00	0.00	0.00	0.00		754 mil	United States Treasury Bonds 1.25%	1.25%	1.62
0.00	0.00	0.00	0.00	0.00	0.00		2,850 mil	China People's Republic Of 3.29%	3.29%	1.61
0.00	0.00	0.00	0.00	0.00	0.00		8,207 mil	Mexico (United Mexican States) 7.7	7.7	1.33
0.00	0.00	0.00	0.00	0.00	0.00		358 mil	Government National Mortgage Assoc	3.625%	1.17
0.00	0.00	0.00	0.00	0.00	0.00		297 mil	United States Treasury Bonds 3.625%	3.625%	1.05
0.00	0.00	0.00	0.00	0.00	0.00		473 mil	United States Treasury Bonds 1.375%	1.375%	1.04
0.00	0.00	0.00	0.00	0.00	0.00		6,081 mil	Mexico (United Mexican States) 8%	8%	1.00
0.00	0.00	0.00	0.00	0.00	0.00		3,650,281 mil	Indonesia (Republic of) 6.5%	6.5%	0.87
0.00	0.00	0.00	0.00	0.00	0.00		210 mil	Government National Mortgage Assoc	7.7	0.71
0.00	0.00	0.00	0.00	0.00	0.00		282 mil	United States Treasury Bonds 1.625%	1.625%	0.67
0.00	0.00	0.00	0.00	0.00	0.00		215 mil	United States Treasury Bonds 1.75%	1.75%	0.56
0.00	0.00	0.00	0.00	0.00	0.00		158 mil	Government National Mortgage Assoc	1.75%	0.55
0.00	0.00	0.00	0.00	0.00	0.00		172 mil	Federal National Mortgage Assocat	1.72	0.53
0.00	0.00	0.00	0.00	0.00	0.00		2,887 mil	Mexico (United Mexican States) 7.7	7.7	0.49

Equity Style		Portfolio Statistics		Port	Rel	Rel
Value	Brand	P/E Ratio TTM	P/C Ratio TTM	Index	Index	Cat
Large	Med	—	—	—	—	—
Small	Med	—	—	—	—	—
Small	Low	—	—	—	—	—
Fixed-Income Style		Avg Eff Maturity	Avg Eff Duration	Avg Wtd Coupon	Avg Wtd Price	
Mid	Ext	14.82	7.66	3.92	87.32	
Med	Ext	—	—	—	—	
Low	Ext	—	—	—	—	

Credit Quality Breakdown 07-31-2022		Bond %
AAA	AAA	42.13
AA	AA	5.62
A	A	14.10
BBB	BBB	22.15
BB	BB	8.14
B	B	2.50
Below B	Below B	0.94
NR	NR	4.42

Sector Weightings		Stocks %	Rel Std Index
Cyclical	Basic Materials	—	—
	Consumer Cyclical	—	—
	Financial Services	—	—
	Real Estate	—	—
Sensitive	Communication Services	—	—
	Energy	—	—
	Industrials	—	—
	Technology	—	—
Defensive	Consumer Defensive	—	—
	Healthcare	—	—
	Utilities	—	—

Operations
 Family: Franklin Templeton Investments
 Manager: Multiple
 Tenure: 15.9 Years
 Objective: Corporate Bond - General
 Base Currency: USD

Ticker: WACPX
 ISIN: US957663034
 Minimum Initial Purchase: \$1 mil
 Min Auto Investment Plan: \$1 mil
 Minimum IRA Purchase: \$1 mil
 Purchase Constraints: —
 Incept: 07-08-1998
 Type: MF
 Total Assets: \$26,407.32 mil

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Westwood Quality SmallCap Fund Inst (USD)

Morningstar Analyst Rating™
Silver
10-06-2022

Overall Morningstar Rating™
★★★★
580 US Fund Small Blend

Standard Index
S&P 500 TR USD

Category Index
Russell 2000 TR
USD

Morningstar Cat
US Fund Small Blend

Performance 10-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-32.64	18.52	1.58	25.98	2.16
2021	16.93	4.75	-3.33	8.04	27.93
2022	-7.93	-11.48	-5.40	—	-12.47
Trailing Returns					
	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-10.08	5.83	4.70	10.82	7.37
Std 09-30-2022	-16.70	—	2.60	9.28	6.54
Total Return	-10.08	5.83	4.70	10.82	7.37
+/- Std Index	4.54	-4.39	-5.74	-1.97	—
+/- Cat Index	8.47	-1.22	-0.86	0.88	—
% Rank Cat	24	80	77	22	—
No. in Cat	609	580	537	359	—

7-day Yield
30-day SEC Yield

	Subsidized	Unsubsidized
7-day Yield	—	—
30-day SEC Yield	—	—

Performance Disclosure
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Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 877-386-3944.

Fees and Expenses

Sales Charges
Front-End Load % NA
Deferred Load % NA

Fund Expenses
Management Fees % 0.85
12b1 Expense % NA
Net Expense Ratio % 0.92
Gross Expense Ratio % 1.09

Risk and Return Profile

	3 Yr	5 Yr	10 Yr
Morningstar Rating™	2★	2★	3★
Morningstar Risk	Avg	Avg	Avg
Morningstar Return	-Avg	-Avg	+Avg

Standard Deviation 25.88 23.07 19.15
Mean 5.83 4.70 10.82
Sharpe Ratio 0.32 0.26 0.60

MPT Statistics	Standard Index	Best Fit Index
Alpha	-4.01	—
Beta	1.11	—
R-Squared	78.79	—

12-Month Yield
Potential Cap Gains Exp

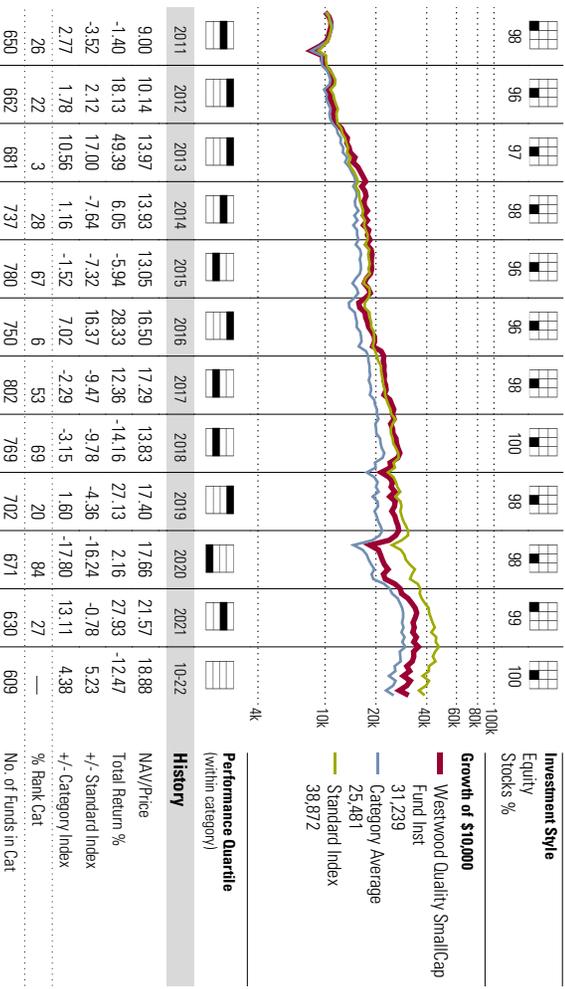
12-Month Yield	—
Potential Cap Gains Exp	22.84%

Operations

Family: Westwood
Manager: Multiple
Tenure: 11.9 Years
Objective: Growth
Base Currency: USD

Ticker: WHGSSX
ISIN: US90386K4076
Minimum Initial Purchase: \$100,000
Min Auto Investment Plan: \$100,000
Purchase Constraints: A

Incept: 04-02-2007
Type: M/F
Total Assets: \$991,955 mil



Portfolio Analysis 09-30-2022		
Asset Allocation %	Net %	Long %
Cash	0.00	0.00
US Stocks	100.00	100.00
Non-US Stocks	0.00	0.00
Bonds	0.00	0.00
Other/Not Cstfd	0.00	0.00
Total	100.00	100.00

Equity Style	Portfolio Statistics	Port Avg Index	Rel Index	Rel Cat
Value	P/E Ratio TTM	12.5	0.64	1.04
Brand	P/C Ratio TTM	9.7	0.68	0.97
Growth	P/B Ratio TTM	1.6	0.45	0.83
Large	Geo Avg Mkt Cap	1891	0.01	0.51
Mid				
Small				

Fixed-Income Style		
Ltd	Med	Ext

Credit Quality Breakdown —

	AAA	AA	A	BBB	BB	B
AAA	—	—	—	—	—	—
AA	—	—	—	—	—	—
A	—	—	—	—	—	—
BBB	—	—	—	—	—	—
BB	—	—	—	—	—	—
B	—	—	—	—	—	—
Below B	—	—	—	—	—	—
NR	—	—	—	—	—	—

Regional Exposure	Stocks %	Rel Std Index
Americas	100.0	1.01
Greater Europe	0.0	0.00
Greater Asia	0.0	0.00

Share Clng	Share Amount	Holdings: 59 Total Stocks, 0 Total Fixed-Income, 58% Turnover Ratio	Net Assets %
06-2022	156,046	Chord Energy Corp Ordinary Shares	2.37
	212,750	Comfort Systems USA Inc	2.30
	366,070	Merit Medical Systems Inc	2.29
	155,451	J&J Snack Foods Corp	2.23
	790,226	Rambus Inc	2.23
	730,798	Northern Oil & Gas Inc	2.22
	639,952	Renasant Corp	2.22
	526,367	Federal Signal Corp	2.18
	389,420	NorthWestern Corp	2.13
	630,374	Atlantic Union Bankshares Corp	2.12
	794,190	Patterson Companies Inc	2.12
	537,760	Sandy Spring Bancorp Inc	2.10
	202,208	Stepan Co	2.10
	439,759	Century Communities Inc	2.09
	808,938	Corporate Office Properties Trust	2.08

Sector Weightings	Stocks %	Rel Std Index
Cyclical	49.4	1.69
Basic Materials	6.5	2.86
Consumer Cyclical	9.2	0.87
Financial Services	22.1	1.63
Real Estate	11.5	4.19
Sensitive	31.8	0.70
Communication Services	1.6	0.22
Energy	6.6	1.23
Industrials	15.7	1.81
Technology	7.8	0.33
Defensive	18.9	0.73
Consumer Defensive	7.3	1.00
Healthcare	7.4	0.48
Utilities	4.1	1.37

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Fund data provided by Morningstar.

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Peer Group Ranking Methodology. A percentile rank denotes the value of a product in which a certain percent of observations falls within a peer group. The range of percentile rankings is between 1 and 100, where 1 represents a high statistical value and 100 represents a low statistical value. The 30th percentile, for example, is the value in which 30% of the highest observations may be found, the 65th percentile is the value in which 65% of the highest observations may be found, and so on.

Percentile rankings are calculated based on a normalized distribution ranging from 1 to 100 for all products in each peer group, where a ranking of 1 denotes a high statistical value and a ranking of 100 denotes a low statistical value. It is important to note that the same ranking methodology applies to all statistics, implying that a ranking of 1 will always mean highest value across all statistics.

For example, consider a risk/return assessment using standard deviation as a measure of risk. A percentile ranking equal to 1 for return denotes highest return, whereas a percentile ranking of 1 for standard deviation denotes highest risk among peers.

In addition, values may be used to demonstrate quartile rankings. For example, the third quartile is also known as the 75th percentile, and the median is the 50th percentile.

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