



CITY OF SAN JOSE
457(b) and PTC Deferred Compensation Plans
September 30, 2022 Performance Report

Vincent Galindo
Senior Consultant
vgalindo@hyasgroup.com

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Hyas Group is a business of Morgan Stanley

Alin Syed
Performance Analyst
asyed@hyasgroup.com

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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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For further information please contact Tom Breaden (tbreaden@hvasgroup.com).
Hvas Group, 9755 SW Barnes Road, Suite 660, Portland, Oregon 97225; 503-634-1500

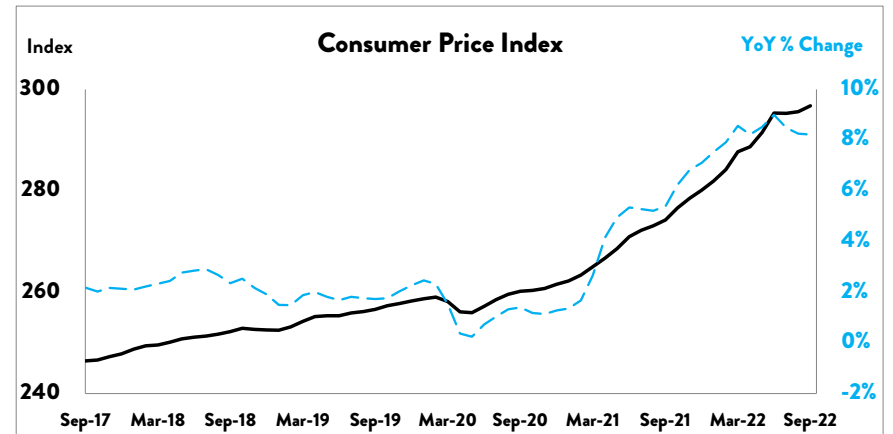
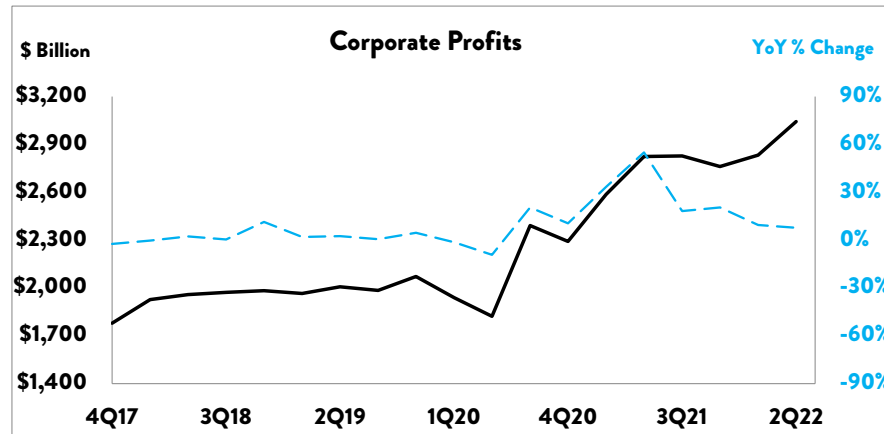
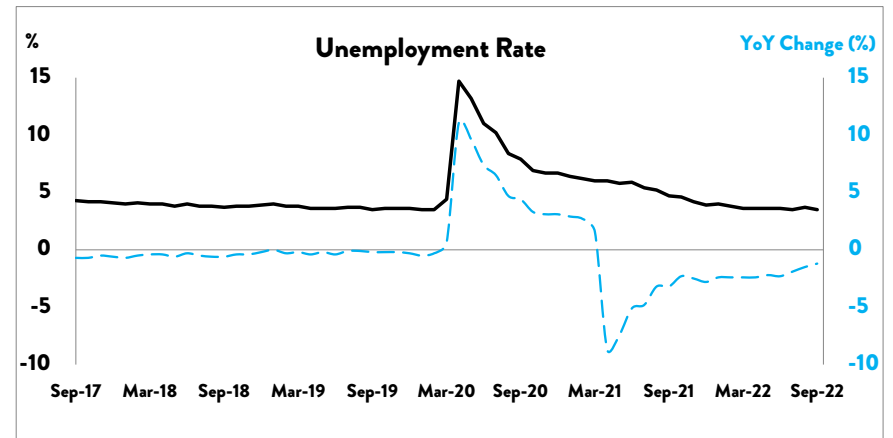
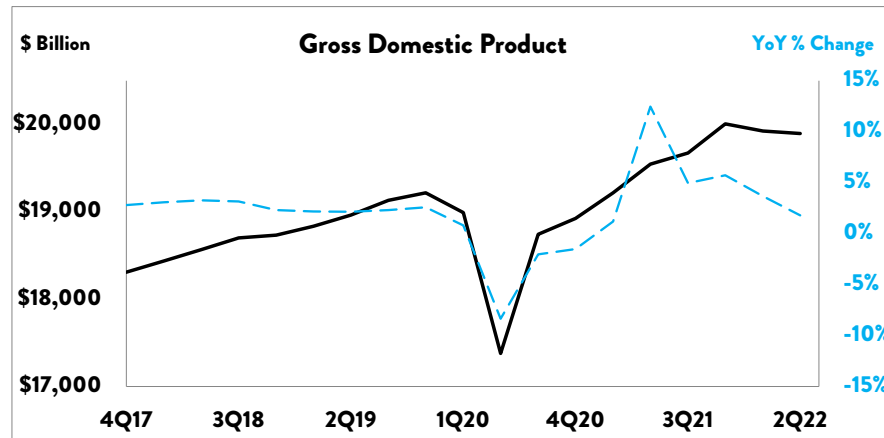
⁹ Source: Morgan Stanley's "Monthly Perspectives", October 2022.

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

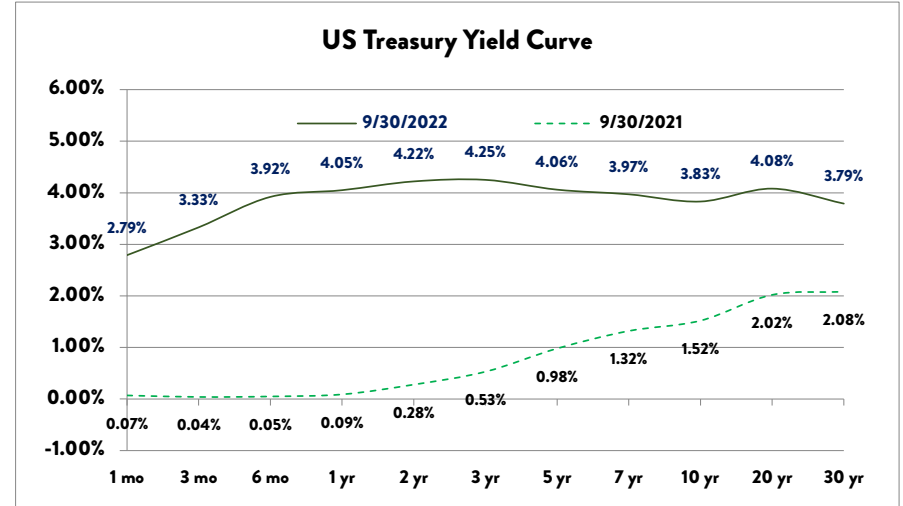
*% Off Low

Morningstar data as of 9/30/2022

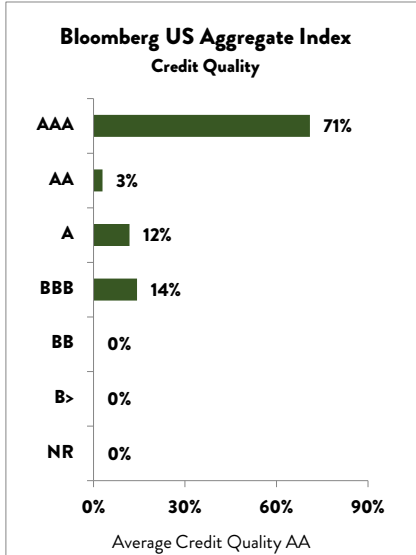
3Q2022 Bond Market Data

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%

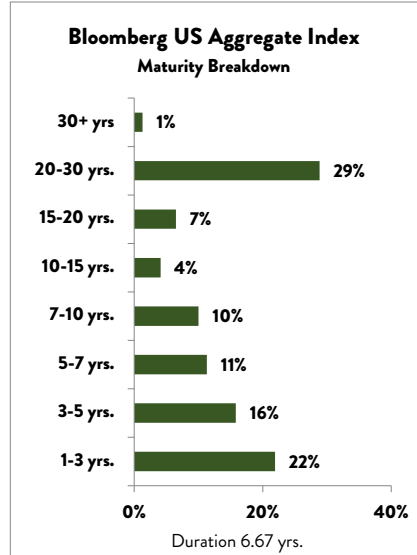
Source: Morningstar



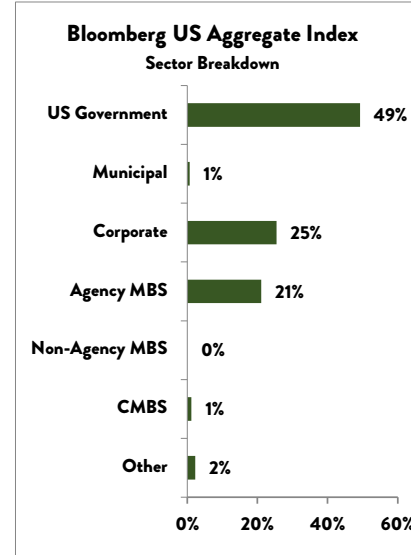
Source: Department of US Treasury



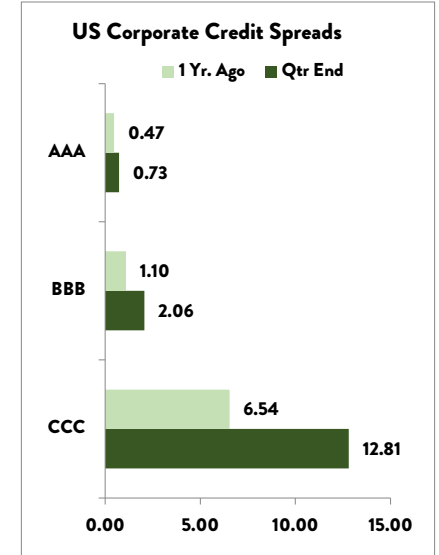
Source: Morningstar



Source: Morningstar



Source: Morningstar



Source: Federal Reserve / Bank of America

3Q2022 US Equity Market Data

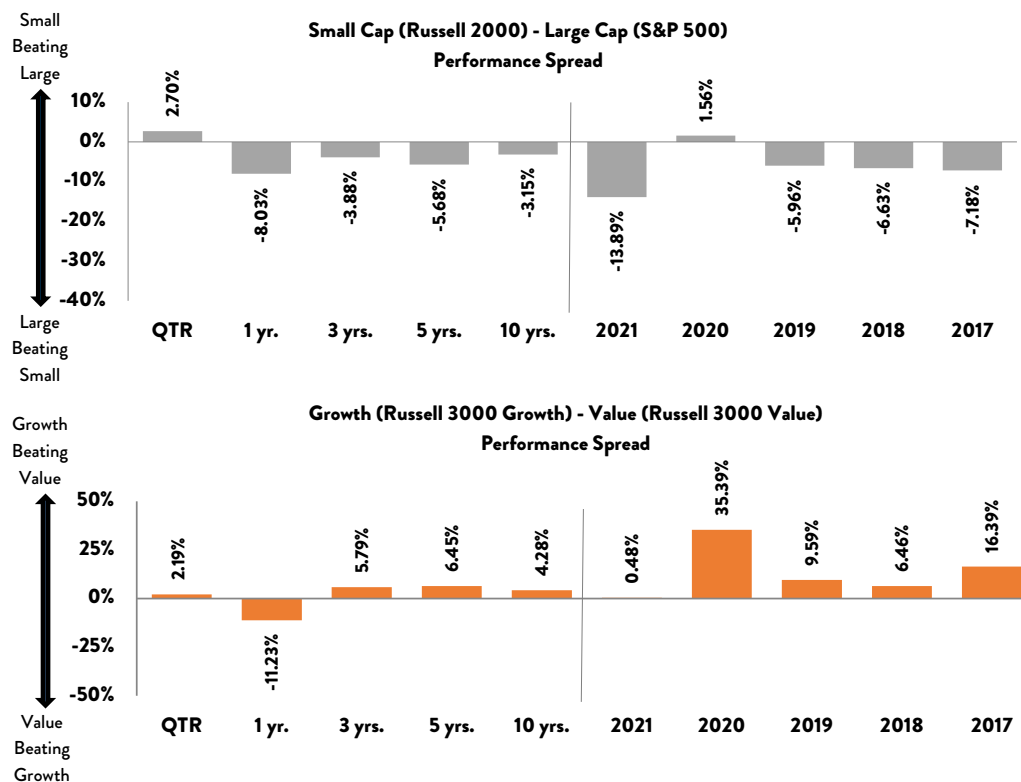
Sectors Weights/Returns (ranked by quarter performance)

	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%



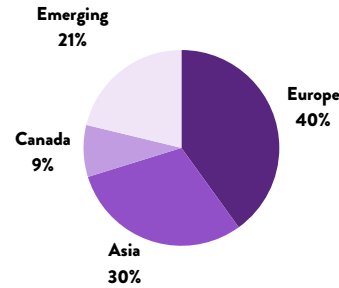
3Q2022 International Market Data

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

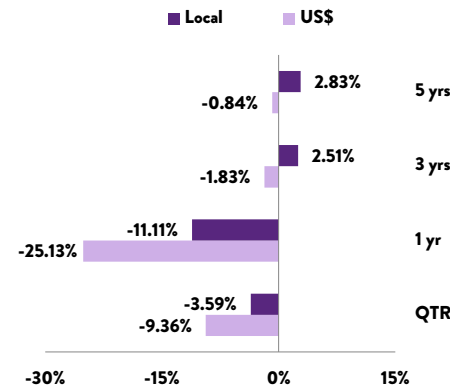


Top 10 Countries (MSCI AC World ex-USA)

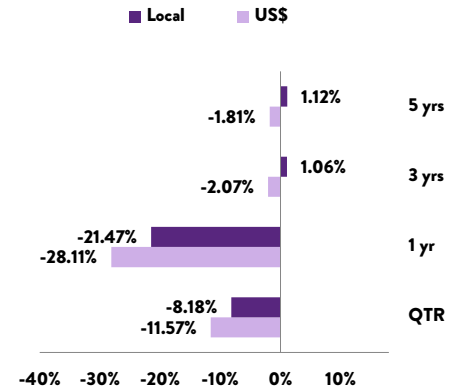
Japan	14%
UK	10%
China	9%
Canada	8%
France	7%
Switzerland	7%
Australia	5%
Germany	5%
India	4%
Taiwan	4%

Source: Morningstar

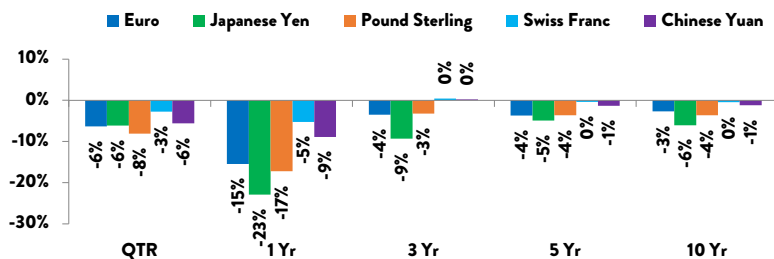
MSCI EAFE Index Return



MSCI Emerging Index Return



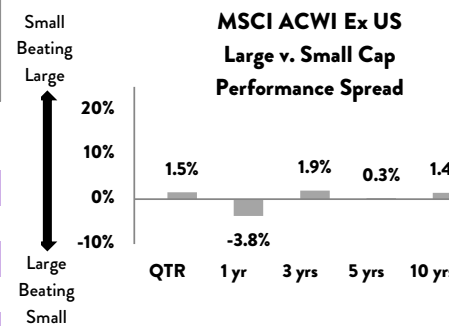
Foreign Currency v. US\$ Returns



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

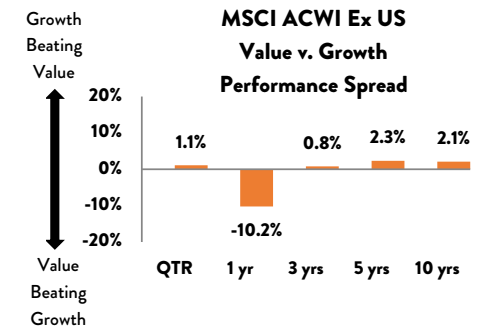
Source: Federal Reserve Bank of St. Louis

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

CITY OF SAN JOSE

457(b) Deferred Compensation Plan

PLAN ASSET ALLOCATION

Third Quarter 2022

Fixed Income	Ticker	#Part	Assets	%
San Jose Stable Value Option	-	3,109	\$274,944,086	24.6%
Loomis Sayles Core Plus Bond N	NERNX	875	\$26,989,407	2.4%
Fidelity US Bond Index	FXNAX	551	\$10,905,332	1.0%
Total			\$312,838,825	28.0%

International	Ticker	#Part	Assets	%
Vanguard International Value Inv	VTRIX	89	\$351,341	0.0%
Vanguard Total Intl Stock Index I	VTSNX	966	\$16,698,324	1.5%
American Funds EuroPacific Growth R6	REGRX	1,531	\$25,377,980	2.3%
Total			\$42,427,645	3.8%

Large Cap	Ticker	#Part	Assets	%
Vanguard Equity-Income Adm	VEIRX	1,593	\$56,223,903	5.0%
Vanguard Institutional Index Instl Plus	VIIIX	2,040	\$97,865,040	8.8%
T. Rowe Price Large Cap Growth Tr-D	-	1,969	\$118,363,163	10.6%
Total			\$272,452,107	24.4%

Asset Allocation	Ticker	#Part	Assets	%
Vanguard Target Retirement Income Trust II	-	391	\$24,204,748	2.2%
Vanguard Target Retirement 2020 Trust II	-	85	\$7,811,848	0.7%
Vanguard Target Retirement 2025 Trust II	-	1,444	\$112,562,977	10.1%
Vanguard Target Retirement 2030 Trust II	-	203	\$10,374,011	0.9%
Vanguard Target Retirement 2035 Trust II	-	257	\$11,229,611	1.0%
Vanguard Target Retirement 2040 Trust II	-	1,281	\$98,949,801	8.9%
Vanguard Target Retirement 2045 Trust II	-	402	\$9,694,615	0.9%
Vanguard Target Retirement 2050 Trust II	-	510	\$11,809,328	1.1%
Vanguard Target Retirement 2055 Trust II	-	820	\$16,228,926	1.5%
Vanguard Target Retirement 2060 Trust II	-	438	\$3,376,244	0.3%
Vanguard Target Retirement 2065 Trust II	-	177	\$1,449,768	0.1%
Vanguard Target Retirement 2070 Trust II	-	3	\$2,931	0.0%
Total			\$307,694,807	27.5%

Mid Cap	Ticker	#Part	Assets	%
MFS Mid Cap Value R6	MVCKX	485	\$4,668,232	0.4%
Vanguard Mid Cap Index Instl	VMCIX	1,774	\$35,512,688	3.2%
Janus Henderson Enterprise N	JDMNX	666	\$20,659,251	1.8%
Total			\$60,840,170	5.4%

Small Cap	Ticker	#Part	Assets	%
DFA US Targeted Value I	DFVX	612	\$3,349,220	0.3%
Vanguard Small Cap Index Instl	VSCIX	1,730	\$24,487,159	2.2%
Hood River Small Cap Growth Ret	HRSIX	360	\$5,863,491	0.5%
Total			\$33,699,870	3.0%

Specialty	Ticker	#Part	Assets	%
Vanguard FTSE Social Index I	VFTNX	814	\$11,809,478	1.1%
Total			\$11,809,478	1.1%

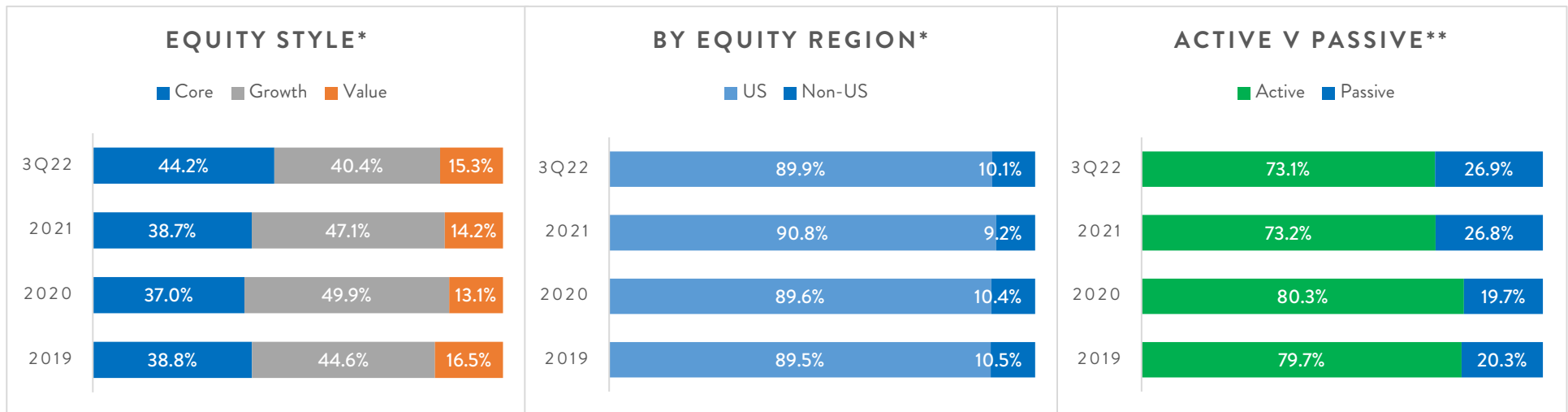
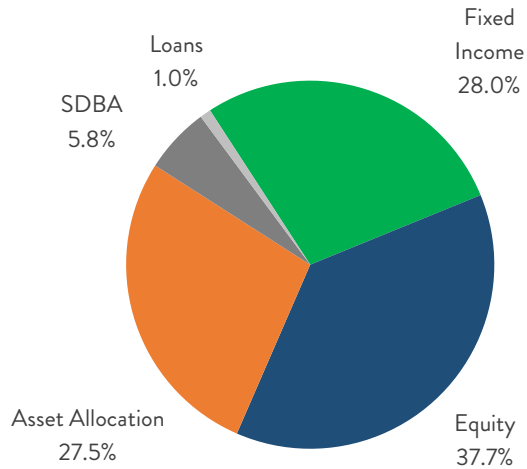
Miscellaneous	Ticker	#Part	Assets	%
Self-Directed Brokerage Account	-	330	\$64,864,324	5.8%
Participant Loans	-	797	\$10,860,040	1.0%
Total			\$75,724,364	6.8%

TOTAL PLAN ASSETS

\$1,117,487,266

HISTORICAL PLAN ALLOCATION

Asset Class	3Q22	2021	2020	2019	2018	2017	2016	2015
Fixed Income	28.0%	22.3%	25.5%	26.8%	N/A	N/A	N/A	N/A
Large Cap	24.4%	28.1%	28.1%	27.3%	N/A	N/A	N/A	N/A
Mid Cap	5.4%	6.0%	4.1%	5.2%	N/A	N/A	N/A	N/A
Small Cap	3.0%	3.4%	2.5%	2.7%	N/A	N/A	N/A	N/A
International	3.8%	3.9%	4.1%	4.3%	N/A	N/A	N/A	N/A
Asset Allocation	27.5%	27.9%	27.3%	27.6%	N/A	N/A	N/A	N/A
Specialty	1.1%	0.9%	1.1%	1.3%	N/A	N/A	N/A	N/A
SDBA	5.8%	6.7%	6.1%	3.6%	N/A	N/A	N/A	N/A
Loans	1.0%	0.8%	1.0%	1.2%	N/A	N/A	N/A	N/A



*Excludes Fixed Income, Asset Allocation, and Miscellaneous assets

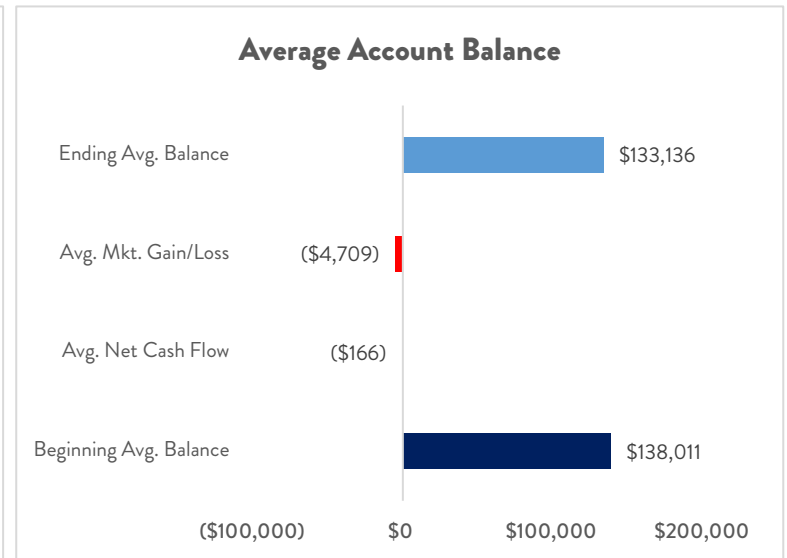
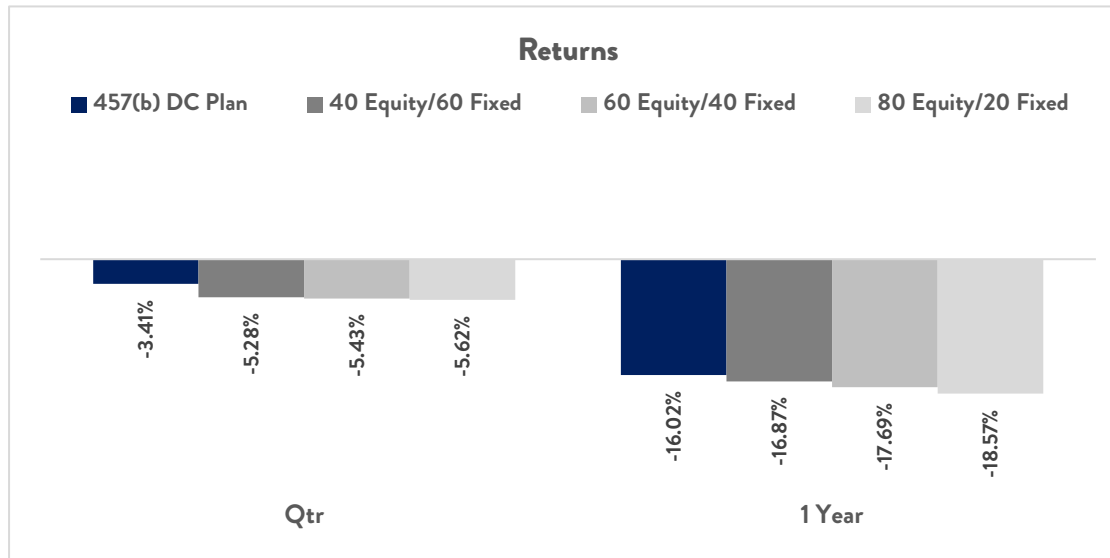
**Excludes Asset Allocation and Miscellaneous assets

PLAN LEVEL CASH FLOWS

	Beginning Value	Cash Flow (+)	Cash Flow (-)	Transfer	Market Gain/Loss	Ending Value
Fixed Income	\$314,677,026	\$1,597,926	(\$6,527,761)	\$3,180,693	(\$89,060)	\$312,838,825
Large Cap	\$286,110,516	\$2,485,992	(\$3,013,275)	(\$993,816)	(\$12,137,311)	\$272,452,107
Mid Cap	\$64,835,688	\$548,501	(\$858,598)	(\$1,122,633)	(\$2,562,787)	\$60,840,170
Small Cap	\$34,027,096	\$452,345	(\$337,263)	\$133,911	(\$576,219)	\$33,699,870
International	\$45,374,596	\$709,856	(\$556,657)	\$1,520,608	(\$4,620,758)	\$42,427,645
Asset Allocation	\$324,891,157	\$7,392,803	(\$3,367,422)	(\$1,754,128)	(\$19,467,603)	\$307,694,807
Specialty	\$11,372,203	\$214,472	(\$118,335)	\$1,062,983	(\$721,845)	\$11,809,478
SDBA	\$65,857,705	\$0	\$0	(\$2,027,619)	\$1,034,238	\$64,864,324
Total	\$1,147,145,987	\$13,401,895	(\$14,779,311)	\$0	(\$39,141,345)	\$1,106,627,226

HISTORICAL PLAN CASH FLOWS

	Beginning Value	Net Cash Flow	Market Gain/Loss	Ending Value
3Q22	\$1,147,145,987	(\$1,377,416)	(\$39,141,345)	\$1,106,627,226
YTD	\$1,385,606,858	(\$5,042,676)	(\$273,936,956)	\$1,106,627,226
2021	\$1,248,667,725	(\$17,604,851)	\$154,543,984	\$1,385,606,858
2020	\$1,079,872,485	(\$8,032,180)	\$176,827,421	\$1,248,667,725
2019	N/A	N/A	N/A	\$1,079,872,485
2018	N/A	N/A	N/A	N/A
2017	N/A	N/A	N/A	N/A
2016	N/A	N/A	N/A	N/A



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

Section 3

CITY OF SAN JOSE

PTC Deferred Compensation Plan

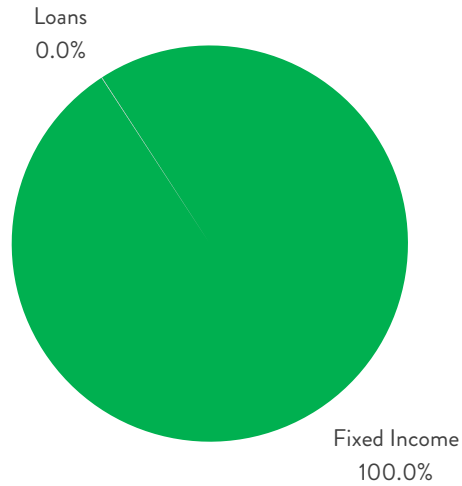
PLAN ASSET ALLOCATION

Third Quarter 2022

Fixed Income	Ticker	#Part	Assets	%
San Jose Stable Value Option	-	5,878	\$29,287,929	100.0%
Total			\$29,287,929	100.0%

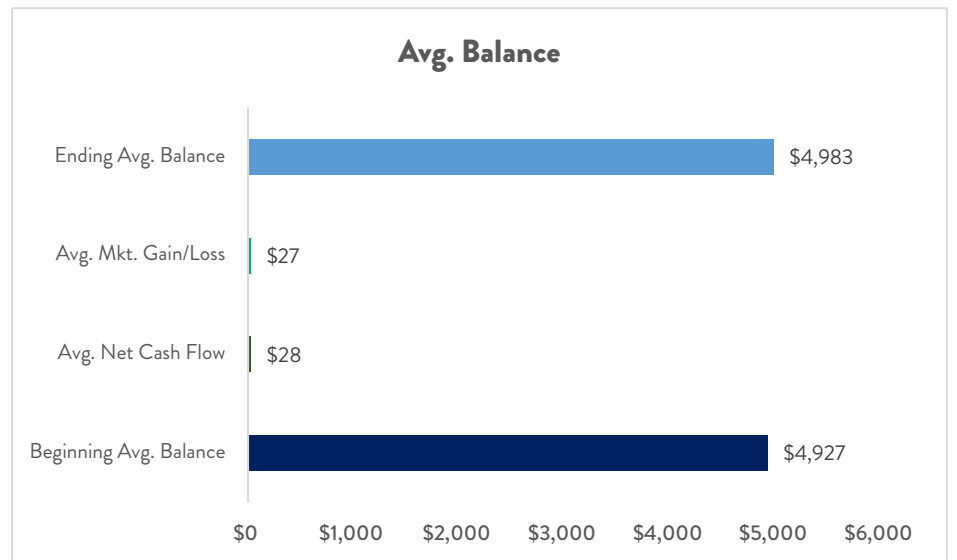
Miscellaneous	Ticker	#Part	Assets	%
Participant Loans	-	4	\$11,706	0.0%
Total			\$11,706	0.0%

TOTAL PLAN ASSETS \$29,299,635



HISTORICAL PLAN CASH FLOWS (excludes loans)

	Beginning Value	Net Cash Flow	Market Gain/Loss	Ending Value
3Q22	\$28,961,982	\$166,302	\$159,646	\$29,287,929
YTD	\$28,202,407	\$665,434	\$420,089	\$29,287,929
2021	\$26,499,138	\$1,194,199	\$509,069	\$28,202,407
2020	\$25,033,668	\$871,271	\$594,199	\$26,499,138
2019	N/A	N/A	N/A	\$25,033,668
2018	N/A	N/A	N/A	N/A



Section 4

Key: Ⓟ Pass / ● Fail

Investment Policy Status

	Performance Factors	Qualitative Factors	On-Watch Date Initiated	Notes
San Jose Stable Value Option	Ⓟ	Ⓟ	-	
Loomis Sayles Core Plus Bond N	Ⓟ	Ⓟ	-	
Fidelity US Bond Index	Ⓟ	Ⓟ	-	
Vanguard Equity-Income Adm	Ⓟ	Ⓟ	-	
Vanguard Institutional Index Instl Plus	Ⓟ	Ⓟ	-	
T. Rowe Price Large Cap Growth Tr-D	Ⓟ	Ⓟ	-	
MFS Mid Cap Value R6	Ⓟ	Ⓟ	-	
Vanguard Mid Cap Index Instl	Ⓟ	Ⓟ	-	
Janus Henderson Enterprise N	Ⓟ	Ⓟ	-	
DFA US Targeted Value I	Ⓟ	Ⓟ	-	
Vanguard Small Cap Index Instl	Ⓟ	Ⓟ	-	
Hood River Small Cap Growth Ret	Ⓟ	Ⓟ	-	
Vanguard International Value Inv	Ⓟ	Ⓟ	-	
Vanguard Total Intl Stock Index I	Ⓟ	Ⓟ	-	
American Funds EuroPacific Growth R6	●	Ⓟ	4Q21	Trailing Benchmark and Peer Group for 5 year period.
Vanguard Target Retirement Income Trust II	Ⓟ	Ⓟ	-	
Vanguard Target Retirement 2020 Trust II	Ⓟ	Ⓟ	-	
Vanguard Target Retirement 2025 Trust II	Ⓟ	Ⓟ	-	
Vanguard Target Retirement 2030 Trust II	Ⓟ	Ⓟ	-	
Vanguard Target Retirement 2035 Trust II	Ⓟ	Ⓟ	-	
Vanguard Target Retirement 2040 Trust II	Ⓟ	Ⓟ	-	
Vanguard Target Retirement 2045 Trust II	Ⓟ	Ⓟ	-	
Vanguard Target Retirement 2050 Trust II	Ⓟ	Ⓟ	-	
Vanguard Target Retirement 2055 Trust II	Ⓟ	Ⓟ	-	

			Investment Policy Status	
	Performance Factors	Qualitative Factors	On-Watch Date Initiated	Notes
Vanguard Target Retirement 2060 Trust II	P	P	-	
Vanguard Target Retirement 2065 Trust II	P	P	-	
Vanguard Target Retirement 2070 Trust II	P	P	-	
Vanguard FTSE Social Index I	P	P	-	

Key: P Pass / F Fail

CITY OF SAN JOSE

457(b) and PTC Deferred Compensation Plans

PERFORMANCE REVIEW

Third Quarter 2022

	QTR	YTD	1Yr	Annualized			2021	2020	2019	2018	2017	2016
				3Yr	5Yr	10Yr						
San Jose Stable Value Option	0.58	1.68	2.00	2.11	2.28	2.29	1.89	2.42	2.52	2.54	2.60	2.36
5 Yr Constant Maturity US Treasury Yield	0.80	1.99	2.29	1.26	1.72	1.59	0.85	0.54	1.96	2.75	1.91	1.44
+/- Index	(0.22)	(0.31)	(0.29)	0.85	0.56	0.70	1.04	1.88	0.56	(0.21)	0.69	0.92
US Stable Value	12	6	14	10	8	6	10	4	11	5	1	1
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
Loomis Sayles Core Plus Bond N	-4.20	-14.71	-14.94	-2.22	0.36	1.72	-1.34	10.71	9.05	-0.52	5.31	7.59
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	0.55	(0.10)	(0.34)	1.04	0.63	0.83	0.20	3.20	0.33	(0.53)	1.77	4.95
US Fund Intermediate Core-Plus Bond	30	30	31	20	18	13	76	14	56	37	18	3
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
Fidelity US Bond Index	-4.69	-14.47	-14.57	-3.24	-0.28	0.85	-1.79	7.80	8.48	0.01	3.50	2.52
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	0.06	0.14	0.03	0.02	(0.01)	(0.04)	(0.25)	0.29	(0.23)	0.00	(0.04)	(0.13)
US Fund Intermediate Core Bond	44	31	28	49	41	47	65	50	48	26	43	55
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
Vanguard Equity-Income Adm	-5.30	-12.22	-4.58	6.65	7.42	10.36	25.64	3.13	25.35	-5.65	18.49	14.82
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	0.32	5.53	6.78	2.29	2.13	1.19	0.48	0.34	(1.19)	2.62	4.83	(2.52)
US Fund Large Value	42	10	6	23	13	13	56	44	50	20	24	44
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
Vanguard Institutional Index Instl Plus	-4.89	-23.88	-15.49	8.15	9.23	11.69	28.69	18.41	31.48	-4.41	21.82	11.95
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)	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)	0.01	0.00	(0.02)	(0.02)	(0.01)
US Fund Large Blend	44	46	36	20	15	11	21	32	22	22	32	27

CITY OF SAN JOSE

457(b) and PTC Deferred Compensation Plans

PERFORMANCE REVIEW

Third Quarter 2022

	QTR	YTD	1Yr	Annualized			2021	2020	2019	2018	2017	2016
				3Yr	5Yr	10Yr						
T. Rowe Price Large Cap Growth Tr-D	-3.22	-33.79	-30.22	6.96	-	-	20.33	39.43	-	-	-	-
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	0.38	(3.13)	(7.63)	(3.71)	-	-	(7.27)	0.94	-	-	-	-
US Fund Large Growth	25	61	65	48	-	-	59	32	-	-	-	-
MFS Mid Cap Value R6	-4.51	-18.47	-10.14	6.09	6.28	10.14	31.00	4.40	31.08	-11.31	13.84	15.86
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	0.42	1.89	3.42	1.59	1.52	0.70	2.66	(0.57)	4.02	0.98	0.50	(4.14)
US Fund Mid-Cap Value	35	50	41	28	13	8	27	34	10	23	45	66
Vanguard Mid Cap Index Instl	-4.14	-25.42	-19.48	5.49	6.66	10.46	24.53	18.26	31.04	-9.24	19.29	11.23
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	0.00	(0.01)	0.01	0.00	(0.02)	0.01	0.02	(0.04)	(0.02)	0.00	(0.02)
US Fund Mid-Cap Blend	52	80	73	42	25	12	45	20	20	28	19	73
Janus Henderson Enterprise N	-4.01	-23.26	-18.70	4.79	9.01	12.75	17.50	20.44	35.40	-0.81	26.65	12.18
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	(3.36)	8.19	10.80	0.53	1.39	1.90	4.77	(15.14)	(0.07)	3.94	1.38	4.85
US Fund Mid-Cap Growth	81	6	7	49	20	5	24	88	37	18	37	7
DFA US Targeted Value I	-2.68	-15.32	-9.34	9.82	5.45	9.68	38.80	3.77	21.47	-15.78	9.59	26.86
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	1.93	5.80	8.35	5.10	2.58	1.74	10.53	(0.87)	(0.92)	(2.92)	1.75	(4.88)
US Fund Small Value	12	12	10	7	15	12	8	46	54	54	47	35

CITY OF SAN JOSE

457(b) and PTC Deferred Compensation Plans

PERFORMANCE REVIEW

Third Quarter 2022

	QTR	YTD	1Yr	Annualized			2021	2020	2019	2018	2017	2016
				3Yr	5Yr	10Yr						
Vanguard Small Cap Index Instl	-2.60	-23.68	-20.73	4.99	5.38	9.58	17.73	19.12	27.40	-9.32	16.25	18.32
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	0.03	0.03	0.02	0.03	0.03	0.03	0.02	0.04	0.05	0.01	0.01	0.05
US Fund Small Blend	29	47	63	42	14	18	81	18	20	20	15	76
Hood River Small Cap Growth Ret	4.17	-27.65	-24.13	16.53	11.27	13.85	23.88	60.81	24.19	-6.78	20.78	13.50
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	3.93	1.63	5.14	13.59	7.67	5.04	21.05	26.17	(4.30)	2.53	(1.38)	2.18
US Fund Small Growth	3	20	16	2	5	3	9	13	79	66	62	25
Vanguard International Value Inv	-9.27	-23.69	-22.20	-0.78	-0.62	3.62	7.97	8.99	20.39	-14.52	27.96	4.46
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	1.17	(2.69)	(2.18)	1.37	1.50	1.75	(2.49)	9.76	4.68	(0.55)	5.30	(4.46)
US Fund Foreign Large Value	7	43	44	28	12	15	88	5	23	20	10	31
Vanguard Total Intl Stock Index I	-10.52	-26.76	-25.20	-1.15	-0.68	3.33	8.68	11.28	21.56	-14.39	27.55	4.70
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	(0.86)	(0.27)	0.00	(0.22)	(0.18)	(0.08)	(0.16)	0.04	(0.25)	0.22	0.14	(0.02)
US Fund Foreign Large Blend	56	27	29	35	37	48	64	40	60	39	29	11
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

CITY OF SAN JOSE

457(b) and PTC Deferred Compensation Plans

PERFORMANCE REVIEW

Third Quarter 2022

	QTR	YTD	1Yr	Annualized			2021	2020	2019	2018	2017	2016
				3Yr	5Yr	10Yr						
Vanguard Target Retirement Income Trust II	-4.70	-15.91	-14.20	0.01	1.99	3.36	5.25	10.08	13.28	-2.00	8.60	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	(0.14)	(0.14)	(0.16)	(0.32)	(0.23)	(0.18)	(0.18)	(0.63)	(0.12)	(0.03)	(0.07)	(0.10)
US Fund Target-Date Retirement	62	46	44	24	22	26	64	29	44	18	46	31
Vanguard Target Retirement 2020 Trust II	-5.15	-18.23	-15.82	1.21	2.96	5.52	8.24	12.10	17.69	-4.19	14.19	7.02
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	(0.22)	(0.26)	(0.29)	(0.41)	(0.30)	(0.22)	(0.19)	(0.76)	(0.18)	(0.05)	(0.03)	(0.15)
US Fund Target-Date 2020	50	41	36	37	22	16	60	38	32	45	19	28
Vanguard Target Retirement 2025 Trust II	-5.61	-20.27	-17.40	1.52	3.25	6.05	9.90	13.39	19.75	-5.07	16.04	7.51
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	(0.29)	(0.32)	(0.31)	(0.45)	(0.33)	(0.24)	(0.20)	(0.79)	(0.18)	(0.07)	(0.04)	(0.16)
US Fund Target-Date 2025	60	58	53	34	22	19	45	29	17	43	19	20
Vanguard Target Retirement 2030 Trust II	-5.89	-21.49	-18.25	1.93	3.52	6.54	11.46	14.19	21.15	-5.79	17.60	7.93
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	(0.31)	(0.33)	(0.29)	(0.46)	(0.34)	(0.24)	(0.19)	(0.78)	(0.18)	(0.05)	(0.05)	(0.19)
US Fund Target-Date 2030	62	44	49	41	32	24	53	33	35	37	33	26
Vanguard Target Retirement 2035 Trust II	-6.10	-22.35	-18.78	2.49	3.88	7.07	13.07	14.92	22.57	-6.54	19.18	8.37
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	(0.35)	(0.35)	(0.30)	(0.45)	(0.34)	(0.24)	(0.17)	(0.75)	(0.19)	(0.06)	(0.06)	(0.18)
US Fund Target-Date 2035	59	31	36	43	34	22	74	37	45	29	37	28

CITY OF SAN JOSE

457(b) and PTC Deferred Compensation Plans

PERFORMANCE REVIEW

Third Quarter 2022

	QTR	YTD	1Yr	Annualized			2021	2020	2019	2018	2017	2016
				3Yr	5Yr	10Yr						
Vanguard Target Retirement 2040 Trust II	-6.29	-23.23	-19.32	3.01	4.20	7.49	14.68	15.57	23.97	-7.30	20.81	8.79
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	(0.36)	(0.37)	(0.31)	(0.46)	(0.35)	(0.26)	(0.17)	(0.73)	(0.22)	(0.08)	(0.06)	(0.19)
US Fund Target-Date 2040	54	27	28	39	25	19	78	39	44	32	26	20
Vanguard Target Retirement 2045 Trust II	-6.51	-24.09	-19.85	3.51	4.48	7.69	16.33	16.27	25.07	-7.86	21.51	8.91
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)	(0.39)	(0.31)	(0.48)	(0.37)	(0.27)	(0.12)	(0.76)	(0.29)	(0.10)	(0.03)	(0.22)
US Fund Target-Date 2045	58	28	32	28	20	16	61	35	36	39	21	25
Vanguard Target Retirement 2050 Trust II	-6.62	-24.43	-20.12	3.49	4.47	7.67	16.60	16.42	25.05	-7.83	21.48	8.95
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	(0.41)	(0.38)	(0.31)	(0.48)	(0.37)	(0.28)	(0.17)	(0.76)	(0.31)	(0.06)	(0.05)	(0.18)
US Fund Target-Date 2050	59	27	35	26	17	19	62	35	42	32	27	26
Vanguard Target Retirement 2055 Trust II	-6.61	-24.42	-20.11	3.49	4.46	7.66	16.59	16.41	25.07	-7.85	21.49	8.97
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	(0.40)	(0.37)	(0.30)	(0.48)	(0.38)	(0.29)	(0.18)	(0.76)	(0.29)	(0.09)	(0.05)	(0.16)
US Fund Target-Date 2055	57	26	34	29	22	25	68	38	43	34	35	25
Vanguard Target Retirement 2060 Trust II	-6.61	-24.40	-20.10	3.52	4.49	7.66	16.56	16.50	25.09	-7.85	21.51	8.95
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	(0.40)	(0.35)	(0.29)	(0.45)	(0.35)	(0.29)	(0.21)	(0.68)	(0.27)	(0.09)	(0.03)	(0.18)
US Fund Target-Date 2060	59	23	33	32	24	50	73	38	48	30	34	22

CITY OF SAN JOSE

457(b) and PTC Deferred Compensation Plans

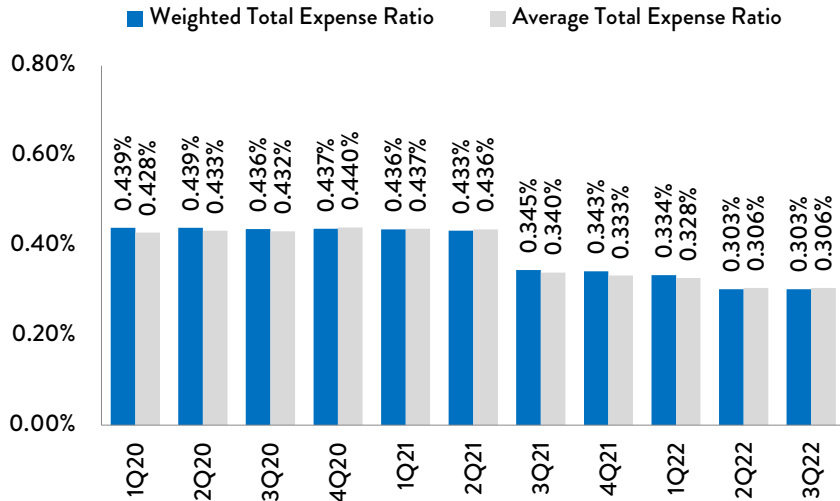
PERFORMANCE REVIEW

Third Quarter 2022

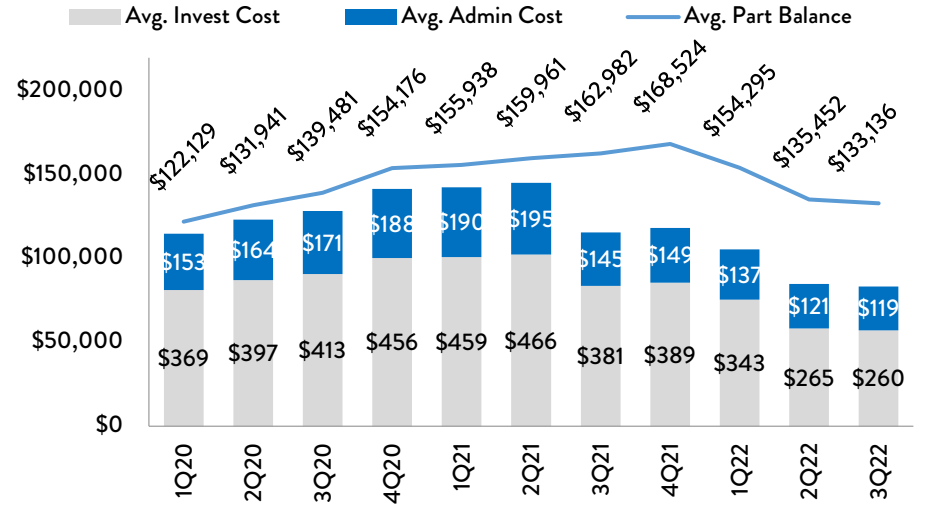
	QTR	YTD	1Yr	Annualized			2021	2020	2019	2018	2017	2016
				3Yr	5Yr	10Yr						
Vanguard Target Retirement 2065 Trust II	-6.59	-24.38	-20.10	3.50	4.50	-	16.54	16.45	25.11	-7.70	-	-
Vanguard Retirement 2065 Index	-6.21	-24.05	-19.81	3.97	4.84	-	16.77	17.18	25.36	-7.77	-	-
+/- Index	(0.38)	(0.33)	(0.29)	(0.47)	(0.34)	-	(0.23)	(0.73)	(0.25)	0.07	-	-
US Fund Target-Date 2065+	50	22	24	31	40	-	64	51	59	-	-	-
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
Vanguard Target Retirement 2070 Trust II	-6.61	-	-	-	-	-	-	-	-	-	-	-
Vanguard Retirement 2070 Index	-6.21	-	-	-	-	-	-	-	-	-	-	-
+/- Index	(0.40)	-	-	-	-	-	-	-	-	-	-	-
US Fund Target-Date 2065+	54	-	-	-	-	-	-	-	-	-	-	-
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
Vanguard FTSE Social Index I	-5.16	-27.91	-20.09	7.70	9.33	12.66	27.77	22.66	33.96	-3.38	24.19	10.34
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
FTSE4Good US Select Index	-5.15	-27.86	-20.02	7.80	9.43	12.78	27.89	22.79	34.08	-3.32	24.33	10.42
+/- Index	(0.28)	(4.04)	(4.62)	(0.46)	0.09	0.96	(0.94)	4.26	2.48	1.00	2.36	(1.62)
US Fund Large Blend	58	96	88	33	14	1	36	8	5	14	10	55

Section 5

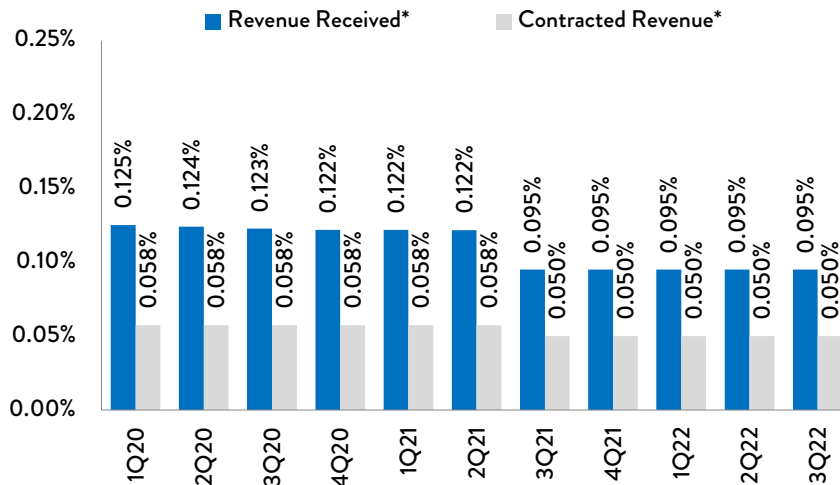
Annualized Plan Cost (%)



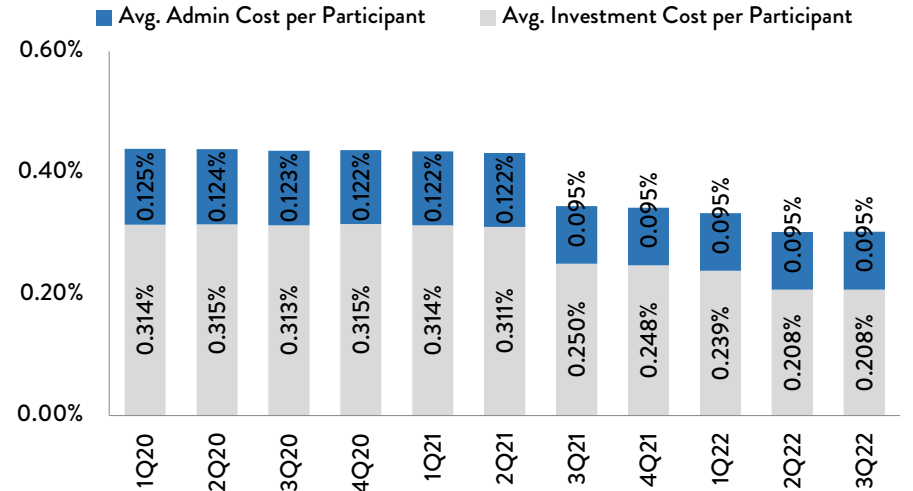
Average Participant Balance and Cost (\$)



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



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



*Revenue received is 0.095% annually on all assets excluding SDBA. Contracted revenue is 0.050% annually on all assets excluding SDBA.

CITY OF SAN JOSE
457(b) Deferred Compensation Plan

PLAN FEE ANALYSIS
Third Quarter 2022

Annualized

Fund	Ticker	Quarter End Assets	Net Expense		Est. Total Net	Est. Total Admin.
			Ratio	Admin Fee*	Invest. Cost	Cost
San Jose Stable Value Option	-	\$274,944,086	0.30%	0.095%	\$824,832	\$261,197
Loomis Sayles Core Plus Bond N	NERNX	\$26,989,407	0.38%	0.095%	\$102,560	\$25,640
Fidelity US Bond Index	FXNAX	\$10,905,332	0.03%	0.095%	\$2,726	\$10,360
Vanguard Equity-Income Adm	VEIRX	\$56,223,903	0.19%	0.095%	\$106,825	\$53,413
Vanguard Institutional Index Instl Plus	VIIIX	\$97,865,040	0.02%	0.095%	\$19,573	\$92,972
T. Rowe Price Large Cap Growth Tr-D	-	\$118,363,163	0.40%	0.095%	\$473,453	\$112,445
MFS Mid Cap Value R6	MVCKX	\$4,668,232	0.64%	0.095%	\$29,877	\$4,435
Vanguard Mid Cap Index Instl	VMCIX	\$35,512,688	0.04%	0.095%	\$14,205	\$33,737
Janus Henderson Enterprise N	JDMNX	\$20,659,251	0.66%	0.095%	\$136,351	\$19,626
DFA US Targeted Value I	DFFVX	\$3,349,220	0.29%	0.095%	\$9,713	\$3,182
Vanguard Small Cap Index Instl	VSCIX	\$24,487,159	0.04%	0.095%	\$9,795	\$23,263
Hood River Small Cap Growth Ret	HRSIX	\$5,863,491	0.99%	0.095%	\$58,049	\$5,570
Vanguard International Value Inv	VTRIX	\$351,341	0.36%	0.095%	\$1,265	\$334
Vanguard Total Intl Stock Index I	VTSNX	\$16,698,324	0.08%	0.095%	\$13,359	\$15,863
American Funds EuroPacific Growth R6	RERGX	\$25,377,980	0.46%	0.095%	\$116,739	\$24,109
Vanguard Target Retirement Income Trust II	-	\$24,204,748	0.075%	0.095%	\$18,154	\$22,995
Vanguard Target Retirement 2020 Trust II	-	\$7,811,848	0.075%	0.095%	\$5,859	\$7,421
Vanguard Target Retirement 2025 Trust II	-	\$112,562,977	0.075%	0.095%	\$84,422	\$106,935
Vanguard Target Retirement 2030 Trust II	-	\$10,374,011	0.075%	0.095%	\$7,781	\$9,855
Vanguard Target Retirement 2035 Trust II	-	\$11,229,611	0.075%	0.095%	\$8,422	\$10,668
Vanguard Target Retirement 2040 Trust II	-	\$98,949,801	0.075%	0.095%	\$74,212	\$94,002
Vanguard Target Retirement 2045 Trust II	-	\$9,694,615	0.075%	0.095%	\$7,271	\$9,210
Vanguard Target Retirement 2050 Trust II	-	\$11,809,328	0.075%	0.095%	\$8,857	\$11,219
Vanguard Target Retirement 2055 Trust II	-	\$16,228,926	0.075%	0.095%	\$12,172	\$15,417
Vanguard Target Retirement 2060 Trust II	-	\$3,376,244	0.075%	0.095%	\$2,532	\$3,207
Vanguard Target Retirement 2065 Trust II	-	\$1,449,768	0.075%	0.095%	\$1,087	\$1,377
Vanguard Target Retirement 2070 Trust II	-	\$2,931	0.075%	0.095%	\$2	\$3

CITY OF SAN JOSE
457(b) Deferred Compensation Plan

PLAN FEE ANALYSIS
Third Quarter 2022

Annualized

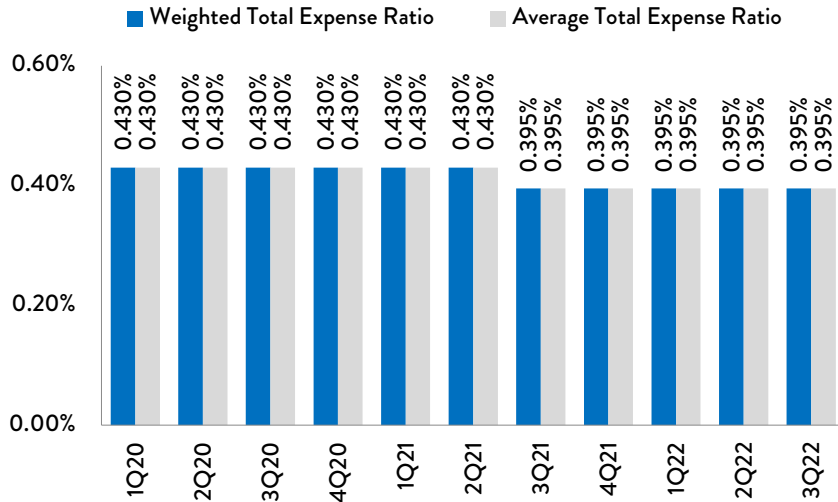
Fund	Ticker	Quarter End Assets	Net Expense Ratio	Admin Fee*	Est. Total Net Invest. Cost	Est. Total Admin. Cost
Vanguard FTSE Social Index I	VFTNX	\$11,809,478	0.12%	0.095%	\$14,171	\$11,219
Self-Directed Brokerage Account	-	\$64,864,324	-	0.000%	-	\$0
TOTAL		\$1,106,627,226			\$2,164,263	\$989,675

Plan Administration Cost	Quarter	Annualized
Plan Generated Revenue (0.095% excluding SDBA - est):	\$247,419	\$989,675
Contracted Revenue (0.050% excluding SDBA - est):	\$130,220	\$520,881
Net Excess/(Deficit) (est):	\$117,198	\$468,793

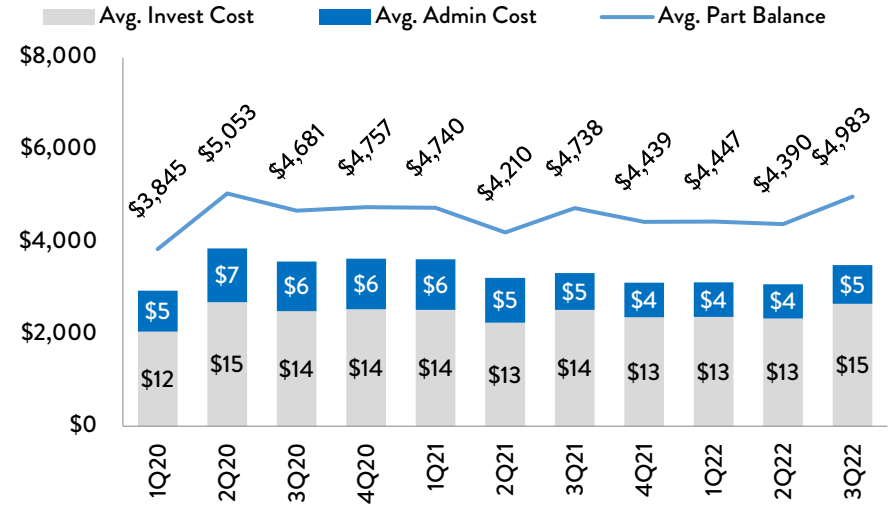
*Revenue received is 0.095% annually on all assets excluding SDBA. Contracted revenue is 0.050% annually on all assets excluding SDBA.

Section 6

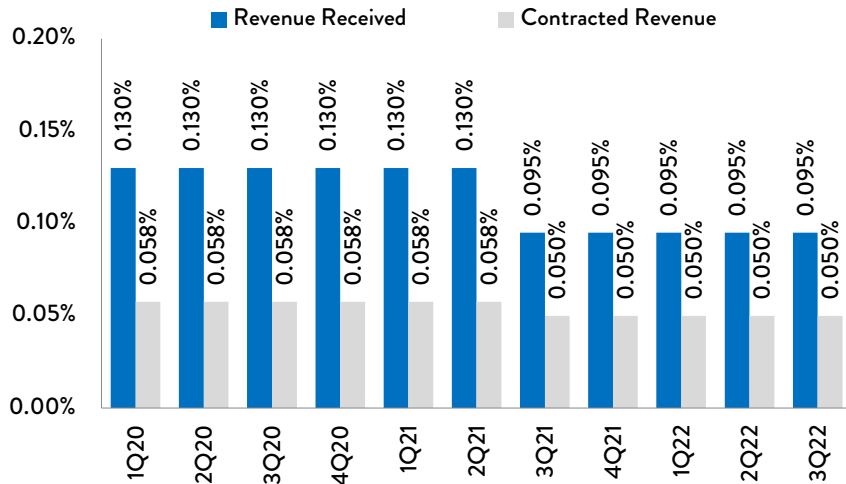
Annualized Plan Cost (%)



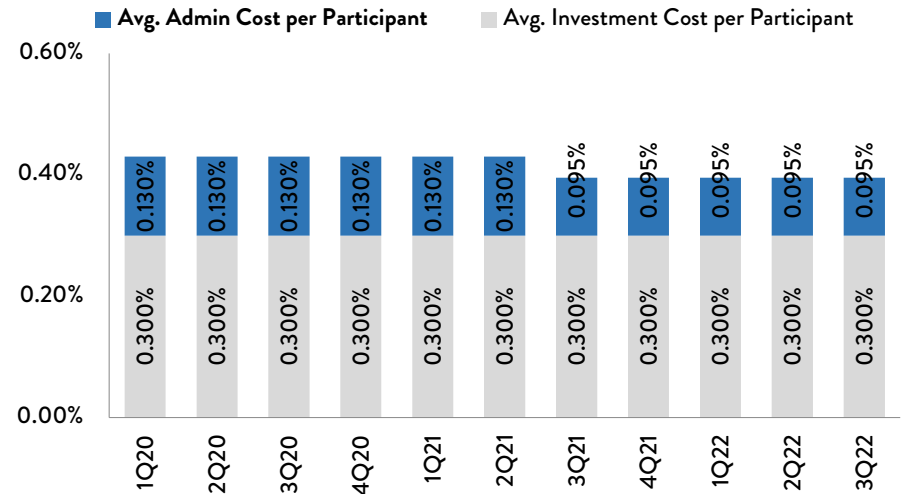
Average Participant Balance and Cost (\$)



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



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



CITY OF SAN JOSE
PTC Deferred Compensation Plan

PLAN FEE ANALYSIS
Third Quarter 2022

Annualized

Fund	Ticker	Quarter End Assets	Net Expense Ratio	Admin Fee	Est. Total Net Invest. Cost	Est. Total Admin. Cost
San Jose Stable Value Option	-	\$29,287,929	0.30%	0.095%	\$87,864	\$27,824
TOTAL		\$29,287,929			\$87,864	\$27,824

Plan Administration Cost	Quarter	Annualized
Plan Generated Revenue (est):	\$6,956	\$27,824
Contracted Revenue (est):	\$3,661	\$14,644
Net Excess/(Deficit) (est):	\$3,295	\$13,180

Section 7

DFA US Targeted Value I (USD)

Morningstar Analyst Rating™ Overall Morningstar Rating™ Standard Index Category Index Morningstar Cat
Silver **★★★★** S&P 500 TR USD Russell 2000 Value US Fund Small Value
 01-23-2022 450 US Fund Small Value TR USD

Performance 10-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-39.19	23.56	4.02	32.77	3.77
2021	25.10	4.21	-0.55	7.06	38.80
2022	-0.11	-12.88	-2.68	—	-3.88

Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly Std 09-30-2022	-1.39	13.94	8.00	11.14	10.90
Total Return	-1.39	13.94	8.00	11.14	10.90
+/- Std Index	13.22	3.72	-2.44	-1.64	—
+/- Cat Index	9.34	5.86	2.69	1.77	—
% Rank Cat	16	14	14	11	—
No. in Cat	477	450	420	317	—

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

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 888-576-1187 or visit www.dimensional.com.

Fees and Expenses	
Sales Charges	NA
Front-End Load %	NA
Deferred Load %	NA
Fund Expenses	0.27
Management Fees %	NA
12B1 Expense %	NA
Net Expense Ratio %	0.29
Gross Expense Ratio %	0.29
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

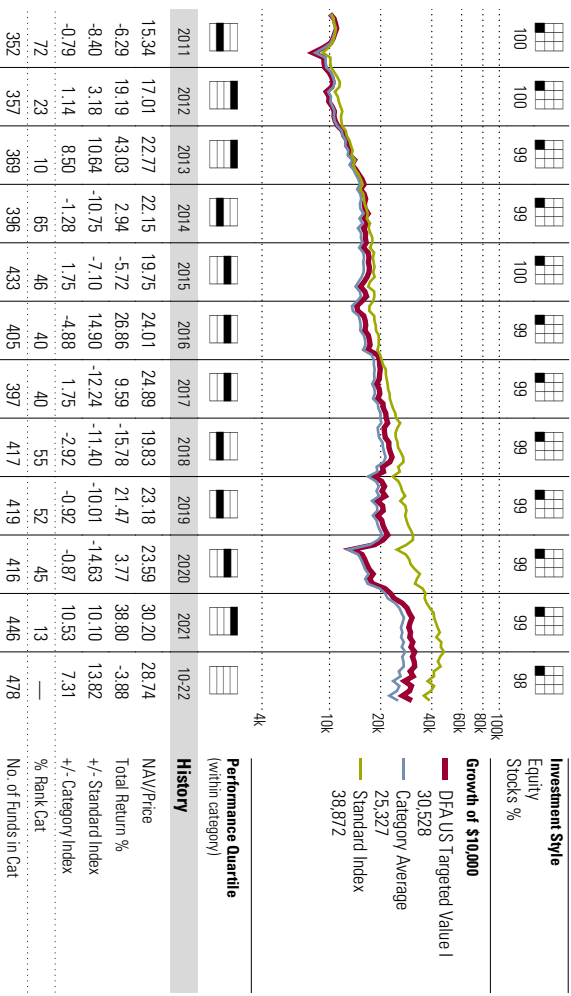
	3 Yr	5 Yr	10 Yr
Standard Deviation	29.09	25.90	20.79
Mean	13.94	8.00	11.14
Sharpe Ratio	0.58	0.38	0.58

MPI Statistics	Standard Index	Best Fit Index
Alpha	3.33	3.82
Beta	1.20	1.00
R-Squared	73.42	99.07
12-Month Yield	—	—
Potential Cap Gains Exp	—	1.32%

Operations
 Family: Dimensional Fund Advisors
 Manager: Multiple
 Tenure: 10.8 Years
 Objective: Growth and Income

Base Currency: USD
 Ticker: DFFX
 ISIN: US23232035953
 Minimum Initial Purchase: \$0

Purchase Constraints: A
 Incept: 02-23-2000
 Type: MF
 Total Assets: \$12,160.33 mil



Portfolio Analysis 09-30-2022		
Asset Allocation %	Net %	Long %
Cash	1.80	1.80
US Stocks	95.80	95.80
Non-US Stocks	2.35	2.35
Bonds	0.00	0.00
Other/Not Cstfd	0.05	0.05
Total	100.00	100.00

Equity Style	Portfolio Statistics	Port	Rel	Rel
		Avg	Index	Cat
Value	P/E Ratio TTM	7.8	0.40	0.64
Brand	P/C Ratio TTM	6.2	0.43	0.68
Growth	P/B Ratio TTM	1.2	0.33	0.71
Large	Geo Avg Mkt Cap	2692	0.02	0.70
Mid				
Small				

Fixed-Income Style	Ang Eff Maturity	Ang Eff Duration	Ang Wtd Coupon	Ang Wtd Price
Mid	High	Med	Low	
AAA	—	—	—	—
AA	—	—	—	—
A	—	—	—	—
BBB	—	—	—	—
BB	—	—	—	—
B	—	—	—	—
Below B	—	—	—	—

Regional Exposure	Stocks %	Rel Std Index
Americas	98.9	1.00
Greater Europe	0.3	0.29
Greater Asia	0.8	28.17

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

Sector Weightings	Stocks %	Rel Std Index
Cyclical	50.2	1.72
Basic Materials	7.9	3.48
Consumer Cyclical	12.0	1.14
Financial Services	29.4	2.16
Real Estate	0.9	0.31
Sensitive	39.1	0.87
Communication Services	2.6	0.35
Energy	9.1	1.69
Industrials	17.7	2.04
Technology	9.8	0.41
Defensive	10.7	0.42
Consumer Defensive	4.9	0.67
Healthcare	5.2	0.34
Utilities	0.5	0.17

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Fidelity® US Bond Index (USD)

Morningstar Analyst Rating™ Overall Morningstar Rating™ Standard Index **Category Index** **Morningstar Cat**
Gold **AAA** **403 US Fund Intermediate** **Bloomberg US** **Bloomberg US Agg** **US Fund Intermediate**
 03-30-2022 **Core Bond** **Agg Bond TR USD** **Bond TR USD** **Core Bond**

Performance 10-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	3.66	2.77	0.43	0.75	7.80
2021	-3.48	1.85	0.02	-0.12	-1.79
2022	-5.88	-4.66	-4.69	—	-15.64
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-15.72	-3.77	-0.56	0.70	1.46
Std 09-30-2022	-14.57	—	-0.28	0.85	1.60
Total Return	-15.72	-3.77	-0.56	0.70	1.46
+/- Std Index	-0.04	0.00	-0.02	-0.04	—
+/- Cat Index	-0.04	0.00	-0.02	-0.04	—
% Rank Cat	37	44	37	38	—
No. in Cat	444	403	363	269	—

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

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 800-544-8544 or visit www.investor.fidelity.com.

Fees and Expenses	
Sales Charges	NA
Front-End Load %	NA
Deferred Load %	NA
Fund Expenses	0.03
Management Fees %	0.03
12b1 Expense %	NA
Net Expense Ratio %	0.03
Gross Expense Ratio %	0.03
Risk and Return Profile	

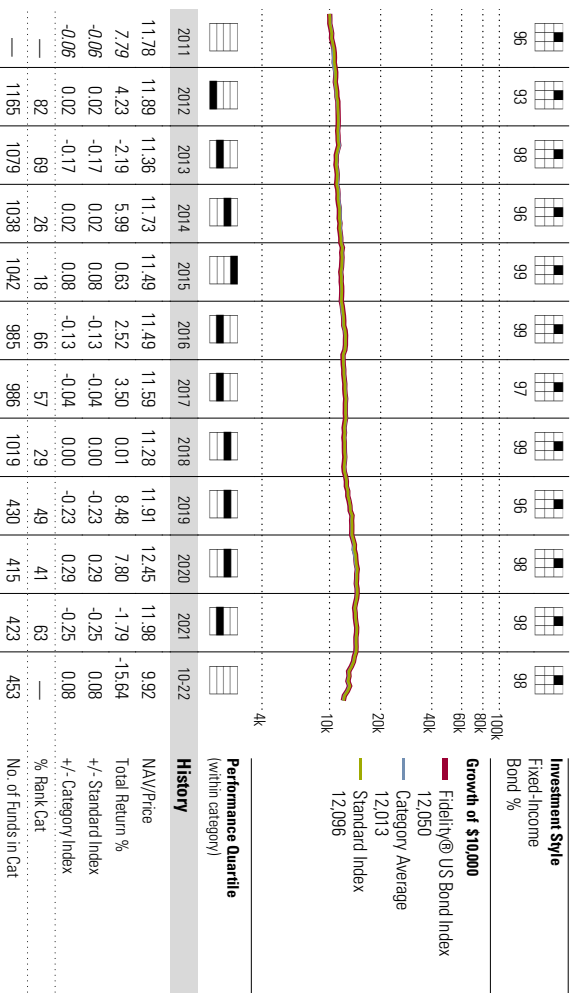
	3 Yr	5 Yr	10 Yr
Morningstar Rating™	403 funds 3★	363 funds 3★	269 funds 3★
Morningstar Risk	Avg	Avg	Avg
Morningstar Return	Avg	Avg	Avg
Standard Deviation	5.37	4.81	4.00
Mean	-3.77	-0.56	0.70
Sharpe Ratio	-0.81	-0.35	0.01

MPI Statistics	Standard Index	Best Fit Index
Alpha	-0.02	-0.02
Beta	1.00	1.00
R-Squared	99.66	99.66
12-Month Yield	—	—
Potential Cap Gains Exp	—	-75.09%

Operations
 Family: Fidelity Investments
 Manager: Multiple
 Tenure: 8.5 Years
 Objective: Multisector Bond

Base Currency: USD
 Ticker: FXMAXX
 ISIN: US3161463563
 Minimum Initial Purchase: \$0

Purchase Constraints: A
 Incept: 05-04-2011
 Type: MF
 Total Assets: \$52,709.56 mil



Portfolio Analysis 09-30-2022	
Asset Allocation %	Net %
Cash	0.43
US Stocks	0.00
Non-US Stocks	0.00
Bonds	98.48
Other/Not Cstfd	1.09
Total	100.00

Equity Style	
Value	Brand
Large	Mid
Mid	Small
Geo Avg Mkt Cap	\$mil

Fixed-Income Style	
Value	Brand
High	Med
Med	Low
Avg Eff Maturity	6.13
Avg Eff Duration	6.13
Avg Wtd Coupon	88.37
Avg Wtd Price	88.37

Credit Quality Breakdown 09-30-2022	
Credit Quality	Bond %
AAA	74.20
AA	4.47
A	10.78
BBB	10.53
BB	0.00
B	0.00
Below B	0.00
NR	0.02

Regional Exposure	
Region	Stocks %
Americas	—
Greater Europe	—
Greater Asia	—

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	—	—	—

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Janus Henderson Enterprise N (USD)

Morningstar Analyst Rating™ Overall Morningstar Rating™ Standard Index
 **Silver**
 07-27-2022

★★★★★
 535 US Fund Mid-Cap Growth

S&P 500 TR USD
 Russell Mid Cap Growth TR USD
 US Fund Mid-Cap Growth

Performance 10-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-24.03	23.25	7.15	20.05	20.44
2021	4.91	4.73	0.94	5.94	17.50
2022	-6.91	-14.12	-4.01	—	-16.61
Trailing Returns					
	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly Std 09-30-2022	-15.00	7.80	10.13	13.78	13.88
Total Return	-18.70	—	9.01	12.75	13.08
+/- Std Index	-0.39	-2.41	-0.31	1.00	—
+/- Cat Index	13.94	1.53	1.47	1.83	—
% Rank Cat	7	36	17	6	—
No. in Cat	576	535	494	383	—

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

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 877-335-2887 or visit www.janushenderson.com.

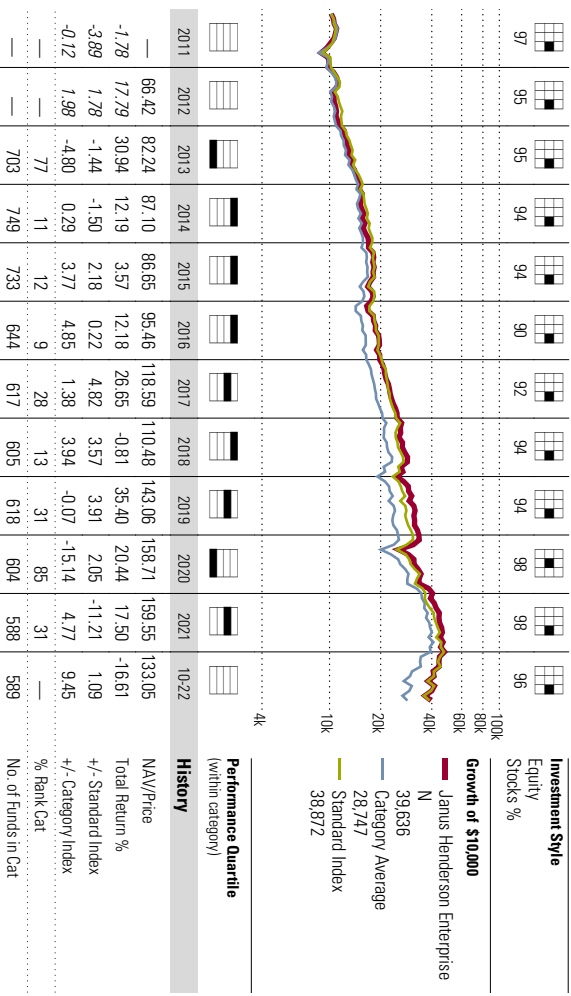
Fees and Expenses	
Sales Charges	NA
Front-End Load %	NA
Deferred Load %	NA
Fund Expenses	0.64
Management Fees %	—
12B1 Expense %	NA
Net Expense Ratio %	0.66
Gross Expense Ratio %	0.66
Risk and Return Profile	

	3 Yr	5 Yr	10 Yr
Morningstar Rating™	4★	5★	5★
Morningstar Risk	-Avg	-Avg	Low
Morningstar Return	Avg	+Avg	High
Standard Deviation	22.55	19.75	15.48
Mean	7.80	10.13	13.78
Sharpe Ratio	0.41	0.53	0.87
MPI Statistics	Standard Index	Best Fit Index	Russell Mid-Cap TR USD
Alpha	-2.22	0.25	0.94
Beta	1.04	0.94	90.74
R-Squared	90.74	97.27	—
12-Month Yield	—	—	55.13%
Potential Cap Gains Exp	—	—	—

Operations
 Family: Janus Henderson
 Manager: Multiple
 Tenure: 15.0 Years
 Objective: Growth

Base Currency: USD
 Ticker: JDMNX
 ISIN: US47103D4051
 Minimum Initial Purchase: \$1 mil

Purchase Constraints: A
 Incept: 07-12-2012
 Type: MF
 Total Assets: \$17,227.54 mil

















Portfolio Analysis 09-30-2022		
Asset Allocation %	Net %	Long %
Cash	3.92	3.92
US Stocks	79.60	79.60
Non-US Stocks	16.45	16.45
Bonds	0.00	0.00
Other/Not Cstfd	0.04	0.04
Total	100.00	100.00

Equity Style		Portfolio Statistics	
Value	Brand Growth	Port Avg	Rel Index
Large	Med	P/E Ratio TTM	21.5
Med	Small	P/C Ratio TTM	15.9
Small	—	P/B Ratio TTM	3.0
—	—	Geo Avg Mkt Cap \$mil	1,4907
—	—	Avg Eff Maturity	—
—	—	Avg Eff Duration	—
—	—	Avg Wtd Coupon	—
—	—	Avg Wtd Price	—

Fixed-Income Style		Credit Quality Breakdown	
Ltd	Med	Ext	Bond %
High	Med	Low	—
Med	Low	—	—
Low	—	—	—

Regional Exposure		Stocks %	Rel Std Index
Americas	91.4	0.92	—
Greater Europe	5.9	5.84	—
Greater Asia	2.6	87.43	—
Below B	—	—	—
NR	—	—	—

Sector Weightings		Stocks %	Rel Std Index
 Cyclical	25.2	0.86	—
 Basic Materials	1.8	0.81	—
 Consumer Cyclical	7.0	0.66	—
 Financial Services	15.1	1.11	—
 Real Estate	1.3	0.48	—
 Sensitive	57.6	1.28	—
 Communication Services	2.8	0.38	—
 Energy	2.2	0.42	—
 Industrials	13.6	1.56	—
 Technology	39.0	1.65	—
 Defensive	17.3	0.67	—
 Consumer Defensive	0.5	0.06	—
 Healthcare	16.1	1.04	—
 Utilities	0.7	0.25	—

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San Jose Stable Value Option

StabilizerSM is the name for a series of stable value separate accounts marketed to 401, 457 and 403(b) Plans. Stabilizer is available through a group annuity contract issued by Voya Retirement Insurance and Annuity Company ("VRIAAC"), a member of the Voya[®] Family of companies.

Asset Class: **Stability of Principal**

Important Information

Voya Retirement Insurance and Annuity Company
One Orange Way
Windsor, CT 06095-4774
www.voyaretirementplans.com

What is the stable value option?

The stable value investment option of your defined contribution plan seeks to preserve participant account balances and to return steady growth over time without daily fluctuations.

What is Stabilizer?

It is an insurance company participating separate account group annuity contract provided by VRIAAC. Subject to certain conditions, the contract generally guarantees the availability of participant account balances in the ordinary course of the plan's operation. The guarantees provided by the contract are based on the claims-paying ability of VRIAAC and are supported by its full faith and credit. VRIAAC is a leading provider of stable value products and services and a member of the Voya[®] Family of companies. The separate account assets are managed by Voya Investment Management Co. LLC. The assets held in the separate account are "insulated" from claims arising out of any other business conducted by VRIAAC and can be used only for the benefit of plan participants.

What does it invest in?

The separate account invests in a diversified portfolio of fixed income assets. This diversified separate account portfolio seeks to maintain a high overall credit quality and consists of various publicly traded fixed-income instruments.

Potential Risks

Under some scenarios it is possible for participants to lose money even in a stable value option. Those situations are unlikely and rarely occur, but they can happen. It's important for investors to be aware of these potential risks. Withdrawals resulting from employer-initiated events, such as withdrawals following mass layoffs, employer bankruptcy or full or partial plan termination are not always covered by Stabilizer's guarantees and may be restricted or subject to market value adjustment. Your stable value account balance is not guaranteed by the Federal Deposit Insurance Corporation (FDIC), by any other government agency or by your plan.

What is the objective?

Stability of principal is the primary objective of this investment option. While the contract is active, StabilizerSM guarantees a minimum rate of interest and may credit a higher interest rate from period to period. The credited interest rate is subject to change, up or down but will never fall below the guaranteed minimum. Once the rate is credited, the interest becomes part of the principal and may increase through compound interest.

How is the rate of interest stated?

Participant balances are credited interest daily. This rate is net of all expenses and will apply to all new contributions and existing account balances for the specified period.

The crediting rate is announced in advance of the upcoming crediting rate period. The crediting rate periods are quarterly, semi-annually or annually.

For information on your current rate, please check your Voya quarterly participant statement.

How does it benefit me?

The stable value investment option is intended to help insulate against the daily fluctuations in market value. Many participants find this stability an attractive feature. An announced rate of interest is another feature of stable value investment options that many participants like.

Are there any limitations on contributions, withdrawals, or transfers from my plan's stable value option?

Voya generally does not limit contributions or withdrawals as a result of retirement, death, disability, unforeseen hardship, separation from service, or attainment of age 65 (consult your own plan for limitations), however sometimes there are restrictions on participant transfers. Participant transfers between the stable value option and funds with similar investment objectives (referred to as competing funds) may be subject to an industry standard 90 day "equity wash" provision.

What are the fees?

Total Annual fees are 0.30% (effective 10/1/2018).

This portfolio is not a registered investment under the 1940 Act and has not been registered with the Securities and Exchange Commission.

Top Ten Credit Exposures (as of 09/30/2022)

09/30/2022)	
Bank of America Corp	1.16
JPMorgan Chase & Co	1.05
Morgan Stanley	0.81
Wells Fargo & Company	0.44
UBS Group AG	0.44
Southern Company (The)	0.42
HSBC Holdings Plc	0.39
Goldman Sachs Group Inc/The	0.38
Verizon Communications Inc	0.38
Abbvie Inc	0.37

Sector Holdings (as of 09/30/2022)

Agency MBS	38.8
Asset Backed Securities	2.8
Commercial Mortgage Backed Securities	6.9
Corporates	25.9
Emerging Markets	0.0
Government Related	0.1
Non-Agency RMBS and SF CRT	0.0
Other	0.0
US Treasury & Cash	25.5

Statistical Data (as of 09/30/2022)

Portfolio Duration (years)	4.96
Yield to Maturity	5.02%
Average Life (years)	6.703

T. Rowe Price Large-Cap Growth Trust - Class D

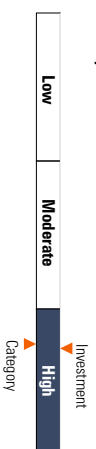
Category
Large Growth

Investment Objective & Strategy

The Trust seeks long-term capital appreciation by investing in the common stocks of growth companies.

Volatility and Risk

Volatility as of 09-30-22



Risk Measures as of 09-30-22	Port Avg	Rel S&P 500	Rel Cat
3 Yr Std Dev	23.00	1.13	1.00
3 Yr Beta	1.07	—	1.01

Principal Risks

Foreign Securities, Loss of Money, Not FDIC Insured, Growth Investing, Nondiversification, Active Management, Market/Market Volatility, Equity Securities, Industry and Sector Investing, IPO, Other, Restricted/Illiquid Securities, Large Cap

Important Information

Morningstar Investment Profiles must be accompanied by Morningstar Disclosure and Glossary.

Funds or their affiliates may pay compensation to Voya® affiliates offering a fund. Such compensation may be paid out of distribution, service and/or 12b-1 fees that are deducted from the fund's assets, and/or may be paid directly by the fund's affiliates. Any fees deducted from fund assets are discussed in the fund's prospectus and disclosed in the fund fact sheet. Because these fees are paid on an on-going basis, over time these fees will increase the cost of your investment and may cost you more than paying other types of sales charges. If offered through a retirement program, additional fees and expenses may be charged under that program. NOT A DEPOSIT. NOT FDIC INSURED. NOT INSURED BY ANY FEDERAL GOVERNMENT AGENCY NOT GUARANTEED BY THE INSTITUTION. MAY GO DOWN IN VALUE.

Portfolio Analysis

Composition as of 06-30-22



Morningstar Style Box™ as of 06-30-22	% Assets	% Mkt Cap
Large	97.0	55.91
Mid	2.2	31.52
Small	0.0	11.84
Micro	0.0	0.73
Value Blend Growth	0.7	0.00

Top 10 Holdings as of 06-30-22

Company	% Assets
Microsoft Corp	12.53
Alphabet Inc Class A	8.97
Amazon.com Inc	8.66
Apple Inc	7.01
Unitedhealth Group Inc	4.64
Inntut Inc	3.53
Cigna Corp	3.21
Alphabet Inc Class C	2.86
Fiserv Inc	2.43
Visa Inc Class A	2.31

Morningstar Equity Sectors as of 06-30-22

Sector	% Fund
Cyclical	20.84
Basic Materials	1.13
Consumer Cyclical	15.65
Financial Services	4.06
Real Estate	0.00
Sensitive	61.67
Communication Services	17.50
Energy	0.00
Industrials	3.12
Technology	41.05
Defensive	17.49
Consumer Defensive	1.50
Healthcare	15.99
Utilities	0.00

Operations

Gross Prosp Exp Ratio	See Notes below.
Net Prosp Exp Ratio	See Notes below.
Management Fee	See Notes below.
12b-1 Fee	See Notes below.
Other Fee	See Notes below.
Miscellaneous Fee(s)	See Notes below.
Fund Inception Date	06-03-19
Total Fund Assets (\$mil)	2,070.6
Annual Turnover Ratio %	34.60
Fund Family Name	T. Rowe Price

Notes

A commingled fund is a pooled investment vehicle, maintained by a bank or trust company, the participants of which are limited to certain types of tax exempt employee benefit plans. The current NET Expense ratio is 0.40%. This Portfolio is not a registered investment company, and interests in the Portfolio have not been registered with the Securities and Exchange Commission.

Waiver Data	Type	Exp. Date	%

Portfolio Manager(s)

Taymour Tamaddon, CFA, Since 2019.	
Advisor	T. Rowe Price Trust Company
Subadvisor	T. Rowe Price Associates, Inc.

Vanguard Equity-Income Adm (USD)

Morningstar Analyst Rating™ Overall Morningstar Rating™ Standard Index Category Index Morningstar Cat
Silver **★★★★★** S&P 500 TR USD Russell 1000 Value US Fund Large Value
 03-30-2022 1,139 US Fund Large Value TR USD

Performance 10-31-2022	Quarterly Returns				Total %
	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	
2020	-23.06	12.67	5.15	13.15	3.13
2021	10.07	5.27	-0.25	8.70	25.64
2022	1.14	-8.36	-5.30	—	-2.73
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	0.76	9.90	9.26	11.58	8.35
Std 09-30-2022	-4.58	—	7.42	10.36	7.86
Total Return	0.76	9.90	9.26	11.58	8.35
+/- Std Index	15.37	-0.31	-1.18	-1.21	—
+/- Cat Index	7.76	2.59	2.06	1.28	—
% Rank Cat	13	24	19	14	—
No. in Cat	1212	1139	1082	802	—

7-day Yield	Subsidized	Unsubsidized
30-day SEC Yield 11-11-22	2.72	2.72

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

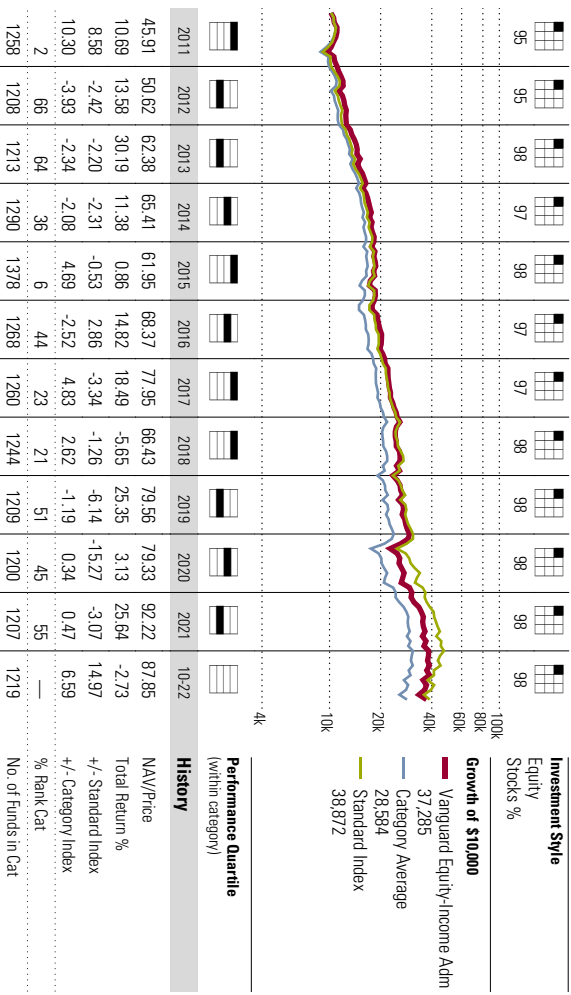
Fund Expenses	
Management Fees %	0.18
12b1 Expense %	NA
Net Expense Ratio %	0.19
Gross Expense Ratio %	0.19

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

Standard Deviation	3 Yr 18.87	5 Yr 16.60	10 Yr 13.31
Mean	9.90	9.26	11.58
Sharpe Ratio	0.56	0.54	0.84

MPT Statistics	Standard Index	Best Fit Index
Alpha	1.18	Morningstar US LTM
Beta	0.84	Brd Val TR USD
R-Squared	84.62	98.09
12-Month Yield	2.65%	26.60%
Potential Cap Gains Exp		

Operations	
Family:	Vanguard
Manager:	Multiple
Tenure:	1.8 Years
Objective:	Equity-Income



Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
NAV/Price	45.91	50.62	62.38	65.41	61.95	68.37	77.95	66.43	79.56	79.33	92.22	87.85
Total Return %	10.69	13.58	30.19	11.38	0.86	14.82	18.49	-5.65	25.35	3.13	25.64	-2.73
+/- Standard Index	8.58	-2.42	-2.20	-2.31	-0.53	2.66	-3.34	-1.26	-6.14	-15.27	-3.07	14.97
+/- Category Index	10.30	-3.93	-2.24	-2.08	4.69	-2.52	4.83	2.62	-1.19	0.34	0.47	6.59
% Rank Cat	2	66	64	36	6	44	23	21	51	45	55	—
No. of Funds in Cat	1258	1208	1213	1290	1378	1268	1260	1244	1209	1200	1207	1219

Portfolio Analysis 10-31-2022

Asset Allocation %	Net %	Long %	Short %
Cash	2.29	2.41	0.12
US Stocks	89.52	89.52	0.00
Non-US Stocks	8.19	8.19	0.00
Bonds	0.00	0.00	0.00
Other/Not Cstfd	0.00	0.00	0.00
Total	100.00	100.12	0.12

Share Cng	Share	Holdings:	Net Assets %
since	Amount	182 Total Stocks, 0 Total Fixed-Income, 29% Turnover Ratio	%
09-2022	15 mil	JPMorgan Chase & Co	3.60
	10 mil	Johnson & Johnson	3.14
	33 mil	Pfizer Inc	2.89
	14 mil	Merck & Co Inc	2.69
	10 mil	ConocoPhillips	2.44
	3 mil	El Lilly and Co	2.28
	4 mil	The Home Depot Inc	2.12
	7 mil	EOG Resources Inc	1.88
	21 mil	Cisco Systems Inc	1.78
	13 mil	MettLife Inc	1.76
	11 mil	Morgan Stanley	1.75
	6 mil	Procter & Gamble Co	1.64
	8 mil	Philip Morris International Inc	1.45
	24 mil	Comcast Corp Class A	1.42
	20 mil	Exelon Corp	1.42

Equity Style	Value	Brand	Growth
	Large	Mid	Small
	High	Med	Low

Fixed-Income Style	Ang Eff Maturity	—
	Ang Eff Duration	—
	Ang Wtd Coupon	—
	Ang Wtd Price	—

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

Sector Weightings	Stocks %	Rel Std Index
Cyclical	29.6	1.02
Basic Materials	3.9	1.71
Consumer Cyclical	5.7	0.54
Financial Services	18.8	1.38
Real Estate	1.3	0.47

Sensitive	31.7	0.70
Communication Services	2.1	0.29
Energy	10.6	1.97
Industrials	10.4	1.20
Technology	8.6	0.37
Defensive	38.7	1.50
Consumer Defensive	12.3	1.66
Healthcare	18.5	1.20
Utilities	7.9	2.66

Regional Exposure	Stocks %	Rel Std Index
Americas	93.6	0.95
Greater Europe	6.4	6.25
Greater Asia	0.0	0.00

Operations	
Base Currency:	USD
Ticker:	VEIRX
ISIN:	US9219213009
Minimum Initial Purchase:	\$50,000

Purchase Constraints:	
Incept:	08-13-2001
Type:	MF
Total Assets:	\$53,227.06 mil

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Vanguard FTSE Social Index I (USD)

Morningstar Analyst Rating™ Overall Morningstar Rating™ Standard Index Category Index Morningstar Cat
Silver **★★★★** **1,221 US Fund Large Blend** **SPF 500 TR USD** **Russell 1000 TR** **US Fund Large Blend**
 04-04-2022

Performance 10-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-19.96	23.37	10.59	12.33	22.66
2021	4.68	9.29	0.75	10.85	27.77
2022	-7.47	-17.85	-5.16	—	-23.12
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-20.67	9.03	10.14	13.47	9.00
Std 09-30-2022	-20.09	—	9.33	12.66	8.89
Total Return	-20.67	9.03	10.14	13.47	9.00
+/- Std Index	-6.06	-1.19	-0.30	0.69	—
+/- Cat Index	-4.29	-0.96	-0.05	0.81	—
% Rank Cat	93	61	31	2	—
No. in Cat	1347	1221	1111	807	—

7-day Yield	Subsidized	Unsubsidized
30-day SEC Yield 11-14-22	1.35	1.35

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 %	0.11
12b1 Expense %	NA

Net Expense Ratio %	0.12
Gross Expense Ratio %	0.12

Risk and Return Profile

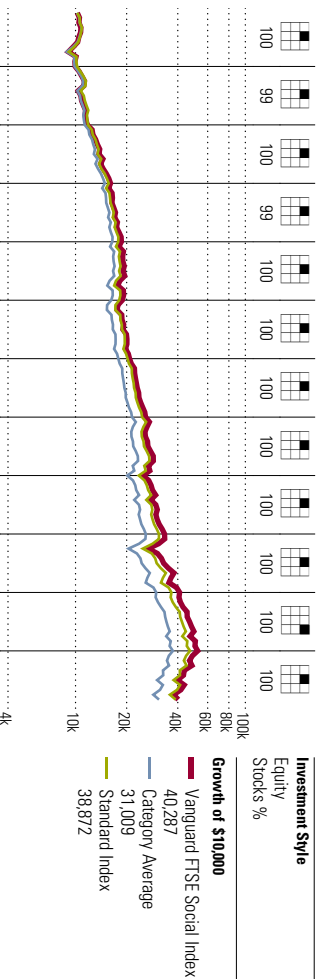
Morningstar Rating™	3 Yr 2★	5 Yr 3★	10 Yr 5★
Morningstar Risk	+Avg	+Avg	+Avg
Morningstar Return	Avg	+Avg	High

Standard Deviation	3 Yr 21.76	5 Yr 19.03	10 Yr 15.19
Mean	9.03	10.14	13.47
Sharpe Ratio	0.47	0.54	0.86

MPT Statistics	Standard Index	Best Fit Index Morningstar US LM TR USD
Alpha	-1.37	-0.89
Beta	1.04	1.03
R-Squared	98.89	99.29
12-Month Yield	1.33%	1.33%
Potential Cap Gains Exp	26.16%	26.16%

Operations

Family:	Vanguard
Manager:	Multiple
Tenure:	6.9 Years
Objective:	Growth



Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
NAV/Price	7.42	8.59	11.61	13.27	13.22	14.31	17.49	16.61	21.90	26.45	33.44	25.48
Total Return %	-0.52	17.84	37.09	15.85	1.27	10.34	24.19	-3.38	33.96	22.66	27.77	-23.12
+/- Standard Index	-2.63	1.84	4.71	2.16	-0.12	-1.62	2.36	1.00	2.48	4.26	-0.94	-5.41
+/- Category Index	-2.02	1.42	3.98	2.61	0.35	-1.72	2.50	1.40	2.54	1.69	1.31	-4.58
% Rank Cat	—	—	—	4	22	54	10	17	7	11	36	—
No. of Funds in Cat	1568	1606	1409	1396	1402	1387	1363	1362	1364	1364	1364	1364

Portfolio Analysis 10-31-2022			Net %	Long %	Short %	Share Clng	Share Holdings:	Holdings:	Net Assets
Asset Allocation %	Cash	US Stocks	0.26	0.26	0.00	since 09-2022	Amount	478 Total Stocks: 0 Total Fixed-Income, 8% Turnover Ratio	%
Non-US Stocks	98.09	1.64	1.64	0.00	0.00	7 mil	Apple Inc	8.53	
Bonds	0.00	0.00	0.00	0.00	0.00	4 mil	Microsoft Corp	6.32	
Other/Not Clsfd	0.00	0.00	0.00	0.00	0.00	4 mil	Amazon.com Inc	3.31	
Total	100.00	100.00	100.00	0.00	0.00	1 mil	Tesla Inc	2.11	
						3 mil	Alphabet Inc Class A	2.07	
						443,766	UnitedHealth Group Inc	1.89	
						3 mil	Alphabet Inc Class C	1.86	
						1 mil	JPMorgan Chase & Co	1.34	
						781,136	Visa Inc Class A	1.24	
						1 mil	NVIDIA Corp	1.18	
						1 mil	Procter & Gamble Co	1.17	
						490,241	The Home Depot Inc	1.11	
						399,770	El Lilly and Co	1.11	
						408,479	Mastercard Inc Class A	1.03	
						3 mil	Pfizer Inc	0.96	

Value	Share	Gain/Loss
Large	Med	Small
High	Med	Low

Fixed-Income Style

Avg Eff Maturity	—
Avg Eff Duration	—
Avg Wtd Coupon	—
Avg Wtd Price	—

Credit Quality Breakdown

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

Regional Exposure	Stocks %	Rel Std Index
Americas	98.5	1.00
Greater Europe	1.4	1.33
Greater Asia	0.1	3.40

Utilities	28.8
Healthcare	7.0
Consumer Defensive	17.3
Technology	1.12
Industrials	0.61
Energy	0.00
Communication Services	0.00
Consumer Cyclical	1.22
Basic Materials	9.1
Financial Services	0.00
Real Estate	0.00
Sensitive	5.3
Cyclical	28.8
Defensive	24.5

Base Currency:	USD
Ticker:	VFTNX
SIN:	US9219104026
Minimum Initial Purchase:	\$5 mil

Purchase Constraints:	—
Incept:	01-14-2003
Type:	MF
Total Assets:	\$13,025.41 mil

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Vanguard Institutional Index Instl PI (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 1,221 US Fund Large Blend USD

Performance 10-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-19.59	20.55	8.93	12.15	18.41
2021	6.18	8.54	0.57	11.02	28.69
2022	-4.61	-16.11	-4.89	—	-17.72
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-14.63	10.21	10.43	12.78	7.90
Std 09-30-2022	-15.49	—	9.23	11.69	7.59
Total Return	-14.63	10.21	10.43	12.78	7.90
+/- Std Index	-0.02	-0.01	-0.01	-0.01	—
+/- Cat Index	1.75	0.22	0.24	0.12	—
% Rank Cat	45	26	19	11	—
No. in Cat	1347	1221	1111	807	—

	Subsidized	Unsubsidized
7-day Yield	—	—
30-day SEC Yield 11-14-22	1.64	1.64

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 888-809-8102 or visit www.vanguard.com.

Fees and Expenses

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

Fund Expenses

Management Fees %	0.02
12b1 Expense %	NA

Net Expense Ratio %	0.02
Gross Expense Ratio %	0.02

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

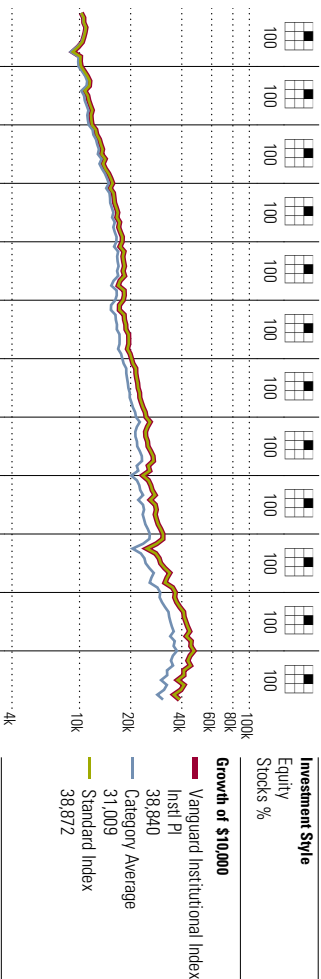
	3 Yr	5 Yr	10 Yr
Standard Deviation	20.72	18.35	14.54
Mean	10.21	10.43	12.78
Sharpe Ratio	0.54	0.57	—

MFT Statistics	Standard Index	Best Fit Index
Alpha	-0.01	-0.01
Beta	1.00	1.00
R-Squared	100.00	100.00

12-Month Yield	1.62%
Potential Cap Gains Exp	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	115.05	130.53	169.28	188.68	186.63	203.84	243.48	227.57	290.25	331.48	405.80	328.16
Total Return %	2.12	16.00	32.37	13.68	1.39	11.95	21.82	-4.41	31.48	18.41	28.69	-17.72
+/- Standard Index	0.01	0.00	-0.02	-0.01	0.01	-0.01	-0.02	-0.02	0.00	0.01	-0.02	-0.02
+/- Category Index	0.62	-0.42	-0.75	0.44	0.47	-0.10	0.13	0.38	0.06	-2.56	2.23	0.82
% Rank Cat	17	34	41	18	20	26	28	25	23	36	23	—
No. of Funds in Cat	1786	1686	1559	1568	1606	1409	1396	1402	1387	1363	1382	1364

Portfolio Analysis 10-31-2022				Net %	Long %	Short %	Share Clng	Share Holdings:	Net Assets %	
Asset Allocation %				0.39	0.39	0.00	since	Amount	503 Total Stocks, 0 Total Fixed-Income, 3% Turnover Ratio	
Cash				0.39	98.57	0.00	09-2022	108 mil	Apple Inc	7.10
US Stocks				98.57	1.04	0.00		53 mil	Microsoft Corp	5.30
Non-US Stocks				1.04	0.00	0.00		63 mil	Amazon.com Inc	2.78
Bonds				0.00	0.00	0.00		19 mil	Tesla Inc	1.86
Other/Not Clsfd				0.00	100.00	0.00		43 mil	Alphabet Inc Class A	1.74
Total				100.00				13 mil	Berkshire Hathaway Inc Class B	1.63
								7 mil	UnitedHealth Group Inc	1.59
								38 mil	Alphabet Inc Class C	1.55
								30 mil	Exxon Mobil Corp	1.41
								19 mil	Johnson & Johnson	1.40
								21 mil	JPMorgan Chase & Co	1.13
								12 mil	Visa Inc Class A	1.04
								18 mil	NVIDIA Corp	1.04
								13 mil	Chevron Corp	1.00
								17 mil	Procter & Gamble Co	0.99

Equity Style				Portfolio Statistics			
Value	Brand	Growth	Value	Port	Rel	Rel	Rel
Large	Mid	Ext	High	Index	Index	Index	Cat
■	■	■	■	19.5	1.00	1.08	P/E Ratio TTM
■	■	■	■	14.3	1.00	0.97	P/C Ratio TTM
■	■	■	■	3.6	1.00	0.90	P/B Ratio TTM
■	■	■	■	Geo Avg Mkt Cap	170973	1.00	0.82
■	■	■	■	Geo Avg Div Yield	1.00	0.82	Smll

Fixed-Income Style				Credit Quality Breakdown			
Value	Brand	Growth	Value	Port	Rel	Rel	Rel
Large	Mid	Ext	High	Index	Index	Index	Cat
■	■	■	■	19.5	1.00	1.08	AAA
■	■	■	■	14.3	1.00	0.97	AA
■	■	■	■	3.6	1.00	0.90	A
■	■	■	■	Geo Avg Mkt Cap	170973	1.00	0.82
■	■	■	■	Geo Avg Div Yield	1.00	0.82	BBB
■	■	■	■	Geo Avg Div Yield	1.00	0.82	BB
■	■	■	■	Geo Avg Div Yield	1.00	0.82	B
■	■	■	■	Geo Avg Div Yield	1.00	0.82	Below B
■	■	■	■	Geo Avg Div Yield	1.00	0.82	NR

Regional Exposure				Sector Weightings			
Value	Brand	Growth	Value	Port	Rel	Rel	Rel
Large	Mid	Ext	High	Index	Index	Index	Cat
■	■	■	■	19.5	1.00	1.08	Cyclical
■	■	■	■	14.3	1.00	0.97	Basic Materials
■	■	■	■	3.6	1.00	0.90	Consumer Cyclical
■	■	■	■	Geo Avg Mkt Cap	170973	1.00	Financial Services
■	■	■	■	Geo Avg Div Yield	1.00	0.82	Real Estate
■	■	■	■	Geo Avg Div Yield	1.00	0.82	Sensitive
■	■	■	■	Geo Avg Div Yield	1.00	0.82	Communication Services
■	■	■	■	Geo Avg Div Yield	1.00	0.82	Energy
■	■	■	■	Geo Avg Div Yield	1.00	0.82	Industrials
■	■	■	■	Geo Avg Div Yield	1.00	0.82	Technology
■	■	■	■	Geo Avg Div Yield	1.00	0.82	Defensive
■	■	■	■	Geo Avg Div Yield	1.00	0.82	Consumer Defensive
■	■	■	■	Geo Avg Div Yield	1.00	0.82	Healthcare
■	■	■	■	Geo Avg Div Yield	1.00	0.82	Utilities

Regional Exposure				Sector Weightings			
Value	Brand	Growth	Value	Port	Rel	Rel	Rel
Large	Mid	Ext	High	Index	Index	Index	Cat
■	■	■	■	19.5	1.00	1.08	Cyclical
■	■	■	■	14.3	1.00	0.97	Basic Materials
■	■	■	■	3.6	1.00	0.90	Consumer Cyclical
■	■	■	■	Geo Avg Mkt Cap	170973	1.00	Financial Services
■	■	■	■	Geo Avg Div Yield	1.00	0.82	Real Estate
■	■	■	■	Geo Avg Div Yield	1.00	0.82	Sensitive
■	■	■	■	Geo Avg Div Yield	1.00	0.82	Communication Services
■	■	■	■	Geo Avg Div Yield	1.00	0.82	Energy
■	■	■	■	Geo Avg Div Yield	1.00	0.82	Industrials
■	■	■	■	Geo Avg Div Yield	1.00	0.82	Technology
■	■	■	■	Geo Avg Div Yield	1.00	0.82	Defensive
■	■	■	■	Geo Avg Div Yield	1.00	0.82	Consumer Defensive
■	■	■	■	Geo Avg Div Yield	1.00	0.82	Healthcare
■	■	■	■	Geo Avg Div Yield	1.00	0.82	Utilities

Regional Exposure				Sector Weightings			
Value	Brand	Growth	Value	Port	Rel	Rel	Rel
Large	Mid	Ext	High	Index	Index	Index	Cat
■	■	■	■	19.5	1.00	1.08	Cyclical
■	■	■	■	14.3	1.00	0.97	Basic Materials
■	■	■	■	3.6	1.00	0.90	Consumer Cyclical
■	■	■	■	Geo Avg Mkt Cap	170973	1.00	Financial Services
■	■	■	■	Geo Avg Div Yield	1.00	0.82	Real Estate
■	■	■	■	Geo Avg Div Yield	1.00	0.82	Sensitive
■	■	■	■	Geo Avg Div Yield	1.00	0.82	Communication Services
■	■	■	■	Geo Avg Div Yield	1.00	0.82	Energy
■	■	■	■	Geo Avg Div Yield	1.00	0.82	Industrials
■	■	■	■	Geo Avg Div Yield	1.00	0.82	Technology
■	■	■	■	Geo Avg Div Yield	1.00	0.82	Defensive
■	■	■	■	Geo Avg Div Yield	1.00	0.82	Consumer Defensive
■	■	■	■	Geo Avg Div Yield	1.00	0.82	Healthcare
■	■	■	■	Geo Avg Div Yield	1.00	0.82	Utilities

Regional Exposure				Sector Weightings			
Value	Brand	Growth	Value	Port	Rel	Rel	Rel
Large	Mid	Ext	High	Index	Index	Index	Cat
■	■	■	■	19.5	1.00	1.08	Cyclical
■	■	■	■	14.3	1.00	0.97	Basic Materials
■	■	■	■	3.6	1.00	0.90	Consumer Cyclical
■	■	■	■	Geo Avg Mkt Cap	170973	1.00	Financial Services
■	■	■	■	Geo Avg Div Yield	1.00	0.82	Real Estate
■	■	■	■	Geo Avg Div Yield	1.00	0.82	Sensitive
■	■	■	■	Geo Avg Div Yield	1.00	0.82	Communication Services
■	■	■	■	Geo Avg Div Yield	1.00	0.82	Energy
■	■	■	■	Geo Avg Div Yield	1.00	0.82	Industrials
■	■	■	■	Geo Avg Div Yield	1.00	0.82	Technology
■	■	■	■	Geo Avg Div Yield	1.00	0.82	Defensive
■	■	■	■	Geo Avg Div Yield	1.00	0.82	Consumer Defensive
■	■	■	■	Geo Avg Div Yield	1.00	0.82	Healthcare
■	■	■	■	Geo Avg Div Yield	1.00	0.82	Utilities

Regional Exposure				Sector Weightings			
Value	Brand	Growth	Value	Port	Rel	Rel	Rel
Large	Mid	Ext	High	Index	Index	Index	Cat
■	■	■	■	19.5	1.00	1.08	Cyclical
■	■	■	■	14.3	1.00	0.97	Basic Materials
■	■	■	■	3.6	1.00	0.90	Consumer Cyclical
■	■	■					

Vanguard Mid Cap Index Institutional (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 365 US Fund Mid-Cap Blend USD

Performance 10-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-25.71	24.96	7.94	18.02	18.26
2021	7.18	7.58	0.02	7.97	24.53
2022	-6.32	-16.96	-4.14	—	-19.07
Trailing Returns					
	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-18.04	8.00	8.11	11.49	9.61
Std 09-30-2022	-19.48	—	6.66	10.46	9.28
Total Return	-18.04	8.00	8.11	11.49	9.61
+/- Std Index	-3.43	-2.21	-2.34	-1.29	—
+/- Cat Index	-0.87	0.16	0.16	0.14	—
% Rank Cat	87	53	27	12	—
No. in Cat	406	365	336	218	—

7-day Yield Subsidized Unsubsidized
 30-day SEC Yield 11-14-22 1.59 1.59

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 888-809-8102 or visit www.vanguard.com.

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

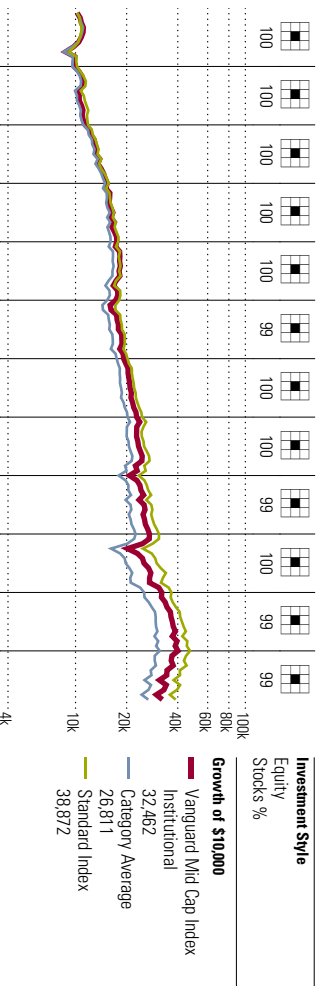
Fund Expenses
 Management Fees % 0.04
 12b1 Expense % NA
Net Expense Ratio % **0.04**
Gross Expense Ratio % **0.04**

Risk and Return Profile					
Morningstar Rating™	3 Yr	5 Yr	10 Yr	365 funds	336 funds
Morningstar Risk	3★	4★	4★	Avg	Avg
Morningstar Return	Avg	+Avg	+Avg	Avg	+Avg

	3 Yr	5 Yr	10 Yr
Standard Deviation	23.18	20.36	16.10
Mean	8.00	8.11	11.49
Sharpe Ratio	0.42	0.43	0.71

MFT Statistics	Standard Index	Best Fit Index
Alpha	-2.38	0.23
Beta	1.08	0.98
R-Squared	93.42	99.58
12-Month Yield	1.50%	36.84%
Potential Cap Gains Exp	—	—

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



Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	10-22
NAV/Price	19.69	22.52	30.08	33.79	32.85	35.99	42.32	37.78	48.74	56.64	69.69	55.82
Total Return %	-1.96	16.01	35.17	13.78	-1.33	11.23	19.29	-9.24	31.04	18.26	24.53	-19.07
+/- Standard Index	-4.07	0.00	2.78	0.09	-2.72	-0.73	-2.54	-4.86	-0.44	-0.13	-4.18	-1.37
+/- Category Index	-0.41	-1.27	0.41	0.57	1.11	-2.57	0.78	-0.18	0.50	1.16	1.94	-1.53
% Rank Cat	32	55	40	5	17	73	17	32	13	17	47	—
No. of Funds in Cat	424	412	399	369	432	427	443	464	404	407	391	408

Portfolio Analysis 10-31-2022					
Asset Allocation %			Net %	Long %	Short %
Cash	1.04	1.04	0.00	0.00	0.00
US Stocks	97.58	97.58	0.00	0.00	0.00
Non-US Stocks	1.39	1.39	0.00	0.00	0.00
Bonds	0.00	0.00	0.00	0.00	0.00
Other/Not Cstfd	0.00	0.00	0.00	0.00	0.00
Total	100.00	100.00	100.00	100.00	0.00

Equity Style					
Value	Brand	Growth	Port	Rel	Rel
Avg	Index	Cat	Avg	Index	Cat
P/E Ratio TTM	17.2	0.88	1.15	—	—
P/C Ratio TTM	13.3	0.93	1.09	—	—
P/B Ratio TTM	2.8	0.76	1.09	—	—
Geo Avg Mkt Cap \$mil	22295	0.13	2.26	—	—

Fixed-Income Style					
Ltd	Med	Ext	High	Med	Low
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—

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

Regional Exposure					
	Stocks %	Rel Std Index		Stocks %	Rel Std Index
Americas	99.2	1.00	—	—	—
Greater Europe	0.6	0.64	—	—	—
Greater Asia	0.2	5.67	—	—	—

Sector Weightings					
	Stocks %	Rel Std Index		Stocks %	Rel Std Index
Cyclical	36.5	1.25	—	—	—
Basic Materials	5.0	2.19	—	—	—
Consumer Cyclical	9.7	0.92	—	—	—
Financial Services	12.8	0.94	—	—	—
Real Estate	9.0	3.28	—	—	—
Sensitive	40.1	3.7	—	—	—
Communication Services	3.7	0.50	—	—	—
Energy	6.2	1.16	—	—	—
Industrials	12.4	1.43	—	—	—
Technology	17.8	0.75	—	—	—
Defensive	23.4	0.91	—	—	—
Consumer Defensive	4.4	0.60	—	—	—
Healthcare	12.0	0.78	—	—	—
Utilities	6.9	2.34	—	—	—

Base Currency: USD
 Ticker: VMCIK
 ISIN: US9229088359
 Minimum Initial Purchase: \$5 mil
 Purchase Constraints: —
 Incept: 05-21-1998
 Type: MIF
 Total Assets: \$51,150.37 mil

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Vanguard Small Cap Index I (USD)

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

589 US Fund Small Blend
★★★★
 S&P 500 TR USD
 Russell 2000 TR
 US Fund Small Blend
 USD

Performance 10-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-30.08	26.69	5.80	27.10	19.12
2021	10.23	5.59	-2.61	3.86	17.73
2022	-5.74	-16.88	-2.60	—	-16.12
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-16.95	7.78	7.06	10.78	8.66
Std 09-30-2022	-20.73	—	5.38	9.58	8.29
Total Return	-16.95	7.78	7.06	10.78	8.66
+/- Std Index	-2.34	-2.43	-3.38	-2.00	—
+/- Cat Index	1.59	0.74	1.50	0.85	—
% Rank Cat	74	56	23	23	—
No. in Cat	619	589	545	364	—

7-day Yield — Subsidized
 30-day SEC Yield 11-14-22 1.46 1.46

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.

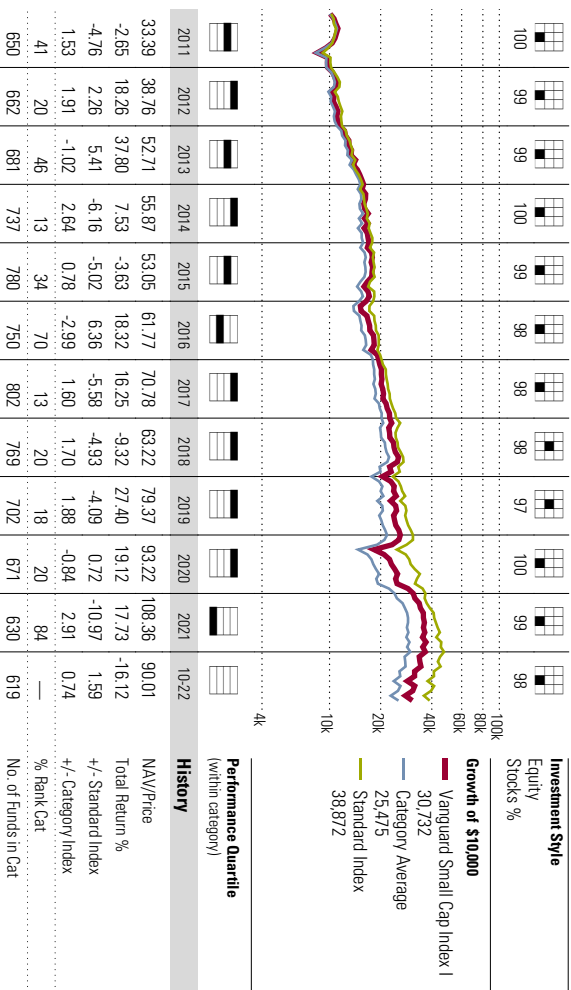
Sales Charges	NA
Front-End Load %	NA
Deferred Load %	NA
Fund Expenses	
Management Fees %	0.04
12b1 Expense %	NA
Net Expense Ratio %	0.04
Gross Expense Ratio %	0.04
Risk and Return Profile	
Morningstar Rating™	3★
Morningstar Risk	Avg
Morningstar Return	Avg

	3 Yr	5 Yr	10 Yr
Standard Deviation	25.22	22.40	17.96
Mean	7.78	7.06	10.78
Shapero Ratio	0.40	0.36	0.62
MPT Statistics	Standard Index	Best Fit Index	Morningstar US SmI
Alpha	-2.57	1.13	1.25
Beta	0.94	0.94	0.94
R-Squared	85.74	99.07	99.07
12-Month Yield	1.56%	1.56%	1.56%
Potential Cap Gains Exp	27.68%	27.68%	27.68%

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

Base Currency: USD
 Ticker: VSCIX
 SIN: US9229088763
 Minimum Initial Purchase: \$5 mil

Purchase Constraints: —
 Incept: 07-07-1997
 Type: MF
 Total Assets: \$42,362.09 mil



Portfolio Analysis 10-31-2022

Asset Allocation %	Net %	Long %	Short %
Cash	2.30	2.30	0.00
US Stocks	97.04	97.04	0.00
Non-US Stocks	0.67	0.67	0.00
Bonds	0.00	0.00	0.00
Other/Not Clsfd	0.00	0.00	0.00
Total	100.00	100.00	0.00

Equity Style

Value	Brand	Geom	Port	Rel	Rel
Large	Mid	Ext	Avg Index	Index	Cat
■	■	■	P/E Ratio TTM	125	0.64
■	■	■	P/C Ratio TTM	10.3	0.72
■	■	■	P/B Ratio TTM	2.1	0.60
■	■	■	Geo Avg Mkt Cap	4948	0.03

Fixed-Income Style

Value	Brand	Geom	Port	Rel	Rel
Large	Mid	Ext	Avg Eff Maturity	Index	Cat
■	■	■	Avg Eff Duration	—	—
■	■	■	Avg Wtd Coupon	—	—
■	■	■	Avg 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	99.6	1.01
Greater Europe	0.2	0.16
Greater Asia	0.2	8.20

Sector Weightings

	Stocks %	Rel Std Index
Cyclical	39.8	1.36
Basic Materials	4.3	1.88
Consumer Cyclical	11.8	1.11
Financial Services	14.7	1.08
Real Estate	9.0	3.28
Sensitive	41.0	0.91
Communication Services	2.2	0.30
Energy	5.9	1.11
Industrials	18.1	2.08
Technology	14.7	0.63
Defensive	19.2	0.75
Consumer Defensive	4.1	0.56
Healthcare	12.0	0.78
Utilities	3.1	1.05

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Vanguard Total Intl Stock Index I (USD)

Morningstar Analyst Rating™ Overall Morningstar Rating™ **Standard Index** **Category Index** **Morningstar Cat**
Gold **★★★★** 700 US Fund Foreign Large **MSCI ACWI EX** **MSCI ACWI EX** **US Fund Foreign Large**
 12-08-2021 **Blend** **★★★★** 700 US Fund Foreign Large **USA NR USD** **USA NR USD** **Blend**

Performance 10-31-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-24.31	18.12	6.48	16.89	11.28
2021	3.95	5.53	-3.00	2.12	8.68
2022	-6.07	-12.85	-10.52	—	-24.25
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-24.63	-1.15	-0.39	3.62	3.21
Std 09-30-2022	-25.20	—	-0.68	3.33	2.94
Total Return	-24.63	-1.15	-0.39	3.62	3.21
+/- Std Index	0.10	0.52	0.21	0.35	—
+/- Cat Index	0.10	0.52	0.21	0.35	—
% Rank Cat	57	45	50	56	—
No. in Cat	746	700	608	419	—

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.

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 % 0.07
 1201 Expense % NA
Net Expense Ratio % 0.08
Gross Expense Ratio % 0.08

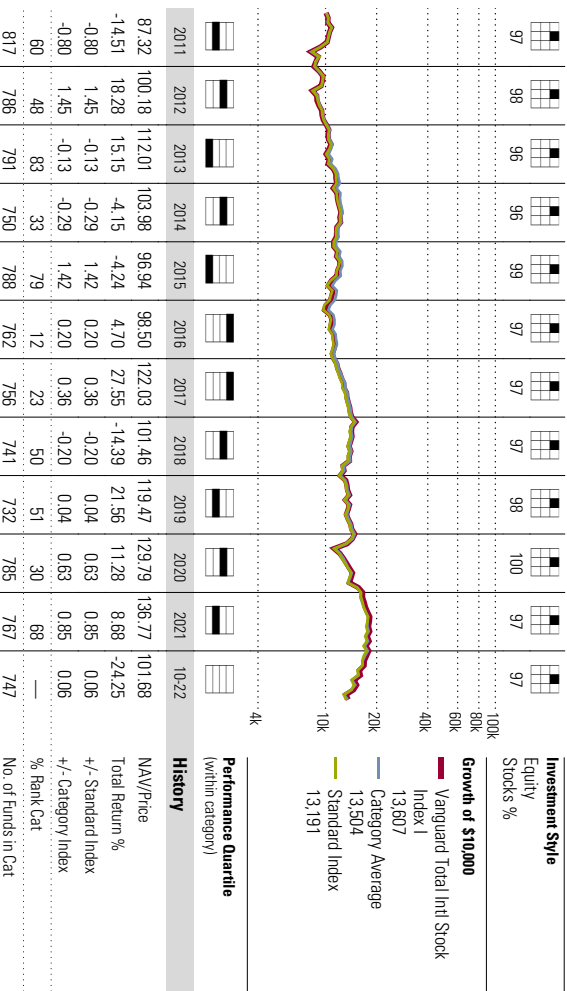
Risk and Return Profile

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

Standard Deviation 3 Yr 18.90 5 Yr 16.75 10 Yr 14.24
 Mean -1.15 -0.39 3.62
 Sharpe Ratio 0.00 -0.01 0.27

MFT Statistics	Standard Index	Best Fit Index
Alpha	0.64	MSCI ACWI EX USA NR USD
Beta	1.02	NR USD
R-Squared	98.87	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 10-31-2022

Asset Allocation %	Net %	Long %	Short %	Share Cng	Share Holdings:	Net Assets %
Cash	2.54	2.88	0.04	since 09-2022	Amount: 7,844 Total Stocks: 0 Total Fixed-Income, 8% Turnover Ratio	%
US Stocks	0.72	0.72	0.00	36 mil	Nestle SA	1.21
Non-US Stocks	96.64	96.64	0.00	320 mil	Taiwan Semiconductor Manufacturing	1.19
Bonds	0.00	0.00	0.00	9 mil	Roche Holding AG	0.95
Other/Not Cstfd	0.11	0.11	0.00	98 mil	Shell PLC	0.84
Total	100.00	100.04	0.04	63 mil	Samsung Electronics Co Ltd	0.81

Equity Style	Portfolio Statistics	Port Avg	Rel Index	Rel Cat
Value	P/E Ratio TTM	11.1	0.98	0.92
Small Growth	P/C Ratio TTM	8.1	0.98	0.94
Large	Non-US Stocks	1.5	0.95	0.88
Mid	P/B Ratio TTM	2.2687	0.63	0.51
Small	Geo Avg Mkt Cap	—	—	—

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

Credit Quality Breakdown

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

Regional Exposure	Stocks %	Rel Std Index
Americas	11.7	0.96
Greater Europe	43.2	0.96
Greater Asia	45.0	1.05

Base Currency: USD
Ticker: VTSNX
SIN: US9219097840
Minimum Initial Purchase: \$5 mil

Purchase Constraints: —
Incept: 11-29-2010
Type: MF
Total Assets: \$48,867.47 mil

Sector Weightings	Stocks %	Rel Std Index
Cyclical	42.4	1.01
Basic Materials	8.4	1.04
Consumer Cyclical	10.8	1.03
Financial Services	19.7	0.94
Real Estate	3.5	1.51
Sensitive	36.6	1.02
Communication Services	5.5	0.93
Energy	6.3	0.93
Industrials	13.7	1.11
Technology	11.1	1.00
Defensive	21.1	0.95
Consumer Defensive	8.1	0.92
Healthcare	9.7	0.95
Utilities	3.3	1.02

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Vanguard Target Retirement Income Trust II

Balanced fund (stocks and bonds)

Fund facts

Risk level	Low ← → High	Total net assets	\$4,087 MM	Expense ratio as of 03/31/21	0.075%	Inception date	02/29/08	Fund number	1471
	1 2 3 4 5								

Investment objective

Vanguard Target Retirement Income Trust II seeks to provide current income and some capital appreciation.

Investment strategy

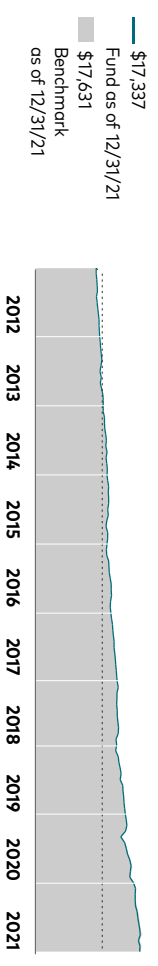
The trust invests in other Vanguard mutual funds and trusts according to an asset allocation strategy designed for investors currently in retirement. The underlying holdings are: Vanguard Total Stock Market Index Fund, Vanguard Total Bond Market II Index Fund, Vanguard Institutional Total International Stock Market Index Trust II, Vanguard Total International Bond II Index Fund, and Vanguard Short-Term Inflation-Protected Securities Fund.

The trust's indirect bond holdings are a diversified mix of short-, intermediate-, and long-term U.S. government, U.S. agency, and investment-grade U.S. corporate bonds; inflation-protected public obligations issued by the U.S. Treasury; mortgage-backed and asset-backed securities; and government, agency, corporate, and securitized investment-grade foreign bonds issued in currencies other than the U.S. dollar (but hedged by Vanguard to minimize foreign currency exposure). The trust's indirect stock holdings are a diversified mix of U.S. and foreign large-, mid-, and small-capitalization stocks.

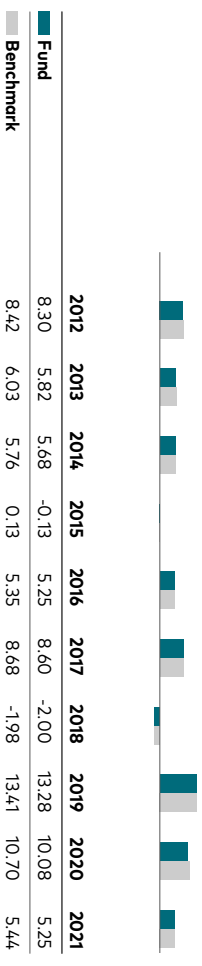
Benchmark

Target Retirement Income Compos. Ix

Growth of a \$10,000 investment: January 31, 2012—December 31, 2021



Annual returns



Total returns

	Quarter	Year to date	One year	Three years	Five years	Ten years
Fund	-4.70%	-15.91%	-14.20%	0.01%	1.99%	3.36%
Benchmark	-4.56%	-15.77%	-14.03%	0.33%	2.23%	3.54%

Periods ended September 30, 2022

The performance data shown represent past performance, which is not a guarantee of future results. Investment returns and principal value will fluctuate, so investors' shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than the performance data cited. For performance data current to the most recent month-end, visit our website at [vanguard.com/performance](https://www.vanguard.com/performance). The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index.

Figures for periods of less than one year are cumulative returns. All other figures represent average annual returns. Performance figures include the reinvestment of all dividends and any capital gains distributions. All returns are net of expenses.

Target Retirement Income Compos. Ix: Derived by applying the fund's target asset allocation to the results of the following benchmarks: for international stocks of developed markets, the MSCI EAFE Index through December 15, 2010, the MSCI ACWI ex USA IMI Index through June 2, 2013, and the FTSE Global All Cap ex US Index thereafter; for emerging-market stocks, the Select Emerging Markets Index through August 23, 2006, the MSCI Emerging Markets Index through December 15, 2010, the MSCI ACWI ex USA IMI Index through June 2, 2013, and the FTSE Global All Cap ex US Index thereafter; for U.S. bonds, the Bloomberg U.S. Aggregate Bond Index through December 31, 2009, and the Bloomberg U.S. Aggregate Float Adjusted Index thereafter, as well as the Bloomberg U.S. Treasury Inflation-Protected Securities Index through June 2, 2013, and the Bloomberg U.S. Treasury Inflation-Protected Securities (TIPS) 0-5 Year Index thereafter; for short-term reserves, the Citigroup Three-Month Treasury Bill Index through June 2, 2013; for international bonds, the Bloomberg Global Aggregate ex-USD Float Adjusted RIC Capped Index, Hedged beginning June 3, 2013; and for U.S. stocks, the Dow Jones U.S. Total Stock Market Index (formerly known as the Dow Jones Wilshire 5000 Index) through April 22, 2005, the MSCI US Broad Market Index through June 2, 2013, and the CRSP US Total Market Index thereafter. International stock benchmark returns are adjusted for withholding taxes.

Vanguard Target Retirement Income Trust II

Balanced fund (stocks and bonds)

Allocation of underlying funds*



Total Bond Market II Index	37.3%	Total Int'l Bnd II	16.6
STern Int Pro Sec Idx Fund	17.2	Inst Trl Intl Stk Idx Trust II	11.8
Total Stock Market Index Plus	17.1		

*Fund holdings are subject to change.

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Plain talk about risk

The trust is subject to several stock and bond market risks, any of which could cause an investor to lose money. However, based on the trust's current allocation between stocks and the less volatile asset class of bonds, the trust's overall level of risk should be higher than those funds that invest mostly in bonds, but lower than those investing mostly in stocks. In addition to the risks inherent in the asset classes of the underlying funds, the trust also is subject to asset allocation risk, which is the chance that the selection of underlying funds and the allocation of fund assets will cause the fund to underperform other funds with a similar investment objective.

Note on frequent trading restrictions

Frequent trading policies may apply to those funds offered as investment options within your plan. Please log on to [vanguard.com](https://www.vanguard.com) for your employer plans or contact Participant Services at 800-523-1188 for additional information.

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For more information about Vanguard Investments, see below for which situation is right for you.

If you receive your retirement plan statement from Vanguard or log on to Vanguard's website to view your plan, visit [vanguard.com](https://www.vanguard.com) or call **800-523-1188**.

If you receive your retirement plan statement from a service provider other than Vanguard or log on to a recordkeeper's website that is not Vanguard to view your plan, please call **855-402-2646**.

Vanguard Target Retirement 2020 Trust II

Balanced fund (stocks and bonds)

Fund facts

Risk level	Low ← → High	Total net assets	\$6,241 MM	Expense ratio as of 03/31/21	0.075%	Inception date	02/29/08	Fund number	1474
1	2	3	4	5					

Investment objective

Vanguard Target Retirement 2020 Trust II seeks to provide capital appreciation and current income consistent with its current asset allocation.

Investment strategy

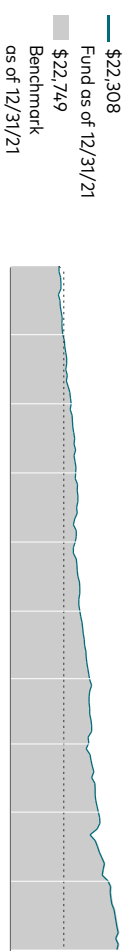
The trust invests in other Vanguard mutual funds and trusts according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2020 (the target year). The trust's asset allocation will become more conservative over time, meaning that the percentage of assets allocated to stocks will decrease while the percentage of assets allocated to bonds and other fixed income investments will increase. Within seven years after 2020, the trust's asset allocation should resemble that of the Target Retirement Income Trust II. The underlying holdings are: Vanguard Total Stock Market Index Fund, Vanguard Total Bond Market II Index Fund, Vanguard Institutional Total International Stock Market Index Trust II, Vanguard Total International Bond II Index Fund, and Vanguard Short-Term Inflation-Protected Securities Fund.

The trust's indirect bond holdings are a diversified mix of short-, intermediate-, and long-term U.S. government, U.S. agency, and investment-grade U.S. corporate bonds; inflation-protected public obligations issued by the U.S. Treasury; mortgage-backed and asset-backed securities; and government, agency, corporate, and securitized investment-grade foreign bonds issued in currencies other than the U.S. dollar (but hedged by Vanguard to minimize foreign currency exposure). The trust's indirect stock holdings are a diversified mix of U.S. and foreign large-, mid-, and small-capitalization stocks.

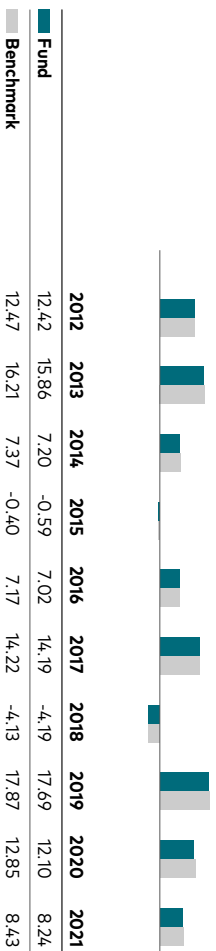
Benchmark

Target Retirement 2020 Composite Ix

Growth of a \$10,000 investment: January 31, 2012—December 31, 2021



Annual returns



Total returns

Periods ended September 30, 2022

	Quarter	Year to date	One year	Three years	Five years	Ten years
Fund	-5.15%	-18.23%	-15.82%	1.21%	2.96%	5.52%
Benchmark	-4.93%	-17.97%	-15.53%	1.62%	3.26%	5.74%

The performance data shown represent past performance, which is not a guarantee of future results. Investment returns and principal value will fluctuate, so investors' shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than the performance data cited. For performance data current to the most recent month-end, visit our website at

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Figures for periods of less than one year are cumulative returns. All other figures represent average annual returns. Performance figures include the reinvestment of all dividends and any capital gains distributions. All returns are net of expenses.

Target Retirement 2020 Composite Ix: Derived by applying the fund's target asset allocation to the results of the following benchmarks: for international stocks of developed markets, the MSCI EAFE Index through December 15, 2010, the MSCI ACWI ex USA IMI Index through June 2, 2013, and the FTSE Global All Cap ex US Index thereafter; for emerging-market stocks, the Select Emerging Markets Index through August 23, 2006, the MSCI Emerging Markets Index through December 15, 2010, the MSCI ACWI ex USA IMI Index through June 2, 2013, and the FTSE Global All Cap ex US Index thereafter; for U.S. bonds, the Bloomberg U.S. Aggregate Bond Index through December 31, 2009, and the Bloomberg U.S. Aggregate Float Adjusted Index thereafter; for international bonds, the Bloomberg Global Aggregate ex-USD Float Adjusted RIC Capped Index. Hedged beginning June 3, 2013, and for U.S. stocks, the MSCI US Broad Market Index through June 2, 2013, and the CRSP US Total Market Index thereafter. International stock benchmark returns are adjusted for withholding taxes.

Vanguard Target Retirement 2020 Trust II

Balanced fund (stocks and bonds)

Allocation of underlying funds[†]



Total Bond Market II Index	32.2%	Total Intl Bnd II	14.4
Total Stock Market Index Plus	25.1	STerm Inf Pro Sec Idx Fund	11.2
Inst Ttl Intl Stk Idx Trust II	17.1		

[†]Fund holdings are subject to change.

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Plain talk about risk

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Note on frequent trading restrictions

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Vanguard Target Retirement 2025 Trust I

Balanced fund (stocks and bonds)

Fund facts

Risk level	Low ← → High	Total net assets	\$11,481 MM	Expense ratio as of 03/31/21	0.065%	Inception date	06/28/07	Fund number	1465
	1 2 3 4 5								

Investment objective

Vanguard Target Retirement 2025 Trust I seeks to provide capital appreciation and current income consistent with its current asset allocation.

Investment strategy

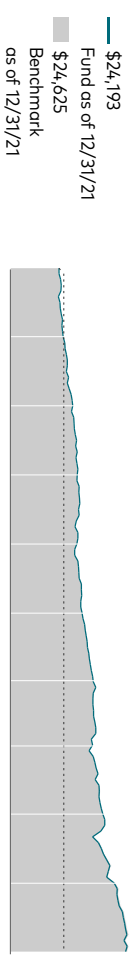
The trust invests in other Vanguard mutual funds and trusts according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2025 (the target year). The trust's asset allocation will become more conservative over time, meaning that the percentage of assets allocated to stocks will decrease while the percentage of assets allocated to bonds and other fixed income investments will increase. Within seven years after 2025, the trust's asset allocation should resemble that of the Target Retirement Income Trust I. The underlying holdings are: Vanguard Total Stock Market Index Fund, Vanguard Total Bond Market II Index Fund, Vanguard Institutional Total International Stock Market Index Trust II, Vanguard Total International Bond II Index Fund, and Vanguard Short-Term Inflation-Protected Securities Fund.

The trust's indirect bond holdings are a diversified mix of short-, intermediate-, and long-term U.S. government, U.S. agency, and investment-grade U.S. corporate bonds; inflation-protected public obligations issued by the U.S. Treasury; mortgage-backed and asset-backed securities; and government, agency, corporate, and securitized investment-grade foreign bonds issued in currencies other than the U.S. dollar (but hedged by Vanguard to minimize foreign currency exposure). The trust's indirect stock holdings are a diversified mix of U.S. and foreign large-, mid-, and small-capitalization stocks.

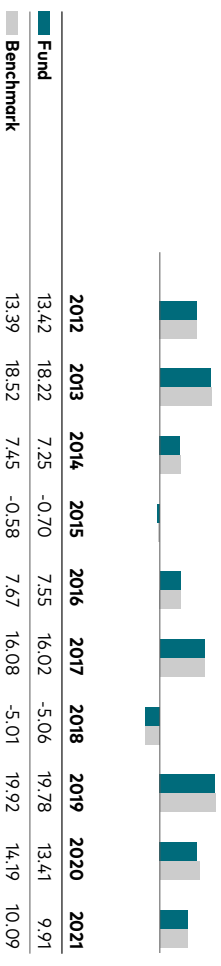
Benchmark

Target Retirement 2025 Composite Ix

Growth of a \$10,000 investment: January 31, 2012—December 31, 2021



Annual returns



Total returns

Periods ended September 30, 2022

	Quarter	Year to date	One year	Three years	Five years	Ten years
Fund	-5.60%	-20.26%	-17.39%	1.53%	3.26%	6.07%
Benchmark	-5.32%	-19.95%	-17.09%	1.97%	3.58%	6.29%

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Vanguard Target Retirement 2025 Trust I

Balanced fund (stocks and bonds)

Allocation of underlying funds*



Total Stock Market Index Plus	32.7%	Total Intl Bnd II	13.0
Total Bond Market II Index	29.1	STerm Inf Pro Sec Idx Fund	3.4
Inst Ttl Intl Stk Idx Trust II	21.8		

*Fund holdings are subject to change.

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Vanguard Target Retirement 2025 Trust II

Balanced fund (stocks and bonds)

Fund facts

Risk level	Low ← → High	Total net assets	\$12,136 MM	Expense ratio as of 03/31/21	0.075%	Inception date	02/29/08	Fund number	1475
	1 2 3 4 5								

Investment objective

Vanguard Target Retirement 2025 Trust II seeks to provide capital appreciation and current income consistent with its current asset allocation.

Investment strategy

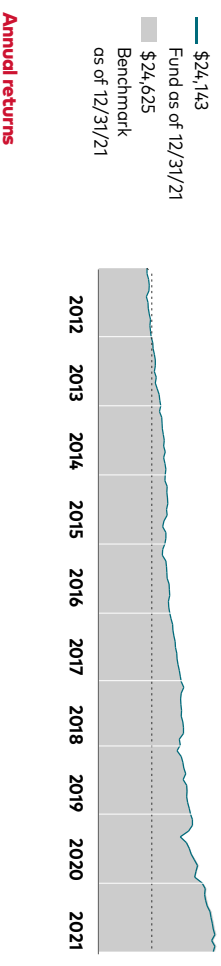
The trust invests in other Vanguard mutual funds and trusts according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2025 (the target year). The trust's asset allocation will become more conservative over time, meaning that the percentage of assets allocated to stocks will decrease while the percentage of assets allocated to bonds and other fixed income investments will increase. Within seven years after 2025, the trust's asset allocation should resemble that of the Target Retirement Income Trust II. The underlying holdings are: Vanguard Total Stock Market Index Fund, Vanguard Total Bond Market II Index Fund, Vanguard Institutional Total International Stock Market Index Trust II, Vanguard Total International Bond II Index Fund, and Vanguard Short-Term Inflation-Protected Securities Fund.

The trust's indirect bond holdings are a diversified mix of short-, intermediate-, and long-term U.S. government, U.S. agency, and investment-grade U.S. corporate bonds; inflation-protected public obligations issued by the U.S. Treasury; mortgage-backed and asset-backed securities; and government, agency, corporate, and securitized investment-grade foreign bonds issued in currencies other than the U.S. dollar (but hedged by Vanguard to minimize foreign currency exposure). The trust's indirect stock holdings are a diversified mix of U.S. and foreign large-, mid-, and small-capitalization stocks.

Benchmark

Target Retirement 2025 Composite Ix

Growth of a \$10,000 investment: January 31, 2012—December 31, 2021



Annual returns

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Fund	13.36	18.23	7.22	-0.72	7.51	16.04	-5.07	19.75	13.39	9.90
Benchmark	13.39	18.52	7.45	-0.58	7.67	16.08	-5.01	19.92	14.19	10.09

Total returns

	Quarter	Year to date	One year	Three years	Five years	Ten years
Fund	-5.61%	-20.27%	-17.40%	1.52%	3.25%	6.05%
Benchmark	-5.32%	-19.95%	-17.09%	1.97%	3.58%	6.29%

Periods ended September 30, 2022

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Vanguard Target Retirement 2025 Trust II

Balanced fund (stocks and bonds)

Allocation of underlying funds*



Total Stock Market Index Plus	32.7%	Total Intl Bnd II	13.0
Total Bond Market II Index	29.1	STerm Inf Pro Sec Idx Fund	3.4
Inst Ttl Intl Stk Idx Trust II	21.8		

*Fund holdings are subject to change.

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Vanguard Target Retirement 2030 Trust II

Balanced fund (stocks and bonds)

Fund facts

Risk level	Low ← → High	Total net assets	\$14,221 MM	Expense ratio as of 03/31/21	0.075%	Inception date	02/29/08	Fund number	1476
1	2	3	4	5					

Investment objective

Vanguard Target Retirement 2030 Trust II seeks to provide capital appreciation and current income consistent with its current asset allocation.

Investment strategy

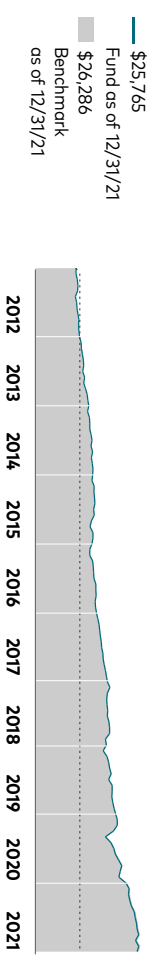
The trust invests in other Vanguard mutual funds and trusts according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2030 (the target year). The trust's asset allocation will become more conservative over time, meaning that the percentage of assets allocated to stocks will decrease while the percentage of assets allocated to bonds and other fixed income investments will increase. Within seven years after 2030, the trust's asset allocation should resemble that of the Target Retirement Income Trust II. The underlying holdings are: Vanguard Total Stock Market Index Fund, Vanguard Total Bond Market II Index Fund, Vanguard Institutional Total International Stock Market Index Trust II, Vanguard Total International Bond II Index Fund, and Vanguard Short-Term Inflation-Protected Securities Fund.

The trust's indirect bond holdings are a diversified mix of short-, intermediate-, and long-term U.S. government, U.S. agency, and investment-grade U.S. corporate bonds; inflation-protected public obligations issued by the U.S. Treasury; mortgage-backed and asset-backed securities; and government, agency, corporate, and securitized investment-grade foreign bonds issued in currencies other than the U.S. dollar (but hedged by Vanguard to minimize foreign currency exposure). The trust's indirect stock holdings are a diversified mix of U.S. and foreign large-, mid-, and small-capitalization stocks.

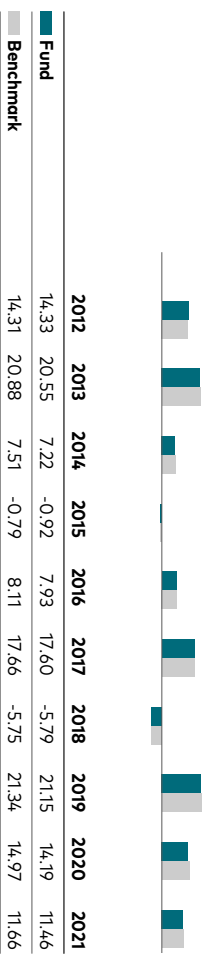
Benchmark

Target Retirement 2030 Composite Ix

Growth of a \$10,000 investment: January 31, 2012—December 31, 2021



Annual returns



Total returns

Periods ended September 30, 2022

	Quarter	Year to date	One year	Three years	Five years	Ten years
Fund	-5.89%	-21.49%	-18.25%	1.93%	3.52%	6.54%
Benchmark	-5.58%	-21.16%	-17.96%	2.39%	3.86%	6.78%

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Target Retirement 2030 Composite Ix: Derived by applying the fund's target asset allocation to the results of the following benchmarks: for international stocks of developed markets, the MSCI EAFE Index through December 15, 2010, the MSCI ACWI ex USA IMI Index through June 2, 2013, and the FTSE Global All Cap ex US Index thereafter; for emerging-market stocks, the Select Emerging Markets Index through August 23, 2006, the MSCI Emerging Markets Index through December 15, 2010, the MSCI ACWI ex USA IMI Index through June 2, 2013, and the FTSE Global All Cap ex US Index thereafter; for U.S. bonds, the Bloomberg U.S. Aggregate Bond Index through December 31, 2009, and the Bloomberg U.S. Aggregate Float Adjusted Index thereafter; for international bonds, the Bloomberg Global Aggregate ex-USD Float Adjusted RIC Capped Index. Hedged beginning June 3, 2013, and for U.S. stocks, the MSCI US Broad Market Index through June 2, 2013, and the CRSP US Total Market Index thereafter. International stock benchmark returns are adjusted for withholding taxes.

Vanguard Target Retirement 2030 Trust II

Balanced fund (stocks and bonds)

Allocation of underlying funds*



Total Stock Market Index Plus	38.0%	Inst Ttl Intl Stk Idx Trust II	25.1
Total Bond Market II Index	25.7	Total Intl Bnd II	11.2

*Fund holdings are subject to change.

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Vanguard Target Retirement 2035 Trust I

Balanced fund (stocks and bonds)

Fund facts

Risk level	Low ← → High	Total net assets	\$12.121 MM	Expense ratio as of 03/31/21	0.065%	Inception date	06/28/07	Fund number	1467
	1 2 3 4 5								

Investment objective

Vanguard Target Retirement 2035 Trust I seeks to provide capital appreciation and current income consistent with its current asset allocation.

Investment strategy

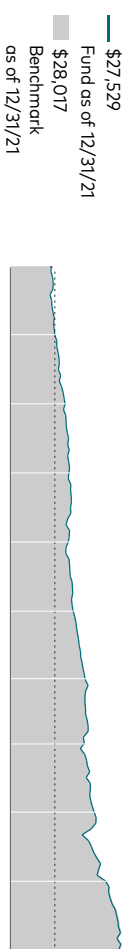
The trust invests in other Vanguard mutual funds and trusts according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2035 (the target year). The trust's asset allocation will become more conservative over time, meaning that the percentage of assets allocated to stocks will decrease while the percentage of assets allocated to bonds and other fixed income investments will increase. Within seven years after 2035, the trust's asset allocation should resemble that of the Target Retirement Income Trust I. The underlying holdings are: Vanguard Total Stock Market Index Fund, Vanguard Total Bond Market II Index Fund, Vanguard Institutional Total International Stock Market Index Trust II, Vanguard Total International Bond II Index Fund, and Vanguard Short-Term Inflation-Protected Securities Fund.

The trust's indirect bond holdings are a diversified mix of short-, intermediate-, and long-term U.S. government, U.S. agency, and investment-grade U.S. corporate bonds; inflation-protected public obligations issued by the U.S. Treasury; mortgage-backed and asset-backed securities; and government, agency, corporate, and securitized investment-grade foreign bonds issued in currencies other than the U.S. dollar (but hedged by Vanguard to minimize foreign currency exposure). The trust's indirect stock holdings are a diversified mix of U.S. and foreign large-, mid-, and small-capitalization stocks.

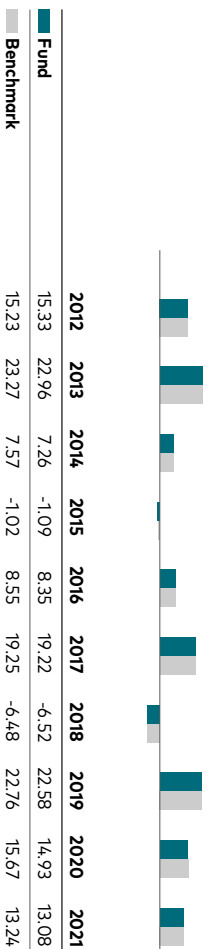
Benchmark

Target Retirement 2035 Composite Ix

Growth of a \$10,000 investment: January 31, 2012—December 31, 2021



Annual returns



Total returns

Periods ended September 30, 2022

	Quarter	Year to date	One year	Three years	Five years	Ten years
Fund	-6.11%	-22.36%	-18.78%	2.49%	3.89%	7.09%
Benchmark	-5.75%	-22.01%	-18.48%	2.94%	4.21%	7.31%

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Target Retirement 2035 Composite Ix: Derived by applying the fund's target asset allocation to the results of the following benchmarks: for international stocks of developed markets, the MSCI EAFE Index through December 15, 2010, the MSCI ACWI ex USA IMI Index through June 2, 2013, and the FTSE Global All Cap ex US Index thereafter; for emerging-market stocks, the Select Emerging Markets Index through August 23, 2006, the MSCI Emerging Markets Index through December 15, 2010, the MSCI ACWI ex USA IMI Index through June 2, 2013, and the FTSE Global All Cap ex US Index thereafter; for U.S. bonds, the Bloomberg U.S. Aggregate Bond Index through December 31, 2009, and the Bloomberg U.S. Aggregate Float Adjusted Index thereafter; for international bonds, the Bloomberg Global Aggregate ex-USD Float Adjusted RIC Capped Index Hedged beginning June 3, 2013, and for U.S. stocks, the Dow Jones U.S. Total Stock Market Index (formerly known as the Dow Jones Wilshire 5000 Index) through April 22, 2005, the MSCI US Broad Market Index through June 2, 2013, and the CRSP US Total Market Index thereafter. International stock benchmark returns are adjusted for withholding taxes.

Vanguard Target Retirement 2035 Trust I

Balanced fund (stocks and bonds)

Allocation of underlying funds*



Total Stock Market Index Plus	42.6%	Total Bond Market II Index	20.4
Inst Intl Stk Idx Trust II	28.2	Total Intl Bnd II	8.8

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Plain talk about risk

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Note on frequent trading restrictions

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Vanguard Target Retirement 2035 Trust II

Balanced fund (stocks and bonds)

Fund facts

Risk level	Low ← → High	Total net assets	\$13,058 MM	Expense ratio as of 03/31/21	0.075%	Inception date	02/29/08	Fund number	1477
	1 2 3 4 5								

Investment objective

Vanguard Target Retirement 2035 Trust II seeks to provide capital appreciation and current income consistent with its current asset allocation.

Investment strategy

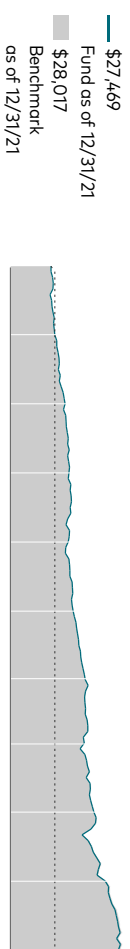
The trust invests in other Vanguard mutual funds and trusts according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2035 (the target year). The trust's asset allocation will become more conservative over time, meaning that the percentage of assets allocated to stocks will decrease while the percentage of assets allocated to bonds and other fixed income investments will increase. Within seven years after 2035, the trust's asset allocation should resemble that of the Target Retirement Income Trust II. The underlying holdings are: Vanguard Total Stock Market Index Fund, Vanguard Total Bond Market II Index Fund, Vanguard Institutional Total International Stock Market Index Trust II, Vanguard Total International Bond II Index Fund, and Vanguard Short-Term Inflation-Protected Securities Fund.

The trust's indirect bond holdings are a diversified mix of short-, intermediate-, and long-term U.S. government, U.S. agency, and investment-grade U.S. corporate bonds; inflation-protected public obligations issued by the U.S. Treasury; mortgage-backed and asset-backed securities; and government, agency, corporate, and securitized investment-grade foreign bonds issued in currencies other than the U.S. dollar (but hedged by Vanguard to minimize foreign currency exposure). The trust's indirect stock holdings are a diversified mix of U.S. and foreign large-, mid-, and small-capitalization stocks.

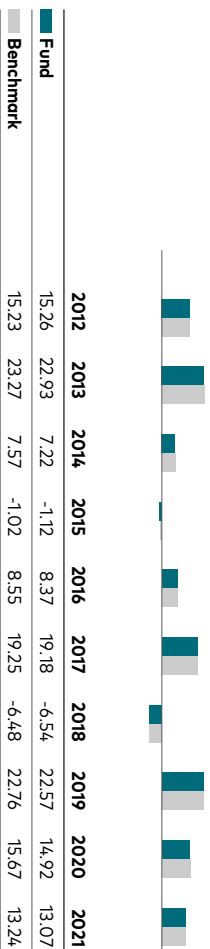
Benchmark

Target Retirement 2035 Composite Ix

Growth of a \$10,000 investment: January 31, 2012—December 31, 2021



Annual returns



Total returns

Periods ended September 30, 2022

	Quarter	Year to date	One year	Three years	Five years	Ten years
Fund	-6.10%	-22.35%	-18.78%	2.49%	3.88%	7.07%
Benchmark	-5.75%	-22.01%	-18.48%	2.94%	4.21%	7.31%

The performance data shown represent past performance, which is not a guarantee of future results. Investment returns and principal value will fluctuate, so investors' shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than the performance data cited. For performance data current to the most recent month-end, visit our website at

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Target Retirement 2035 Composite Ix: Derived by applying the fund's target asset allocation to the results of the following benchmarks: for international stocks of developed markets, the MSCI EAFE Index through December 15, 2010, the MSCI ACWI ex USA IMI Index through June 2, 2013, and the FTSE Global All Cap ex US Index thereafter; for emerging-market stocks, the Select Emerging Markets Index through August 23, 2006, the MSCI Emerging Markets Index through December 15, 2010, the MSCI ACWI ex USA IMI Index through June 2, 2013, and the FTSE Global All Cap ex US Index thereafter; for U.S. bonds, the Bloomberg U.S. Aggregate Bond Index through December 31, 2009, and the Bloomberg U.S. Aggregate Float Adjusted Index thereafter; for international bonds, the Bloomberg Global Aggregate ex-USD Float Adjusted RIC Capped Index Hedged beginning June 3, 2013, and for U.S. stocks, the Dow Jones U.S. Total Stock Market Index (formerly known as the Dow Jones Wilshire 5000 Index) through April 22, 2005, the MSCI US Broad Market Index through June 2, 2013, and the CRSP US Total Market Index thereafter. International stock benchmark returns are adjusted for withholding taxes.

Vanguard Target Retirement 2035 Trust II

Balanced fund (stocks and bonds)

Allocation of underlying funds*



Total Stock Market Index Plus	42.6%	Total Bond Market II Index	20.4
Inst Ttl Intl Stk Idx Trust II	28.2	Total Intl Bnd II	8.8

*Fund holdings are subject to change.

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Vanguard Target Retirement 2040 Trust II

Balanced fund (stocks and bonds)

Fund facts

Risk level	Low ← → High	Total net assets	\$11,932 MM	Expense ratio as of 03/31/21	0.075%	Inception date	02/29/08	Fund number	1478
	1 2 3 4 5								

Investment objective

Vanguard Target Retirement 2040 Trust II seeks to provide capital appreciation and current income consistent with its current asset allocation.

Investment strategy

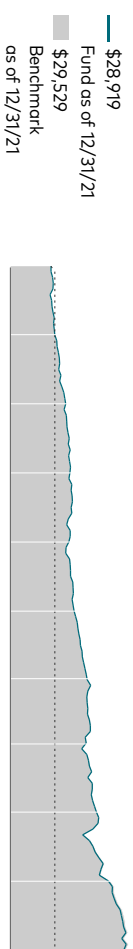
The trust invests in other Vanguard mutual funds and trusts according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2040 (the target year). The trust's asset allocation will become more conservative over time, meaning that the percentage of assets allocated to stocks will decrease while the percentage of assets allocated to bonds and other fixed income investments will increase. Within seven years after 2040, the trust's asset allocation should resemble that of the Target Retirement Income Trust II. The underlying holdings are: Vanguard Total Stock Market Index Fund, Vanguard Total Bond Market II Index Fund, Vanguard Institutional Total International Stock Market Index Trust II, Vanguard Total International Bond II Index Fund, and Vanguard Short-Term Inflation-Protected Securities Fund.

The trust's indirect bond holdings are a diversified mix of short-, intermediate-, and long-term U.S. government, U.S. agency, and investment-grade U.S. corporate bonds; inflation-protected public obligations issued by the U.S. Treasury; mortgage-backed and asset-backed securities; and government, agency, corporate, and securitized investment-grade foreign bonds issued in currencies other than the U.S. dollar (but hedged by Vanguard to minimize foreign currency exposure). The trust's indirect stock holdings are a diversified mix of U.S. and foreign large-, mid-, and small-capitalization stocks.

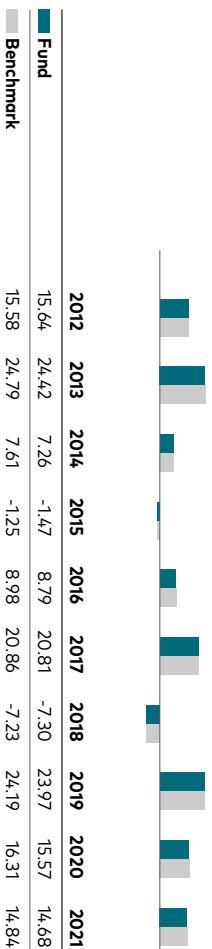
Benchmark

Target Retirement 2040 Composite Ix

Growth of a \$10,000 investment: January 31, 2012—December 31, 2021



Annual returns



Total returns

Periods ended September 30, 2022

	Quarter	Year to date	One year	Three years	Five years	Ten years
Fund	-6.29%	-23.23%	-19.32%	3.01%	4.20%	7.49%
Benchmark	-5.93%	-22.86%	-19.01%	3.47%	4.55%	7.75%

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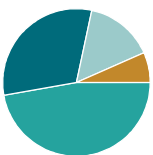
Figures for periods of less than one year are cumulative returns. All other figures represent average annual returns. Performance figures include the reinvestment of all dividends and any capital gains distributions. All returns are net of expenses.

Target Retirement 2040 Composite Ix: Derived by applying the fund's target asset allocation to the results of the following benchmarks: for international stocks of developed markets, the MSCI EAFE Index through December 15, 2010, the MSCI ACWI ex USA IMI Index through June 2, 2013, and the FTSE Global All Cap ex US Index thereafter; for emerging-market stocks, the Select Emerging Markets Index through August 23, 2006, the MSCI Emerging Markets Index through December 15, 2010, the MSCI ACWI ex USA IMI Index through June 2, 2013, and the FTSE Global All Cap ex US Index thereafter; for U.S. bonds, the Bloomberg U.S. Aggregate Bond Index through December 31, 2009, and the Bloomberg U.S. Aggregate Float Adjusted Index thereafter; for international bonds, the Bloomberg Global Aggregate ex-USD Float Adjusted RIC Capped Index. Hedged beginning June 3, 2013, and for U.S. stocks, the MSCI US Broad Market Index through June 2, 2013, and the CRSP US Total Market Index thereafter. International stock benchmark returns are adjusted for withholding taxes.

Vanguard Target Retirement 2040 Trust II

Balanced fund (stocks and bonds)

Allocation of underlying funds*



Total Stock Market Index Plus	47.2%	Total Bond Market II Index	15.0
Inst Ttl Intl Stk Idx Trust II	31.2	Total Intl Bnd II	6.6

*Fund holdings are subject to change.

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Plain talk about risk

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Vanguard Target Retirement 2045 Trust I

Balanced fund (stocks and bonds)

Fund facts

Risk level	Low ← → High	Total net assets	\$9,574 MM	Expense ratio as of 03/31/21	0.065%	Inception date	06/28/07	Fund number	1469
	1 2 3 4 5								

Investment objective

Vanguard Target Retirement 2045 Trust I seeks to provide capital appreciation and current income consistent with its current asset allocation.

Investment strategy

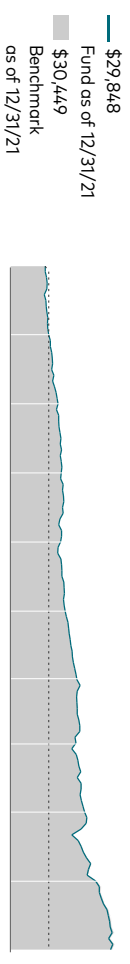
The trust invests in other Vanguard mutual funds and trusts according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2045 (the target year). The trust's asset allocation will become more conservative over time, meaning that the percentage of assets allocated to stocks will decrease while the percentage of assets allocated to bonds and other fixed income investments will increase. Within seven years after 2045, the trust's asset allocation should resemble that of the Target Retirement Income Trust I. The underlying holdings are: Vanguard Total Stock Market Index Fund, Vanguard Total Bond Market II Index Fund, Vanguard Institutional Total International Stock Market Index Trust II, Vanguard Total International Bond II Index Fund, and Vanguard Short-Term Inflation-Protected Securities Fund.

The trust's indirect bond holdings are a diversified mix of short-, intermediate-, and long-term U.S. government, U.S. agency, and investment-grade U.S. corporate bonds; inflation-protected public obligations issued by the U.S. Treasury; mortgage-backed and asset-backed securities; and government, agency, corporate, and securitized investment-grade foreign bonds issued in currencies other than the U.S. dollar (but hedged by Vanguard to minimize foreign currency exposure). The trust's indirect stock holdings are a diversified mix of U.S. and foreign large-, mid-, and small-capitalization stocks.

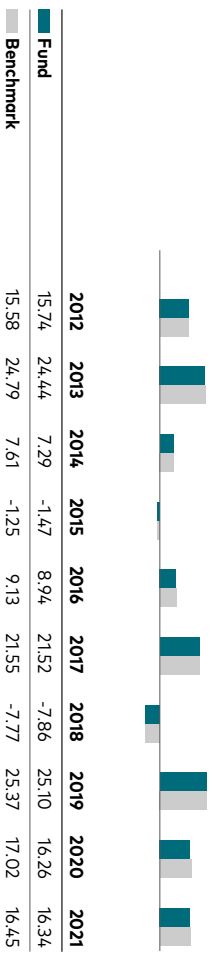
Benchmark

Target Retirement 2045 Composite Ix

Growth of a \$10,000 investment: January 31, 2012—December 31, 2021



Annual returns



Total returns

Periods ended September 30, 2022

	Quarter	Year to date	One year	Three years	Five years	Ten years
Fund	-6.50%	-24.08%	-19.84%	3.52%	4.49%	7.70%
Benchmark	-6.11%	-23.71%	-19.55%	3.99%	4.85%	7.96%

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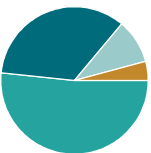
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Target Retirement 2045 Composite Ix: Derived by applying the fund's target asset allocation to the results of the following benchmarks: for international stocks of developed markets, the MSCI EAFE Index through December 15, 2010, the MSCI ACWI ex USA IMI Index through June 2, 2013, and the FTSE Global All Cap ex US Index thereafter; for emerging-market stocks, the Select Emerging Markets Index through August 23, 2006, the MSCI Emerging Markets Index through December 15, 2010, the MSCI ACWI ex USA IMI Index through June 2, 2013, and the FTSE Global All Cap ex US Index thereafter; for U.S. bonds, the Bloomberg U.S. Aggregate Bond Index through December 31, 2009, and the Bloomberg U.S. Aggregate Float Adjusted Index thereafter; for international bonds, the Bloomberg Global Aggregate ex-USD Float Adjusted RIC Capped Index Hedged beginning June 3, 2013, and for U.S. stocks, the Dow Jones U.S. Total Stock Market Index (formerly known as the Dow Jones Wilshire 5000 Index) through April 22, 2005, the MSCI US Broad Market Index through June 2, 2013, and the CRSP US Total Market Index thereafter. International stock benchmark returns are adjusted for withholding taxes.

Vanguard Target Retirement 2045 Trust I

Balanced fund (stocks and bonds)

Allocation of underlying funds*



Total Stock Market Index Plus	51.7%	Total Bond Market II Index	9.7%
Inst Ttl Intl Stk Idx Trust II	34.4%	Total Intl Bnd II	4.2%

*Fund holdings are subject to change.

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Vanguard Target Retirement 2045 Trust II

Balanced fund (stocks and bonds)

Fund facts

Risk level	Low ← → High	Total net assets	\$10,495 MM	Expense ratio as of 03/31/21	0.075%	Inception date	02/29/08	Fund number	1479
	1 2 3 4 5								

Investment objective

Vanguard Target Retirement 2045 Trust II seeks to provide capital appreciation and current income consistent with its current asset allocation.

Investment strategy

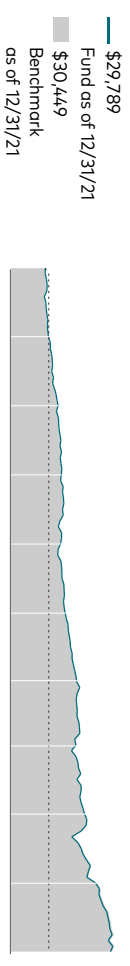
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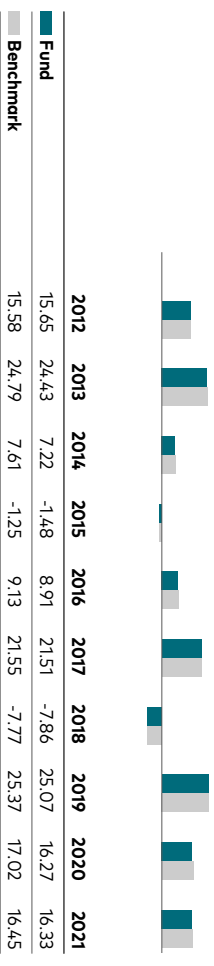
Benchmark

Target Retirement 2045 Composite Ix

Growth of a \$10,000 investment: January 31, 2012—December 31, 2021



Annual returns



Total returns

Periods ended September 30, 2022

	Quarter	Year to date	One year	Three years	Five years	Ten years
Fund	-6.51%	-24.09%	-19.85%	3.51%	4.48%	7.69%
Benchmark	-6.11%	-23.71%	-19.55%	3.99%	4.85%	7.96%

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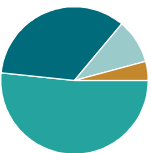
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Vanguard Target Retirement 2045 Trust II

Balanced fund (stocks and bonds)

Allocation of underlying funds*



Total Stock Market Index Plus	51.7%	Total Bond Market II Index	9.7%
Inst Ttl Intl Stk Idx Trust II	34.4%	Total Intl Bnd II	4.2%

*Fund holdings are subject to change.

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Vanguard Target Retirement 2050 Trust II

Balanced fund (stocks and bonds)

Fund facts

Risk level	Low ← → High	Total net assets	\$9,096 MM	Expense ratio as of 03/31/21	0.075%	Inception date	02/29/08	Fund number	1480
	1 2 3 4 5								

Investment objective

Vanguard Target Retirement 2050 Trust II seeks to provide capital appreciation and current income consistent with its current asset allocation.

Investment strategy

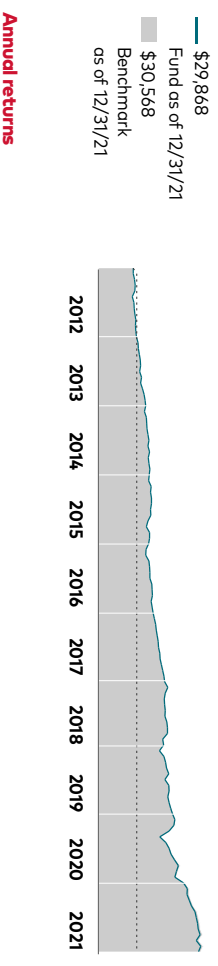
The trust invests in other Vanguard mutual funds and trusts according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2050 (the target year). The trust's asset allocation will become more conservative over time, meaning that the percentage of assets allocated to stocks will decrease while the percentage of assets allocated to bonds and other fixed income investments will increase. Within seven years after 2050, the trust's asset allocation should resemble that of the Target Retirement Income Trust II. The underlying holdings are: Vanguard Total Stock Market Index Fund, Vanguard Total Bond Market II Index Fund, Vanguard Institutional Total International Stock Market Index Trust II, Vanguard Total International Bond II Index Fund, and Vanguard Short-Term Inflation-Protected Securities Fund.

The trust's indirect bond holdings are a diversified mix of short-, intermediate-, and long-term U.S. government, U.S. agency, and investment-grade U.S. corporate bonds; inflation-protected public obligations issued by the U.S. Treasury; mortgage-backed and asset-backed securities; and government, agency, corporate, and securitized investment-grade foreign bonds issued in currencies other than the U.S. dollar (but hedged by Vanguard to minimize foreign currency exposure). The trust's indirect stock holdings are a diversified mix of U.S. and foreign large-, mid-, and small-capitalization stocks.

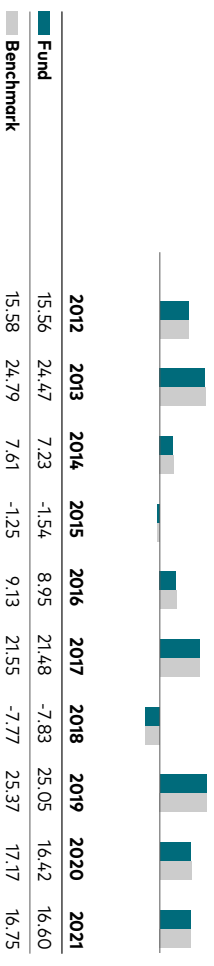
Benchmark

Target Retirement 2050 Composite Ix

Growth of a \$10,000 investment: January 31, 2012—December 31, 2021



Annual returns



Total returns

Periods ended September 30, 2022

	Quarter	Year to date	One year	Three years	Five years	Ten years
Fund	-6.62%	-24.43%	-20.12%	3.49%	4.47%	7.67%
Benchmark	-6.21%	-24.04%	-19.81%	3.97%	4.84%	7.95%

The performance data shown represent past performance, which is not a guarantee of future results. Investment returns and principal value will fluctuate, so investors' shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than the performance data cited. For performance data current to the most recent month-end, visit our website at

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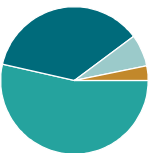
Figures for periods of less than one year are cumulative returns. All other figures represent average annual returns. Performance figures include the reinvestment of all dividends and any capital gains distributions. All returns are net of expenses.

Target Retirement 2050 Composite Ix: Derived by applying the fund's target asset allocation to the results of the following benchmarks: for international stocks of developed markets, the MSCI EAFE Index through December 15, 2010, the MSCI ACWI ex USA IMI Index through June 2, 2013, and the FTSE Global All Cap ex US Index thereafter; for emerging-market stocks, the Select Emerging Markets Index through August 23, 2006, the MSCI Emerging Markets Index through December 15, 2010, the MSCI ACWI ex USA IMI Index through June 2, 2013, and the FTSE Global All Cap ex US Index thereafter; for U.S. bonds, the Bloomberg U.S. Aggregate Bond Index through December 31, 2009, and the Bloomberg U.S. Aggregate Float Adjusted Index thereafter; for international bonds, the Bloomberg Global Aggregate ex-USD Float Adjusted RIC Capped Index. Hedged beginning June 3, 2013, and for U.S. stocks, the MSCI US Broad Market Index through June 2, 2013, and the CRSP US Total Market Index thereafter. International stock benchmark returns are adjusted for withholding taxes.

Vanguard Target Retirement 2050 Trust II

Balanced fund (stocks and bonds)

Allocation of underlying funds*



Total Stock Market Index Plus	53.6%	Total Bond Market II Index	7.0
Inst Ttl Intl Stk Idx Trust II	36.2	Total Intl Bnd II	3.2

*Fund holdings are subject to change.

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The trust is subject to several stock and bond market risks, any of which could cause an investor to lose money. However, based on the trust's current allocation between stocks and the less volatile asset class of bonds, the trust's overall level of risk should be higher than those funds that invest mostly in bonds, but lower than those investing mostly in stocks. As the trust's allocation between underlying funds gradually changes, the trust's overall level of risk also will decline. In addition to the risks inherent in the asset classes of the underlying funds, the trust also is subject to asset allocation risk, which is the chance that the selection of underlying funds and the allocation of fund assets will cause the trust to underperform other funds with a similar investment objective. Investments in Target Retirement Trusts are subject to the risks of their underlying funds. The year in the trust name refers to the approximate year 2050 when an investor in the trust would retire and leave the workforce. The trust will gradually shift its emphasis from more aggressive investments to more conservative ones based on its target date. An investment in the Target Retirement Trust is not guaranteed at any time, including on or after the target date.

Note on frequent trading restrictions

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Vanguard Target Retirement 2055 Trust I

Balanced fund (stocks and bonds)

Fund facts

Risk level	Low ← → High	Total net assets	\$4,926 MM	Expense ratio as of 03/31/21	0.065%	Inception date	10/05/10	Fund number	1488
	1 2 3 4 5								

Investment objective

Vanguard Target Retirement 2055 Trust I seeks to provide capital appreciation and current income consistent with its current asset allocation.

Investment strategy

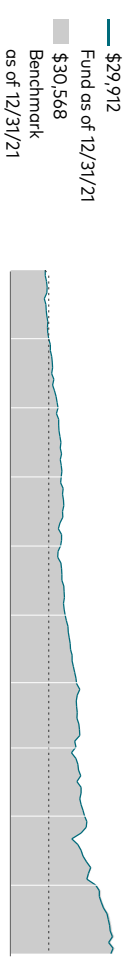
The trust invests in other Vanguard mutual funds and trusts according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2055 (the target year). The trust's asset allocation will become more conservative over time, meaning that the percentage of assets allocated to stocks will decrease while the percentage of assets allocated to bonds and other fixed income investments will increase. Within seven years after 2055, the trust's asset allocation should resemble that of the Target Retirement Income Trust I. The underlying holdings are: Vanguard Total Stock Market Index Fund, Vanguard Total Bond Market II Index Fund, Vanguard Institutional Total International Stock Market Index Trust II, Vanguard Total International Bond II Index Fund, and Vanguard Short-Term Inflation-Protected Securities Fund.

The trust's indirect bond holdings are a diversified mix of short-, intermediate-, and long-term U.S. government, U.S. agency, and investment-grade U.S. corporate bonds; inflation-protected public obligations issued by the U.S. Treasury; mortgage-backed and asset-backed securities; and government, agency, corporate, and securitized investment-grade foreign bonds issued in currencies other than the U.S. dollar (but hedged by Vanguard to minimize foreign currency exposure). The trust's indirect stock holdings are a diversified mix of U.S. and foreign large-, mid-, and small-capitalization stocks.

Benchmark

Target Retirement 2055 Composite Ix

Growth of a \$10,000 investment: January 31, 2012—December 31, 2021



Annual returns



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Fund	15.69	24.41	7.27	-1.63	8.98	21.48	-7.83	25.09	16.42	16.61
Benchmark	15.58	24.79	7.61	-1.25	9.13	21.55	-7.77	25.37	17.17	16.75

Total returns

Periods ended September 30, 2022

	Quarter	Year to date	One year	Three years	Five years	Ten years
Fund	-6.61%	-24.42%	-20.11%	3.50%	4.47%	7.67%
Benchmark	-6.21%	-24.04%	-19.81%	3.97%	4.84%	7.95%

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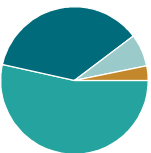
Figures for periods of less than one year are cumulative returns. All other figures represent average annual returns. Performance figures include the reinvestment of all dividends and any capital gains distributions. All returns are net of expenses.

Target Retirement 2055 Composite Ix: Derived by applying the fund's target asset allocation to the results of the following benchmarks: for international stocks of developed markets, the MSCI EAFE Index through December 15, 2010, the MSCI ACWI ex USA IMI Index through June 2, 2013, and the FTSE Global All Cap ex US Index thereafter; for emerging-market stocks, the MSCI Emerging Markets Index through December 15, 2010, the MSCI ACWI ex USA IMI Index through June 2, 2013, and the FTSE Global All Cap ex US Index thereafter; for U.S. bonds, the Bloomberg U.S. Aggregate Float Adjusted Index; for international bonds, the Bloomberg Global Aggregate ex-USD Float Adjusted RIC Capped Index Hedged beginning June 3, 2013, and for U.S. stocks, the MSCI US Broad Market Index through June 2, 2013, and the CRSP US Total Market Index thereafter. International stock benchmark returns are adjusted for withholding taxes.

Vanguard Target Retirement 2055 Trust I

Balanced fund (stocks and bonds)

Allocation of underlying funds[†]



Total Stock Market Index Plus	53.5%	Total Bond Market II Index	7.1%
Inst Ttl Intl Stk Idx Trust II	36.2%	Total Intl Bnd II	3.2%

[†]Fund holdings are subject to change.

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Note on frequent trading restrictions

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Vanguard Target Retirement 2055 Trust II

Balanced fund (stocks and bonds)

Fund facts

Risk level	Low ← → High	Total net assets	\$5,679 MM	Expense ratio as of 03/31/21	0.075%	Inception date	08/31/10	Fund number	1489
	1 2 3 4 5								

Investment objective

Vanguard Target Retirement 2055 Trust II seeks to provide capital appreciation and current income consistent with its current asset allocation.

Investment strategy

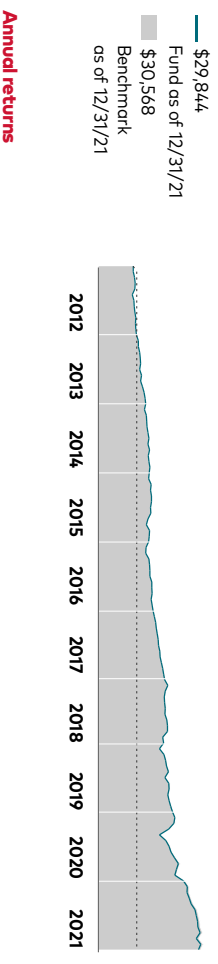
The trust invests in other Vanguard mutual funds and trusts according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2055 (the target year). The trust's asset allocation will become more conservative over time, meaning that the percentage of assets allocated to stocks will decrease while the percentage of assets allocated to bonds and other fixed income investments will increase. Within seven years after 2055, the trust's asset allocation should resemble that of the Target Retirement Income Trust II. The underlying holdings are: Vanguard Total Stock Market Index Fund, Vanguard Total Bond Market II Index Fund, Vanguard Institutional Total International Stock Market Index Trust II, Vanguard Total International Bond II Index Fund, and Vanguard Short-Term Inflation-Protected Securities Fund.

The trust's indirect bond holdings are a diversified mix of short-, intermediate-, and long-term U.S. government, U.S. agency, and investment-grade U.S. corporate bonds; inflation-protected public obligations issued by the U.S. Treasury; mortgage-backed and asset-backed securities; and government, agency, corporate, and securitized investment-grade foreign bonds issued in currencies other than the U.S. dollar (but hedged by Vanguard to minimize foreign currency exposure). The trust's indirect stock holdings are a diversified mix of U.S. and foreign large-, mid-, and small-capitalization stocks.

Benchmark

Target Retirement 2055 Composite Ix

Growth of a \$10,000 investment: January 31, 2012—December 31, 2021



Annual returns

Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Fund	15.63	24.34	7.26	-1.66	8.97	21.49	-7.85	25.07	16.41	16.59
Benchmark	15.58	24.79	7.61	-1.25	9.13	21.55	-7.77	25.37	17.17	16.75

Total returns

Fund	Periods ended September 30, 2022									
	Quarter	Year to date	One year	Three years	Five years	Ten years				
Fund	-6.63%	-24.43%	-20.13%	3.48%	4.46%	7.65%				
Benchmark	-6.21%	-24.04%	-19.87%	3.97%	4.84%	7.95%				

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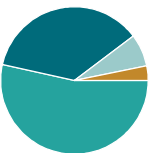
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Target Retirement 2055 Composite Ix: Derived by applying the fund's target asset allocation to the results of the following benchmarks: for international stocks of developed markets, the MSCI EAFE Index through December 15, 2010, the MSCI ACWI ex USA IMI Index through June 2, 2013, and the FTSE Global All Cap ex US Index thereafter; for emerging-market stocks, the MSCI Emerging Markets Index through December 15, 2010, the MSCI ACWI ex USA IMI Index through June 2, 2013, and the FTSE Global All Cap ex US Index thereafter; for U.S. bonds, the Bloomberg U.S. Aggregate Float Adjusted Index; for international bonds, the Bloomberg Global Aggregate ex-USD Float Adjusted RIC Capped Index Hedged beginning June 3, 2013, and for U.S. stocks, the MSCI US Broad Market Index through June 2, 2013, and the CRSP US Total Market Index thereafter. International stock benchmark returns are adjusted for withholding taxes.

Vanguard Target Retirement 2055 Trust II

Balanced fund (stocks and bonds)

Allocation of underlying funds*



Total Stock Market Index Plus	53.5%	Total Bond Market II Index	7.1
Inst Ttl Intl Stk Idx Trust II	36.2	Total Intl Bnd II	3.2

*Fund holdings are subject to change.

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Vanguard Target Retirement 2060 Trust II

Balanced fund (stocks and bonds)

Fund facts

Risk level	Low ← → High	Total net assets	\$2,741 MM	Expense ratio as of 03/31/21	0.075%	Inception date	03/01/12	Fund number	1693
	1 2 3 4 5								

Investment objective

Vanguard Target Retirement 2060 Trust II seeks to provide capital appreciation and current income consistent with its current asset allocation.

Investment strategy

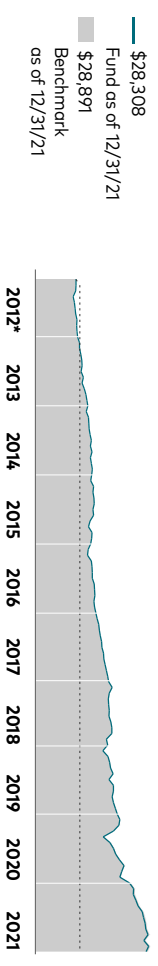
The trust invests in other Vanguard mutual funds and trusts according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2060 (the target year). The trust's asset allocation will become more conservative over time, meaning that the percentage of assets allocated to stocks will decrease while the percentage of assets allocated to bonds and other fixed income investments will increase. Within seven years after 2060, the trust's asset allocation should resemble that of the Target Retirement Income Trust II. The underlying holdings are: Vanguard Total Stock Market Index Fund, Vanguard Total Bond Market II Index Fund, Vanguard Institutional Total International Stock Market Index Trust II, Vanguard Total International Bond II Index Fund, and Vanguard Short-Term Inflation-Protected Securities Fund.

The trust's indirect bond holdings are a diversified mix of short-, intermediate-, and long-term U.S. government, U.S. agency, and investment-grade U.S. corporate bonds; inflation-protected public obligations issued by the U.S. Treasury; mortgage-backed and asset-backed securities; and government, agency, corporate, and securitized investment-grade foreign bonds issued in currencies other than the U.S. dollar (but hedged by Vanguard to minimize foreign currency exposure). The trust's indirect stock holdings are a diversified mix of U.S. and foreign large-, mid-, and small-capitalization stocks.

Benchmark

Target Retirement 2060 Composite Ix

Growth of a \$10,000 investment: March 31, 2012—December 31, 2021



Annual returns



	2012*	2013	2014	2015	2016	2017	2018	2019	2020	2021
Fund	5.25	24.32	7.22	-1.60	8.95	21.51	-7.85	25.09	16.50	16.56
Benchmark	4.96	24.79	7.61	-1.25	9.13	21.55	-7.77	25.37	17.17	16.75

Total returns

Periods ended September 30, 2022

	Quarter	Year to date	One year	Three years	Five years	Ten years
Fund	-6.61%	-24.40%	-20.10%	3.52%	4.49%	7.66%
Benchmark	-6.21%	-24.04%	-19.81%	3.97%	4.84%	7.95%

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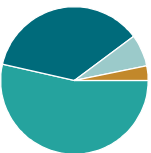
* Partial return since fund started, March 1, 2012.

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Vanguard Target Retirement 2060 Trust II

Balanced fund (stocks and bonds)

Allocation of underlying funds*



Total Stock Market Index Plus	53.6%	Total Bond Market II Index	7.0
Inst Ttl Intl Stk Idx Trust II	36.2	Total Intl Bnd II	3.2

*Fund holdings are subject to change.

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Vanguard Target Retirement 2065 Trust I

Balanced fund (stocks and bonds)

Fund facts

Risk level		← Low		→ High	
1	2	3	4	5	
Total net assets			Expense ratio as of 03/31/21		Inception date
\$528 MM			0.065%		07/21/17
					Fund number
					1793

Investment objective

Vanguard Target Retirement 2065 Trust I seeks to provide capital appreciation and current income consistent with its current asset allocation.

Investment strategy

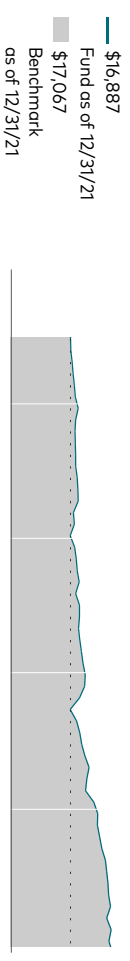
The trust invests in other Vanguard mutual funds and trusts according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2065 (the target year). The trust's asset allocation will become more conservative over time, meaning that the percentage of assets allocated to stocks will decrease while the percentage of assets allocated to bonds and other fixed income investments will increase. Within seven years after 2065, the trust's asset allocation should resemble that of the Target Retirement Income Trust I. The underlying holdings are: Vanguard Total Stock Market Index Fund, Vanguard Total Bond Market II Index Fund, Vanguard Institutional Total International Stock Market Index Trust II, Vanguard Total International Bond II Index Fund, and Vanguard Short-Term Inflation-Protected Securities Fund.

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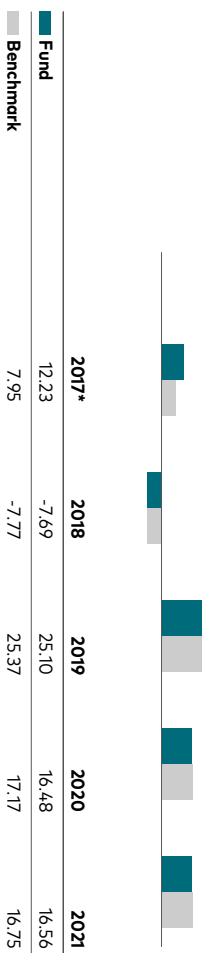
Benchmark

Target Retirement 2065 Composite Ix

Growth of a \$10,000 investment : July 31, 2017 –December 31, 2021



Annual returns



Total returns

Periods ended September 30, 2022

	Quarter	Year to date	One year	Three years	Five years	Since inception
Fund	-6.62%	-24.39%	-20.11%	3.51%	4.51%	5.65%
Benchmark	-6.21%	-24.04%	-19.81%	3.97%	4.84%	—

The performance data shown represent past performance, which is not a guarantee of future results.

Investment returns and principal value will fluctuate, so investors' shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than the performance data cited.

For performance data current to the most recent month-end, visit our website at [vanguard.com/performance](https://www.vanguard.com/performance).

The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index.

Figures for periods of less than one year are cumulative returns. All other figures represent average annual returns. Performance figures include the reinvestment of all dividends and any capital gains distributions. All returns are net of expenses.

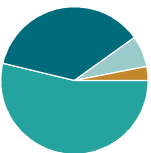
* Partial return since fund started, July 21, 2017.

Target Retirement 2065 Composite Ix: Derived by applying the fund's target asset allocation to the results of the following benchmarks: the FTSE Global All Cap ex US Index for international stocks, the Bloomberg U.S. Aggregate Float Adjusted Index for U.S. bonds, the Bloomberg Global Aggregate ex-USD Float Adjusted Index Hedged for international bonds, and the CRSP US Total Market Index for U.S. stocks. International stock benchmark returns are adjusted for withholding taxes.

Vanguard Target Retirement 2065 Trust I

Balanced fund (stocks and bonds)

Allocation of underlying funds



Total Stock Market Index Plus	53.8%	Total Bond Market II Index	6.8
Inst Ttl Intl Stk Idx Trust II	36.3	Total Intl Bnd II	3.1

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Plain talk about risk

The trust is subject to several stock and bond market risks, any of which could cause an investor to lose money. However, based on the trust's current allocation between stocks and the less volatile asset class of bonds, the trust's overall level of risk should be higher than those funds that invest mostly in bonds, but lower than those investing mostly in stocks. As the trust's allocation between underlying funds gradually changes, the trust's overall level of risk also will decline. In addition to the risks inherent in the asset classes of the underlying funds, the trust also is subject to asset allocation risk, which is the chance that the selection of underlying funds and the allocation of fund assets will cause the trust to underperform other funds with a similar investment objective. Investments in Target Retirement Trusts are subject to the risks of their underlying funds. The year in the trust name refers to the approximate year 2065 when an investor in the trust would retire and leave the workforce. The trust will gradually shift its emphasis from more aggressive investments to more conservative ones based on its target date. An investment in the Target Retirement Trust 2065 is not guaranteed at any time, including on or after the target date.

Note on frequent trading restrictions

Frequent trading policies may apply to those funds offered as investment options within your plan. Please log on to [vanguard.com](https://www.vanguard.com) for your employer plans or contact Participant Services at 800-523-1188 for additional information.

This investment is not a mutual fund. It is a collective trust available only to tax-qualified plans and their eligible participants.

This collective trust is managed by Vanguard Fiduciary Trust Company, a wholly owned subsidiary of The Vanguard Group, Inc., and is not a mutual fund. Investment objectives, risks, charges, expenses, and other important information should be considered carefully before investing.

For more information about Vanguard Investments, see below for which situation is right for you.

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Vanguard Target Retirement 2065 Trust II

Balanced fund (stocks and bonds)

Fund facts

Risk level		Total net assets		Expense ratio as of 03/31/21		Inception date		Fund number	
Low ← → High		\$600 MM		0.075%		07/17/17		1794	
1	2	3	4	5					

Investment objective

Vanguard Target Retirement 2065 Trust II seeks to provide capital appreciation and current income consistent with its current asset allocation.

Investment strategy

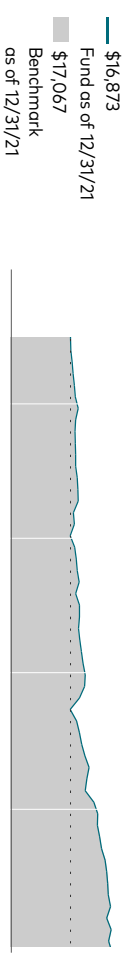
The trust invests in other Vanguard mutual funds and trusts according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2065 (the target year). The trust's asset allocation will become more conservative over time, meaning that the percentage of assets allocated to stocks will decrease while the percentage of assets allocated to bonds and other fixed income investments will increase. Within seven years after 2065, the trust's asset allocation should resemble that of the Target Retirement Income Trust II. The underlying holdings are: Vanguard Total Stock Market Index Fund, Vanguard Total Bond Market II Index Fund, Vanguard Institutional Total International Stock Market Index Trust II, Vanguard Total International Bond II Index Fund, and Vanguard Short-Term Inflation-Protected Securities Fund.

The trust's indirect bond holdings are a diversified mix of short-, intermediate-, and long-term U.S. government, U.S. agency, and investment-grade U.S. corporate bonds; inflation-protected public obligations issued by the U.S. Treasury; mortgage-backed and asset-backed securities; and government, agency, corporate, and securitized investment-grade foreign bonds issued in currencies other than the U.S. dollar (but hedged by Vanguard to minimize foreign currency exposure). The trust's indirect stock holdings are a diversified mix of U.S. and foreign large-, mid-, and small-capitalization stocks.

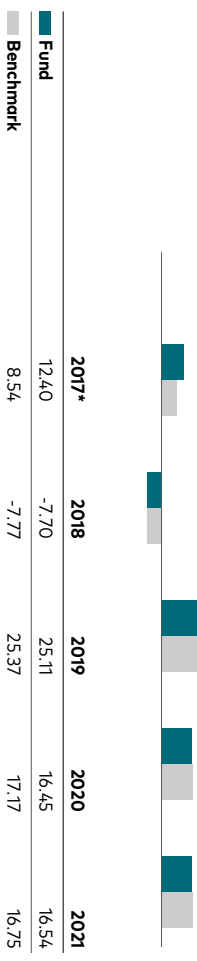
Benchmark

Target Retirement 2065 Composite Ix

Growth of a \$10,000 investment : July 31, 2017 –December 31, 2021



Annual returns



Total returns

	Periods ended September 30, 2022					
	Quarter	Year to date	One year	Three years	Five years	Since inception
Fund	-6.59%	-24.38%	-20.10%	3.50%	4.50%	5.66%
Benchmark	-6.21%	-24.04%	-19.81%	3.97%	4.84%	—

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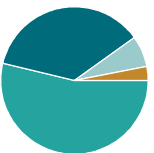
* Partial return since fund started, July 17, 2017.

Target Retirement 2065 Composite Ix: Derived by applying the fund's target asset allocation to the results of the following benchmarks: the FTSE Global All Cap ex US Index for international stocks, the Bloomberg U.S. Aggregate Float Adjusted Index for U.S. bonds, the Bloomberg Global Aggregate ex-USD Float Adjusted Index Hedged for international bonds, and the CRSP US Total Market Index for U.S. stocks. International stock benchmark returns are adjusted for withholding taxes.

Vanguard Target Retirement 2065 Trust II

Balanced fund (stocks and bonds)

Allocation of underlying funds



Total Stock Market Index Plus	53.8%	Total Bond Market II Index	6.8
Inst Ttl Intl Stk Idx Trust II	36.3	Total Intl Bnd II	3.1

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Vanguard Target Retirement 2070 Trust II

Balanced fund (stocks and bonds)

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Plain talk about risk

The trust is subject to several stock and bond market risks, any of which could cause an investor to lose money. However, based on the trust's current allocation between stocks and the less volatile asset class of bonds, the trust's overall level of risk should be higher than those funds that invest mostly in bonds, but lower than those investing mostly in stocks. As the trust's allocation between underlying funds gradually changes, the trust's overall level of risk also will decline. In addition to the risks inherent in the asset classes of the underlying funds, the trust also is subject to asset allocation risk, which is the chance that the selection of underlying funds and the allocation of fund assets will cause the trust to underperform other funds with a similar investment objective. Investments in Target Retirement Trusts are subject to the risks of their underlying funds. The year in the trust name refers to the approximate year 2070 when an investor in the trust would retire and leave the workforce. The trust will gradually shift its emphasis from more aggressive investments to more conservative ones based on its target date. An investment in the Target Retirement 2070 Trust II is not guaranteed at any time, including on or after the target date.

Note on frequent trading restrictions

Frequent trading policies may apply to those funds offered as investment options within your plan. Please log on to [vanguard.com](https://www.vanguard.com) for your employer plans or contact Participant Services at 800-523-1188 for additional information.

This investment is not a mutual fund. It is a collective trust available only to tax-qualified plans and their eligible participants.

For more information about Vanguard funds or to obtain a prospectus, see below for which situation is right for you.
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If you receive your retirement plan statement from a service provider other than Vanguard or log on to a recordkeeper's website that is not Vanguard to view your plan, please call **855-402-2646**.

Visit [vanguard.com](https://www.vanguard.com) to obtain a prospectus or, if available, a summary prospectus. Investment objectives, risks, charges, expenses, and other important information about a fund are contained in the prospectus; read and consider it carefully before investing.

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PLEASE CONTACT YOUR HYAS GROUP CONSULTANT FOR A COPY OF A FUND'S PROSPECTUS.

PLEASE READ THE PROSPECTUS AND CONSIDER THE FUND'S INVESTMENT OBJECTIVES, RISKS, CHARGES AND EXPENSES CAREFULLY BEFORE INVESTING. THE PROSPECTUS CONTAINS THIS AND OTHER IMPORTANT INFORMATION ABOUT THE FUND.

Performance. Performance results illustrated herein do not reflect a deduction of any investment advisory fees charged by Hyas Group or any investment manager but do include the fund's internal expenses. Performance results are annualized for time periods greater than one year and include all cash and cash equivalents, realized and unrealized capital gains and losses, and dividends, interest, and income. The investment results depicted herein represent historical performance. As a result of recent market activity, current performance may vary from the figures shown. Past performance is not a guarantee of future results.

The underlying fund's internal expenses (also known as the expense ratio) generally covers investment management fees, marketing, and distribution fees (also known as 12b-1 fees) and other operating expenses of the fund. The expense ratios being displayed for mutual funds reflect each fund's prospectus "net" expenses as provided by Morningstar. Such "net" expenses are subject to change and may increase at any time.

To learn more about the Hyas Group advisory services, please see the Hyas Group ADV Brochure for more information. It is available from your Hyas Group Consultant.

Performance data quoted is historical. Past performance does not guarantee future results. Current performance may be higher or lower than the performance quoted. You can obtain performance data current to the most recent month-end for each fund by visiting the fund company website. The investment return and principal value of an investment will fluctuate such that an investor's shares, when redeemed, may be worth more or less than their original cost. Total returns include reinvestment of dividends and capital gains and are net of all fund fees and expenses.

Performance figures are based on Net Asset Value (NAV) within a qualified retirement plan. If an individual were to purchase shares outside of a qualified plan, they would likely be subject to all, or a portion of, any applicable sales charges. These charges would lower the performance indicated above.

Each fund's performance may, from time to time, have been affected significantly by material market and economic conditions, including interest rates, market trends, and general business and economic cycles, which may or may not be repeated in the future. Also, keep in mind that any double-digit returns are highly unusual and cannot be sustained. Such returns are primarily achieved during favorable market conditions.

Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment. Index returns include the reinvestment of all dividends, but do not reflect the payment of transaction costs, advisory fees or expenses that are associated with an investment. The indices selected by Hyas Group to measure performance are representative of broad asset classes. Hyas Group retains the right to change representative indices at any time. Performance of indices may be more or less volatile than any investment product. The risk of loss in value of a specific investment is not the same as the risk of loss in a broad market index. Therefore, the historical returns of an index will not be the same as the historical returns of a particular investment a client selects. Past performance does not guarantee future results.

The "Investment Policy Statement Compliance Report" indicates funds that are on the Plan's Watch List, as based on investment monitoring criteria which is provided to Hyas Group by the plan sponsor. The plan sponsor should inform its Hyas Group Consultant of any changes to the plan's investment policy.

Fund data provided by Morningstar.

Peer Groups. Peer Groups are a collection of similar investment strategies that essentially group investment products that share the same investment approach. Peer Groups are used for comparison purposes to compare and illustrate a client's investment portfolio versus its peer across various quantitative metrics like performance and risk. Peer Group comparison is conceptually another form of benchmark comparison whereby the actual investment can be ranked versus its peer across various quantitative metrics.

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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