

**HYAS**  
GROUP

## **COUNTY OF SAN BERNARDINO**

**Combined Retirement and RMT Plans**

December 31, 2019 Performance Report

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# Section 1


**DIVERSIFICATION – THE BROKEN DECADE?**

We've been indoctrinated through financial theory and literature that diversification is essential to investing success. However, in the 2010's it bluntly has not worked. In the past decade, US equities (S&P 500 Index) have generated an annualized return of 13.5% vs. 4.9% for the rest of the world (MSCI ACWI ex-US). This includes outperformance in 8 of 10 calendar years. With the emergence of China as a global economic power and historically unprecedented growth rates, surely emerging market returns have added additional value to investor portfolios? Not exactly. Emerging markets have generated annualized returns of 3.6% over the past decade, averaging nearly 10% less than the US market per year. Beyond geographic diversification, we are also generally taught that diversifying across business sectors and market capitalizations is essential for risk-adjusted performance. During the 2010's small cap stocks generated annualized returns of 11.8% lagging their large cap brethren by nearly 2% per year, while Technology stocks handily outpaced all others to provide consistent market leadership throughout the decade.

Technology and innovation are the threads that run through and tie these performance differences together. While narrow market leadership is not a new phenomenon (look no further than the prior Technology bubble of the 1990s), the emergence of a handful of Technology companies, domiciled in the US and operating on a global platform, with few if any competitors has driven extensive profit growth in the US. Cumulative earnings growth for the S&P 500 for the past 10 years is 111% vs. total stock returns of 134%. Point being, P/E expansion has been moderate, and gains have been largely supported by strong earnings fundamentals of innovative global companies. Technology stocks with global market presence continue to make up a much larger percentage of the US stock market than other developed markets. Based on GICS statistics, Technology stocks represent roughly 25-30% of the domestic stock market. For comparison, Technology represents 5-10% of developed European markets and 10-15% in Japan. Not only are these innovators higher percentages of the domestic equity markets, but US Technology companies also consistently generate higher returns on assets. The combination of significantly higher returns on assets and higher market weights currently provide a structural advantage for domestic equity markets relative to the rest of the developed world.

**RETURN ON ASSETS (%)**

COUNTRY	CONSUMER STAPLES	CONSUMER DISCRETIONARY	TECHNOLOGY	HEALTHCARE	COMMUNICATION SVCS	FINANCIALS
US	5.9	6.1	9.8	5.6	5.6	1.2
EUROPE	6.3	4.2	5.3	5.5	1.6	0.4
JAPAN	3.5	3.6	4.3	4.2	4.1	0.3

Source: Bloomberg, December 31, 2019.

While diversification is not broken, a globalized economy demands and rewards innovators with higher returns on assets and larger end markets (growth opportunities). Companies demonstrating innovation and the ability to expand into global markets should be expected to generate structurally higher returns over longer time periods. This would also suggest the market indices on which these companies trade will outperform over the long-term. There is a strong case to be made that the superior domestic returns of the 2010's merely reflect US leadership in innovative global Technology companies. Investors are then left to evaluate whether that leadership is sustainable and whether those leaders remain reasonably priced.

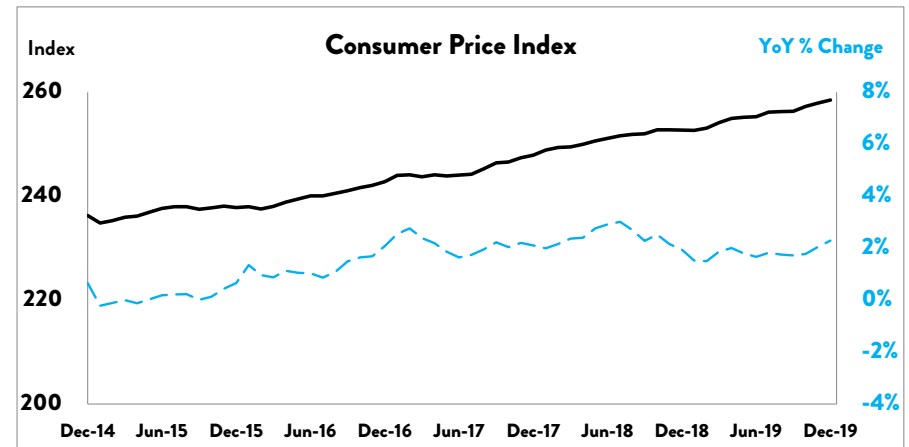
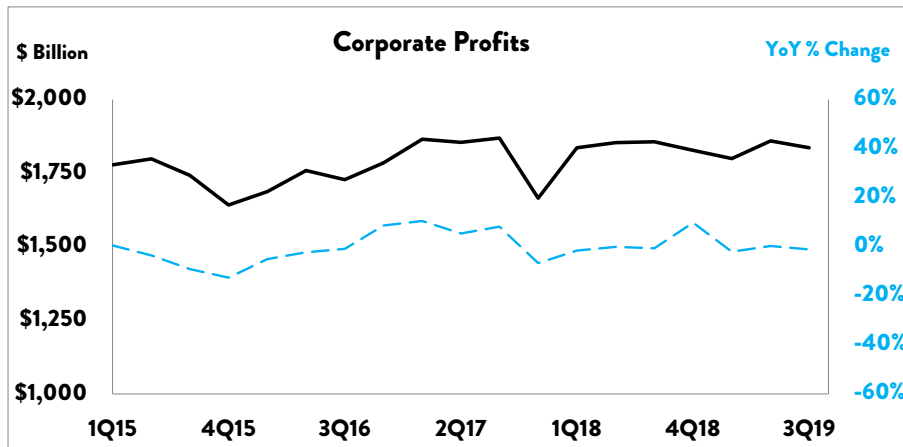
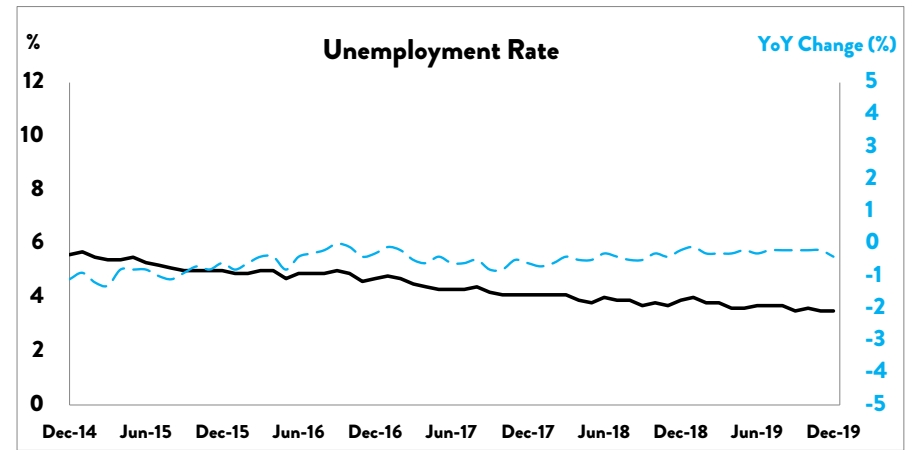
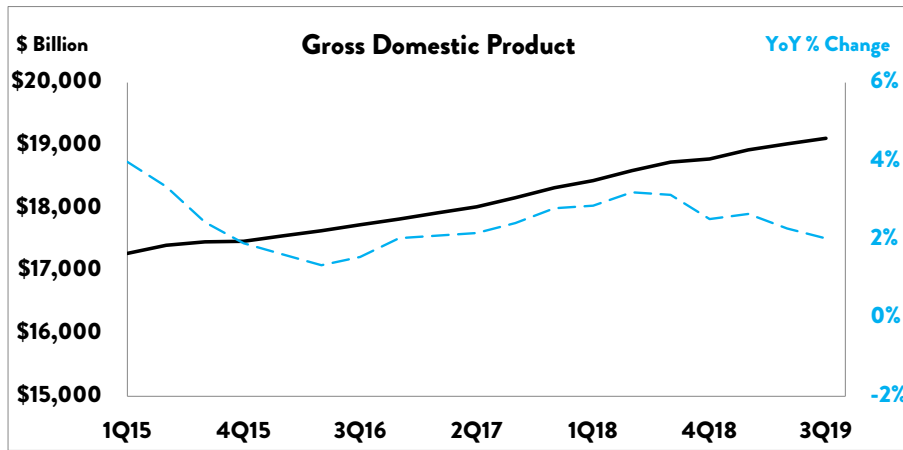
## GLOBAL ECONOMIC LANDSCAPE

- After raising rates in December of 2018, the Federal Reserve (Fed) indicated that investors should expect multiple interest rate hikes in 2019. After a subsequent stock market collapse the Fed responded with a more neutral stance of no rate hikes in 2019. This “pause” then turned to a full “pivot” as global economic growth appeared to stall and turn negative. The Fed pivot resulted in three rate cuts in 2019 that essentially erased all the Fed’s rate increases of 2018.
- The unemployment rate held steady at 3.5% to end the year, its lowest reading since December 1969. This is well below the 50-year average rate of 6.2% and indicates an economy operating near full capacity. Contrary to popular opinion, this economy has benefited a broad range of employees. Unemployment for those with less than a high school education recently declined to 5.3%, a 30-year low. Wage growth continued its deliberate rise and now stands at 3.7%, just shy of its 50-year average rate of 4.0%.
- After much anticipation and plenty of false starts, the US and China agreed to a “Phase One” trade deal in December. In some small or not so small way, global investors may have pigs to thank for this progress. More specifically, China has come down with African swine fever, but this goes far beyond a prescription and extended bed rest. The fever has wiped out nearly half of China’s domestic pig herd in just over a year. China is the largest global pork consumer and local pork prices have increased over 100% in the last year. This has driven consumer price inflation (CPI) in China to 4.5% YOY, well above the central bank’s 3.0% target. Excluding the price increases of pork, CPI rose at a mere 1.0%. With higher inflation, China has less tolerance for the inflationary impact of a trade war.

## GLOBAL FINANCIAL MARKETS

- Over the last 20 years, the 50 largest stocks in the Russell 3000 Index have averaged a combined total market cap of roughly four times the total market cap of the Russell 2000. At the end of 2019, that ratio was more than six times – higher than it was even at the height of the internet bubble of 2000.
- Despite domestic equity markets demonstrating historically high operating earnings and margins, valuations remain consistently above historical averages. The current forward price/earnings ratio for the S&P 500 Index is 18.2 times expected 2020 earnings. This compares to the 25-year average of 16.3. Price-to-book and price-to-cash flow also remain well above their historical averages.
- Developed market interest rates have declined consistently over the past decade, with several countries declining into negative rate territory. Declining interest rates have been strongly correlated to outperformance by momentum growth and low volatility stocks at the expense of value stocks. In the fourth quarter, global rates reversed course across nearly all developed markets. Correlations followed suit, with value stocks performing especially well versus low volatility stocks.
- Yield seekers with a penchant for volatility continue to be well rewarded for investing in emerging market debt. Despite the high-profile collapse of Argentinian debt, which saw bond prices cut in half in 3Q2019, the Barclays EM Debt Index rose over 2.0% for the quarter and 13.0% for the year. This often-dismissed asset class has benefited from significant gains in breadth. The asset class has five times more countries than at its inception in 1993 while the maximum weight to any single country has declined from 20.0% to less than 5.0%.

# 4Q2019 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	145,000	351,000	14,000	200,500	Dec-19
Unemployment Rate	3.5%	5.7%	3.5%	4.4%	Dec-19
Median Unemployment Length (Weeks)	8.4	13.5	6.6	10.2	Dec-19
Average Hourly Earnings	\$28.32	\$28.32	\$24.75	\$26.41	Dec-19

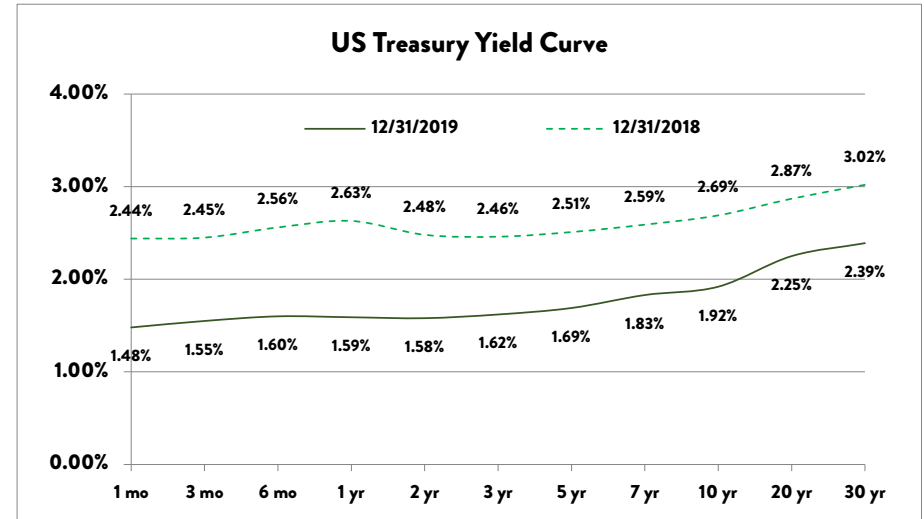
Source: Federal Reserve Bank of St. Louis and Bureau of Labor Statistics

Other Prices and Indexes (Monthly)					
Category	Recent	5-Yr High	5-Yr Low	% Off Peak	Date
Gas: Price per Gallon	\$2.54	\$2.88	\$1.79	-11.9%	Dec-19
Spot Oil	\$59.88	\$70.98	\$30.32	-15.6%	Dec-19
Case-Shiller Home Price Index	218.1	218.1	173.1	26.0%*	Oct-19
Medical Care CPI	511.7	511.7	441.0	16%*	Dec-19

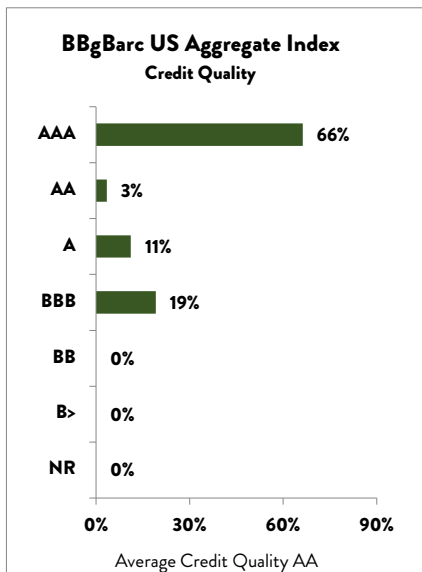
\*% Off Low

# 4Q2019 Bond Market Data

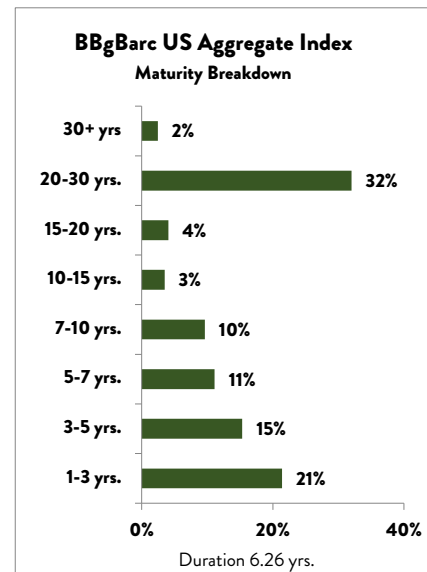
Index	QTR	YTD	1 yr.	3 yrs.	5 yrs.	10 yrs.
90-Day T-Bill	0.46%	2.30%	2.30%	1.57%	0.99%	0.54%
BBgBarc US Aggregate	0.18%	8.72%	8.72%	4.03%	3.05%	3.75%
BBgBarc Short US Treasury	0.50%	2.46%	2.46%	1.71%	1.16%	0.67%
BBgBarc Int. US Treasury	0.01%	5.22%	5.22%	2.57%	1.99%	2.46%
BBgBarc Long US Treasury	-4.12%	14.83%	14.83%	6.95%	4.13%	7.01%
BBgBarc US TIPS	0.79%	8.43%	8.43%	3.32%	2.62%	3.36%
BBgBarc US Credit	1.05%	13.80%	13.80%	5.75%	4.39%	5.32%
BBgBarc US Mortgage-Backed	0.71%	6.35%	6.35%	3.25%	2.58%	3.15%
BBgBarc US Asset-Backed	0.39%	4.53%	4.53%	2.61%	2.22%	2.72%
BBgBarc US 20-Yr Municipal	0.65%	9.29%	9.29%	5.89%	4.39%	5.46%
BBgBarc US High Yield	2.61%	14.32%	14.32%	6.37%	6.13%	7.57%
BBgBarc Global	0.49%	6.84%	6.84%	4.27%	2.31%	2.48%
BBgBarc International	0.67%	5.09%	5.09%	4.36%	1.62%	1.50%
BBgBarc Emerging Market	2.09%	13.11%	13.11%	6.07%	5.84%	6.62%



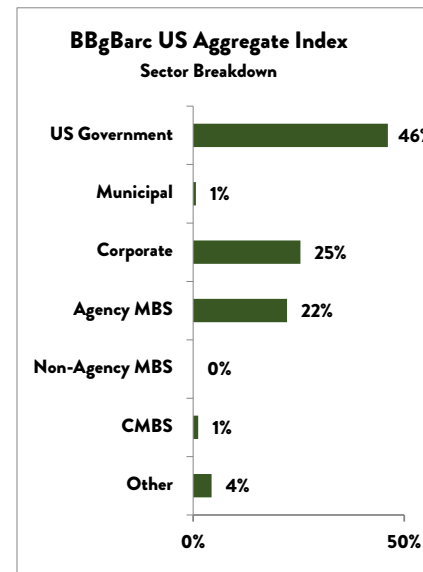
Source: Department of US Treasury



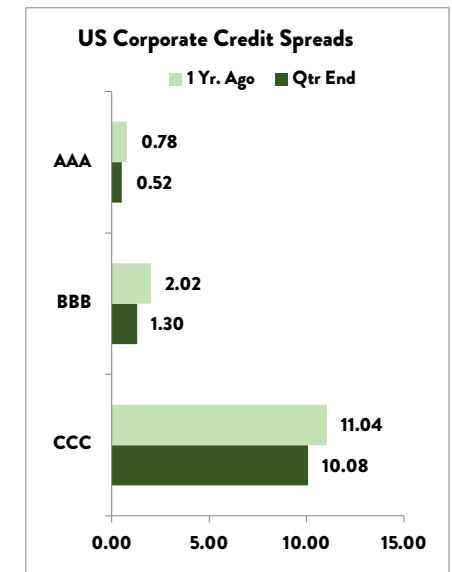
Source: Morningstar



Source: Morningstar



Source: Morningstar



Source: Federal Reserve / Bank of America

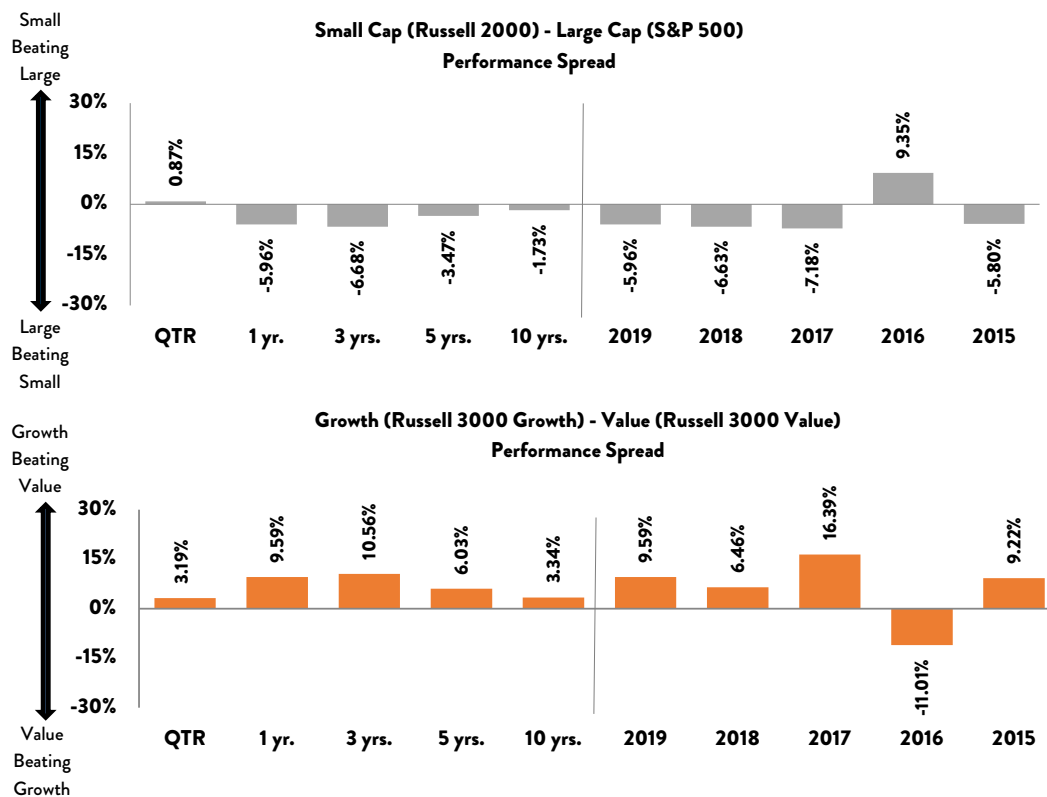
# 4Q2019 US Equity Market Data

## Sectors Weights/Returns (ranked by quarter performance)

	Wgt.	Sector	Performance		
			QTR	YTD	1 yr.
<b>S&amp;P 500 Index</b>	23%	Information Technology	14.40%	50.29%	50.29%
	14%	Health Care	14.37%	20.82%	20.82%
	13%	Financials	10.47%	32.13%	32.13%
	10%	Communication Services	9.00%	32.69%	32.69%
	3%	Materials	6.38%	24.58%	24.58%
	9%	Industrials	5.53%	29.37%	29.37%
	4%	Energy	5.49%	11.81%	11.81%
	10%	Consumer Discretionary	4.47%	27.94%	27.94%
	7%	Consumer Staples	3.51%	27.61%	27.61%
	3%	Utilities	0.75%	26.35%	26.35%
3%	Real Estate	-0.54%	29.01%	29.01%	
<b>S&amp;P Midcap 400 Index</b>	2%	Energy	13.27%	-12.43%	-12.43%
	16%	Information Technology	11.24%	42.91%	42.91%
	10%	Health Care	11.04%	22.68%	22.68%
	16%	Industrials	8.39%	33.55%	33.55%
	13%	Consumer Discretionary	7.76%	26.57%	26.57%
	6%	Materials	6.89%	20.88%	20.88%
	17%	Financials	5.15%	26.47%	26.47%
	2%	Communication Services	3.82%	16.29%	16.29%
	3%	Consumer Staples	3.03%	10.85%	10.85%
	11%	Real Estate	2.75%	24.17%	24.17%
5%	Utilities	-2.11%	14.33%	14.33%	
<b>S&amp;P Smallcap 600 Index</b>	12%	Health Care	14.06%	20.26%	20.26%
	14%	Information Technology	11.70%	39.59%	39.59%
	4%	Consumer Staples	8.53%	16.90%	16.90%
	18%	Financials	7.85%	20.52%	20.52%
	5%	Materials	7.44%	20.57%	20.57%
	17%	Industrials	7.27%	29.64%	29.64%
	14%	Consumer Discretionary	6.85%	17.64%	17.64%
	4%	Energy	6.50%	-14.77%	-14.77%
	2%	Communication Services	2.82%	5.77%	5.77%
	7%	Real Estate	2.77%	26.92%	26.92%
2%	Utilities	0.07%	22.99%	22.99%	

## Index Performance Data

Index	QTR	YTD	1 yr.	Annualized		
				3 yrs.	5 yrs.	10 yrs.
<b>S&amp;P 500</b>	9.07%	31.49%	31.49%	15.27%	11.70%	13.56%
<b>Russell 1000 Value</b>	7.41%	26.54%	26.54%	9.68%	8.29%	11.80%
<b>Russell 1000 Growth</b>	10.62%	36.39%	36.39%	20.49%	14.63%	15.22%
<b>Russell Mid Cap</b>	7.06%	30.54%	30.54%	12.06%	9.33%	13.19%
<b>Russell Mid Cap Value</b>	6.36%	27.06%	27.06%	8.10%	7.62%	12.41%
<b>Russell Mid Cap Growth</b>	8.17%	35.47%	35.47%	17.36%	11.60%	14.24%
<b>Russell 2000</b>	9.94%	25.52%	25.52%	8.59%	8.23%	11.83%
<b>Russell 2000 Value</b>	8.49%	22.39%	22.39%	4.77%	6.99%	10.56%
<b>Russell 2000 Growth</b>	11.39%	28.48%	28.48%	12.49%	9.34%	13.01%
<b>Russell 3000</b>	9.10%	31.02%	31.02%	14.57%	11.24%	13.42%
<b>DJ US Select REIT</b>	-1.23%	23.10%	23.10%	6.95%	6.40%	11.57%





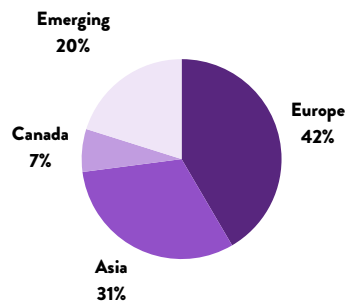
# 4Q2019 International Market Data

## Index Performance Data (net)

Index (US\$)	QTR	YTD	1 yr.	3 yrs.	5 yrs.	10 yrs.
<b>MSCI ACWI ex-US</b>	<b>8.92%</b>	<b>21.51%</b>	<b>21.51%</b>	<b>9.87%</b>	<b>5.51%</b>	<b>4.97%</b>
<b>MSCI EAFE</b>	<b>8.17%</b>	<b>22.01%</b>	<b>22.01%</b>	<b>9.56%</b>	<b>5.67%</b>	<b>5.50%</b>
<b>Europe</b>	<b>8.84%</b>	<b>23.77%</b>	<b>23.77%</b>	<b>9.77%</b>	<b>5.06%</b>	<b>5.17%</b>
United Kingdom	9.95%	21.05%	21.05%	8.32%	3.25%	5.05%
Germany	9.89%	20.77%	20.77%	6.27%	3.89%	5.18%
France	8.50%	25.72%	25.72%	12.19%	8.15%	4.99%
<b>Pacific</b>	<b>7.03%</b>	<b>19.25%</b>	<b>19.25%</b>	<b>9.35%</b>	<b>7.00%</b>	<b>6.33%</b>
Japan	7.64%	19.61%	19.61%	8.92%	7.70%	6.59%
Hong Kong	7.32%	10.34%	10.34%	11.47%	7.09%	8.12%
Australia	4.29%	22.92%	22.92%	9.07%	5.42%	5.01%
<b>Canada</b>	<b>4.89%</b>	<b>27.50%</b>	<b>27.50%</b>	<b>7.01%</b>	<b>2.97%</b>	<b>3.59%</b>
<b>MSCI EM</b>	<b>11.84%</b>	<b>18.42%</b>	<b>18.42%</b>	<b>11.57%</b>	<b>5.61%</b>	<b>3.68%</b>
<b>MSCI EM Latin America</b>	<b>10.48%</b>	<b>17.46%</b>	<b>17.46%</b>	<b>10.74%</b>	<b>4.18%</b>	<b>-0.65%</b>
<b>MSCI EM Asia</b>	<b>12.51%</b>	<b>19.24%</b>	<b>19.24%</b>	<b>12.92%</b>	<b>6.63%</b>	<b>5.76%</b>
<b>MSCI EM Eur/Mid East</b>	<b>8.49%</b>	<b>19.33%</b>	<b>19.33%</b>	<b>8.32%</b>	<b>5.68%</b>	<b>0.03%</b>
<b>MSCI ACWI Value ex-US</b>	<b>8.21%</b>	<b>15.71%</b>	<b>15.71%</b>	<b>6.88%</b>	<b>3.65%</b>	<b>3.64%</b>
<b>MSCI ACWI Growth ex-US</b>	<b>9.58%</b>	<b>27.34%</b>	<b>27.34%</b>	<b>12.89%</b>	<b>7.30%</b>	<b>6.24%</b>
<b>MSCI ACWI Sm Cap ex-US</b>	<b>11.01%</b>	<b>22.42%</b>	<b>22.42%</b>	<b>9.65%</b>	<b>7.04%</b>	<b>6.92%</b>

## Regional Exposure

MSCI ACWI ex-USA

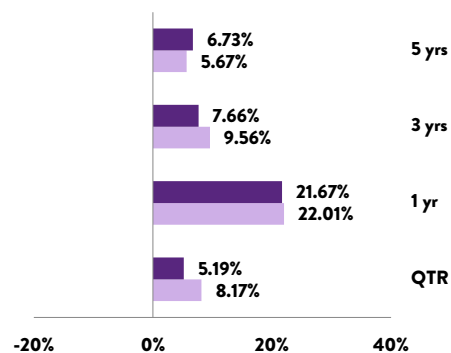


## Top 10 Countries (MSCI AC World ex-USA)

Japan	16%
UK	11%
China	9%
France	8%
Canada	6%
Switzerland	6%
Germany	6%
Australia	5%
Taiwan	3%
South Korea	3%

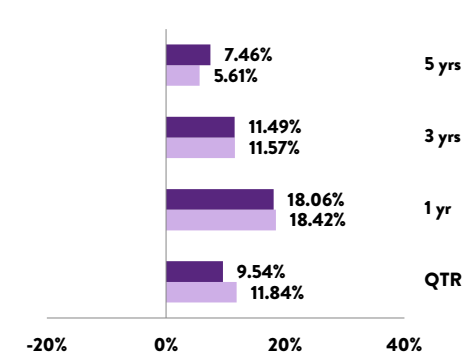
## MSCI EAFE Index Return

Local (Dark Purple) vs US\$ (Light Purple)

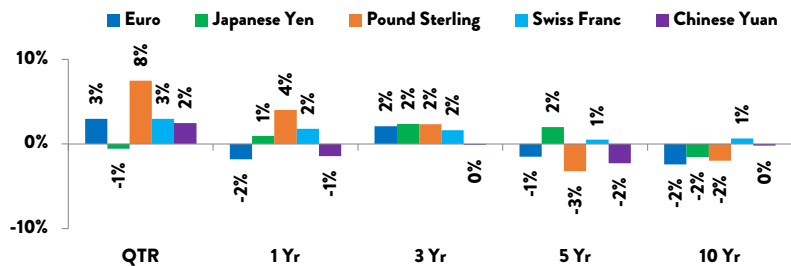


## MSCI Emerging Index Return

Local (Dark Purple) vs US\$ (Light Purple)

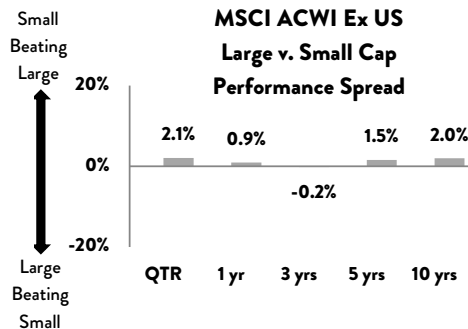


## Foreign Currency v. US\$ Returns

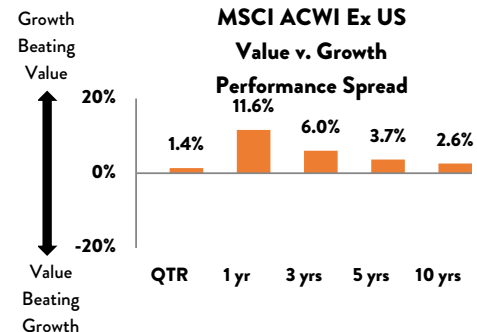


Exchange Rates	QTR	3Q19	2Q19	1Q19	4Q18	3Q18
<b>Japanese Yen</b>	108.67	108.11	107.84	110.68	109.70	113.48
<b>Euro</b>	0.89	0.92	0.88	0.89	0.87	0.86
<b>British Pound</b>	0.75	0.81	0.79	0.77	0.78	0.77
<b>Swiss Franc</b>	0.97	1.00	0.98	1.00	0.98	0.98
<b>Chinese Yuan</b>	6.96	7.15	6.87	6.71	6.88	6.87

## MSCI ACWI Ex US Large v. Small Cap Performance Spread



## MSCI ACWI Ex US Value v. Growth Performance Spread



# Historical Market Returns

Ranked by Performance

2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	4Q19
Emerging Markets 25.55%	Emerging Markets 34.00%	Emerging Markets 32.14%	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%	Emerging Markets 11.84%
Intl 20.91%	Commod. 21.36%	Intl 26.65%	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%	Small Cap 9.94%
Mid Cap 20.22%	Core Real Estate 20.15%	Small Cap 18.37%	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%	Large Cap 9.07%
Small Cap 18.33%	Intl 16.62%	Large Cap 15.79%	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%	Intl 8.92%
Global Balanced 12.18%	Mid Cap 12.65%	Core Real Estate 15.27%	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%	Mid Cap 7.06%
Core Real Estate 12.00%	Large Cap 4.91%	Mid Cap 15.26%	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%	Global Balanced 5.33%
High Yield 11.13%	Small Cap 4.55%	Global Balanced 14.53%	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%	Commod. 4.42%
Large Cap 10.88%	Global Balanced 4.16%	High Yield 11.85%	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%	High Yield 2.61%
Global Bonds 9.27%	Cash 3.25%	Global Bonds 6.64%	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%	Core Real Estate 1.29%
Commod. 9.15%	TIPS 2.84%	Cash 4.85%	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%	TIPS 0.79%
TIPS 8.46%	High Yield 2.74%	US Bonds 4.33%	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%	Global Bonds 0.49%
US Bonds 4.34%	US Bonds 2.43%	Commod. 2.07%	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%	Cash 0.46%
Cash 1.44%	Global Bonds -4.49%	TIPS 0.41%	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%	US Bonds 0.18%

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

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# Section 2

# COUNTY OF SAN BERNARDINO

All Plans - Combined

# PLAN ASSET ALLOCATION

Fourth Quarter 2019

Fixed Income	Ticker	Assets	%
Stabilizer	-	\$279,248,920	22.5%
Voya Fixed Account	-	\$79,097,265	6.4%
Voya Government Money Market A	VYAXX	\$11,705	0.0%
Loomis Sayles Investment Grade Bond Y	LSIIX	\$27,544,650	2.2%
Invesco Oppenheimer International Bd R6	OIBIX	\$4,747,686	0.4%
Pioneer Global High Yield Y	GHYYX	\$7,078,006	0.6%
<b>Total</b>		<b>\$397,728,232</b>	<b>32.1%</b>

Large Cap	Ticker	Assets	%
Vanguard Institutional Index Instl Plus	VIIIX	\$126,725,981	10.2%
American Funds Growth Fund of America R6	RGAGX	\$115,481,438	9.3%
<b>Total</b>		<b>\$242,207,420</b>	<b>19.5%</b>

Mid Cap	Ticker	Assets	%
Vanguard Mid Cap Index Instl	VMCIX	\$63,788,852	5.1%
<b>Total</b>		<b>\$63,788,852</b>	<b>5.1%</b>

Small Cap	Ticker	Assets	%
Invesco Small Cap Value Y	VSMIX	\$8,341,283	0.7%
Vanguard Small Cap Index Instl	VSCIX	\$43,152,553	3.5%
Baron Growth Instl	BGRIX	\$38,400,180	3.1%
<b>Total</b>		<b>\$89,894,017</b>	<b>7.3%</b>

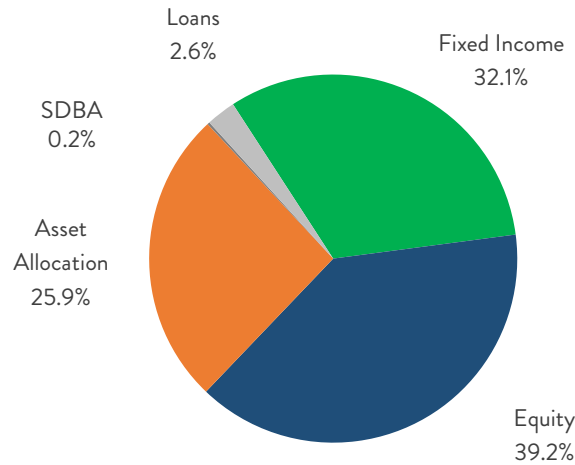
International	Ticker	Assets	%
Dodge & Cox International Stock	DODFX	\$12,026,897	1.0%
Vanguard Total Intl Stock Index I	VTSNX	\$26,615,122	2.1%
American Funds Capital World Gr & Inc R6	RWIGX	\$51,829,624	4.2%
<b>Total</b>		<b>\$90,471,643</b>	<b>7.3%</b>

Asset Allocation	Ticker	Assets	%
Conservative Allocation Portfolio	-	\$28,982,479	2.3%
Moderate Allocation Portfolio	-	\$83,892,714	6.8%
Aggressive Allocation Portfolio	-	\$59,849,924	4.8%
Vanguard Instl Target Retirement Income Instl	VITRX	\$6,099,647	0.5%
Vanguard Instl Target Retirement 2020 Instl	VITWX	\$28,978,933	2.3%
Vanguard Instl Target Retirement 2025 Instl	VRIVX	\$582,716	0.0%
Vanguard Instl Target Retirement 2030 Instl	VTTWX	\$45,248,285	3.6%
Vanguard Instl Target Retirement 2035 Instl	VITFX	\$380,655	0.0%
Vanguard Instl Target Retirement 2040 Instl	VIRSX	\$40,692,069	3.3%
Vanguard Instl Target Retirement 2045 Instl	VITLX	\$22,318	0.0%
Vanguard Instl Target Retirement 2050 Instl	VTRLX	\$26,326,685	2.1%
Vanguard Instl Target Retirement 2055 Instl	VIVLX	\$38,551	0.0%
Vanguard Instl Target Retirement 2060 Instl	VILVX	\$43,629	0.0%
Vanguard Instl Target Retirement 2065 Instl	VSXFX	\$49,909	0.0%
<b>Total</b>		<b>\$321,188,516</b>	<b>25.9%</b>

Miscellaneous	Ticker	Assets	%
Self-Directed Brokerage Account	-	\$2,557,175	0.2%
Participant Loans	-	\$32,006,196	2.6%
<b>Total</b>		<b>\$34,563,371</b>	<b>2.8%</b>

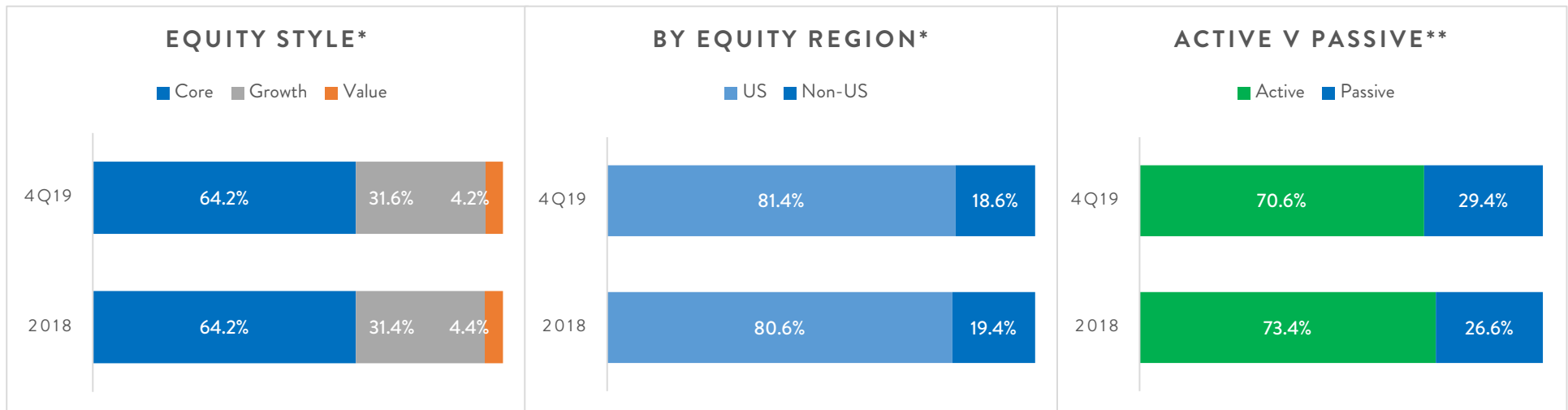
**TOTAL PLAN ASSETS**

**\$1,239,842,051**



HISTORICAL PLAN ALLOCATION

Asset Class	4Q19	2018	2017	2016	2015	2014	2013	2012
<b>Fixed Income</b>	32.1%	36.1%	N/A	N/A	N/A	N/A	N/A	N/A
<b>Large Cap</b>	19.5%	18.3%	N/A	N/A	N/A	N/A	N/A	N/A
<b>Mid Cap</b>	5.1%	4.7%	N/A	N/A	N/A	N/A	N/A	N/A
<b>Small Cap</b>	7.3%	6.5%	N/A	N/A	N/A	N/A	N/A	N/A
<b>International</b>	7.3%	7.1%	N/A	N/A	N/A	N/A	N/A	N/A
<b>Asset Allocation</b>	25.9%	24.2%	N/A	N/A	N/A	N/A	N/A	N/A
<b>SDBA</b>	0.2%	0.2%	N/A	N/A	N/A	N/A	N/A	N/A
<b>Loans</b>	2.6%	2.9%	N/A	N/A	N/A	N/A	N/A	N/A



\*Excludes Fixed Income, Asset Allocation, SDBA, and Loan assets

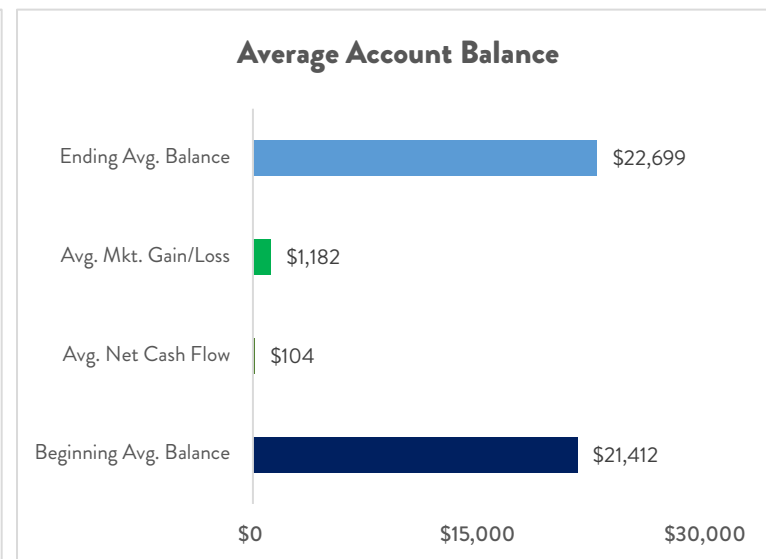
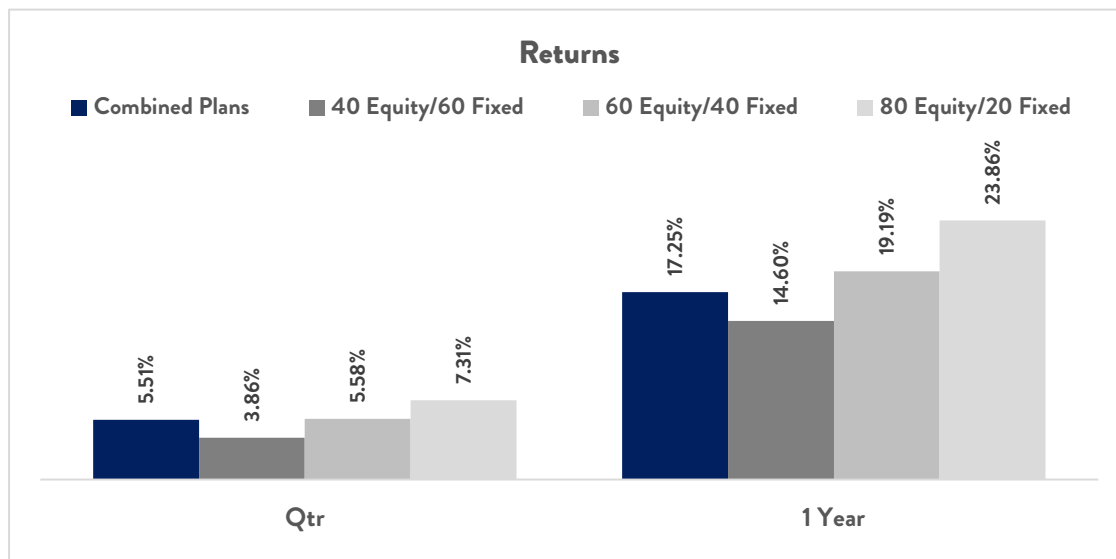
\*\*Excludes Asset Allocation, SDBA, and Loan assets

PLAN LEVEL CASH FLOWS

	Beginning Value	Cash Flow (+)	Cash Flow (-)	Transfer	Market Gain/Loss	Ending Value
<b>Fixed Income</b>	\$392,693,547	\$8,148,661	(\$8,409,124)	\$2,500,319	\$2,794,829	\$397,728,232
<b>Large Cap</b>	\$220,781,256	\$3,312,639	(\$2,839,244)	(\$1,415,475)	\$22,368,244	\$242,207,420
<b>Mid Cap</b>	\$59,497,830	\$918,036	(\$754,288)	\$35,946	\$4,091,328	\$63,788,852
<b>Small Cap</b>	\$82,982,740	\$1,557,584	(\$959,613)	(\$716,998)	\$7,030,305	\$89,894,017
<b>International</b>	\$83,658,640	\$1,455,217	(\$1,068,494)	(\$1,383,609)	\$7,809,888	\$90,471,643
<b>Asset Allocation</b>	\$297,267,413	\$8,486,901	(\$4,289,425)	\$1,068,338	\$18,655,289	\$321,188,516
<b>SDBA</b>	\$2,494,881	\$0	\$0	(\$88,521)	\$150,815	\$2,557,175
<b>Total</b>	\$1,139,376,305	\$23,879,038	(\$18,320,188)	\$0	\$62,900,699	\$1,207,835,855

HISTORICAL PLAN CASH FLOWS

	Beginning Value	Net Cash Flow	Market Gain/Loss	Ending Value
<b>4Q19</b>	\$1,139,376,305	\$5,558,850	\$62,900,699	\$1,207,835,855
<b>YTD</b>	\$1,007,761,280	\$24,519,560	\$175,555,015	\$1,207,835,855
<b>2018</b>	N/A	N/A	N/A	\$1,007,761,280
<b>2017</b>	N/A	N/A	N/A	N/A
<b>2016</b>	N/A	N/A	N/A	N/A
<b>2015</b>	N/A	N/A	N/A	N/A
<b>2014</b>	N/A	N/A	N/A	N/A



Equity Indices: Russell 3000, MSCI ACWI ex USA; Fixed Indices: US Treasury 3 Mo T-Bill, BBgBarc Global

Aggregate Bond (rebalanced quarterly)

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# COUNTY OF SAN BERNARDINO

## 457 Deferred Compensation Plan

# PLAN ASSET ALLOCATION

Fourth Quarter 2019

Fixed Income	Ticker	Assets	%
Stabilizer	-	\$196,578,743	22.7%
Loomis Sayles Investment Grade Bond Y	LSIIX	\$23,384,765	2.7%
Invesco Oppenheimer International Bd R6	OIBIX	\$3,834,433	0.4%
Pioneer Global High Yield Y	GHYYX	\$5,461,563	0.6%
<b>Total</b>		<b>\$229,259,504</b>	<b>26.5%</b>

Large Cap	Ticker	Assets	%
Vanguard Institutional Index Instl Plus	VIIIIX	\$102,403,252	11.8%
American Funds Growth Fund of America R6	RGAGX	\$92,763,341	10.7%
<b>Total</b>		<b>\$195,166,593</b>	<b>22.6%</b>

Mid Cap	Ticker	Assets	%
Vanguard Mid Cap Index Instl	VMCIX	\$50,812,497	5.9%
<b>Total</b>		<b>\$50,812,497</b>	<b>5.9%</b>

Small Cap	Ticker	Assets	%
Invesco Small Cap Value Y	VSMIX	\$6,387,054	0.7%
Vanguard Small Cap Index Instl	VSCIX	\$35,621,245	4.1%
Baron Growth Instl	BGRIX	\$31,377,590	3.6%
<b>Total</b>		<b>\$73,385,888</b>	<b>8.5%</b>

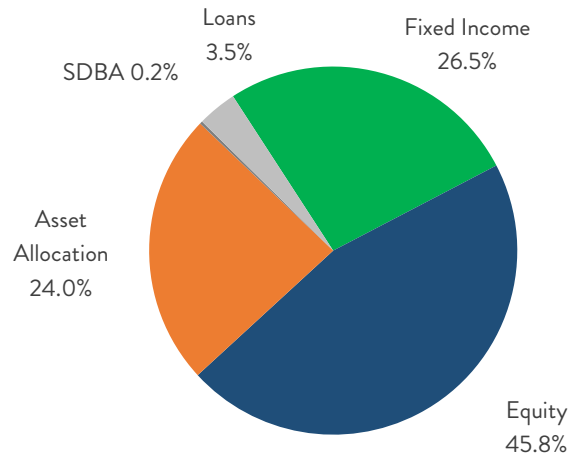
International	Ticker	Assets	%
Dodge & Cox International Stock	DODFX	\$9,888,085	1.1%
Vanguard Total Intl Stock Index I	VTSNX	\$22,505,814	2.6%
American Funds Capital World Gr & Inc R6	RWIGX	\$44,481,872	5.1%
<b>Total</b>		<b>\$76,875,771</b>	<b>8.9%</b>

Asset Allocation	Ticker	Assets	%
Conservative Allocation Portfolio	-	\$20,692,295	2.4%
Moderate Allocation Portfolio	-	\$62,805,664	7.3%
Aggressive Allocation Portfolio	-	\$46,743,883	5.4%
Vanguard Instl Target Retirement Income Instl	VITRX	\$3,625,066	0.4%
Vanguard Instl Target Retirement 2020 Instl	VITWX	\$12,020,820	1.4%
Vanguard Instl Target Retirement 2025 Instl	VRIVX	\$422,954	0.0%
Vanguard Instl Target Retirement 2030 Instl	VTTWX	\$18,133,421	2.1%
Vanguard Instl Target Retirement 2035 Instl	VITFX	\$112,143	0.0%
Vanguard Instl Target Retirement 2040 Instl	VIRSX	\$22,099,982	2.6%
Vanguard Instl Target Retirement 2045 Instl	VITLX	\$19,079	0.0%
Vanguard Instl Target Retirement 2050 Instl	VTRLX	\$20,405,266	2.4%
Vanguard Instl Target Retirement 2055 Instl	VIVLX	\$36,995	0.0%
Vanguard Instl Target Retirement 2060 Instl	VILVX	\$41,752	0.0%
Vanguard Instl Target Retirement 2065 Instl	VSXFX	\$49,505	0.0%
<b>Total</b>		<b>\$207,208,825</b>	<b>24.0%</b>

Miscellaneous	Ticker	Assets	%
Self-Directed Brokerage Account	-	\$2,079,554	0.2%
Participant Loans	-	\$29,916,362	3.5%
<b>Total</b>		<b>\$31,995,916</b>	<b>3.7%</b>

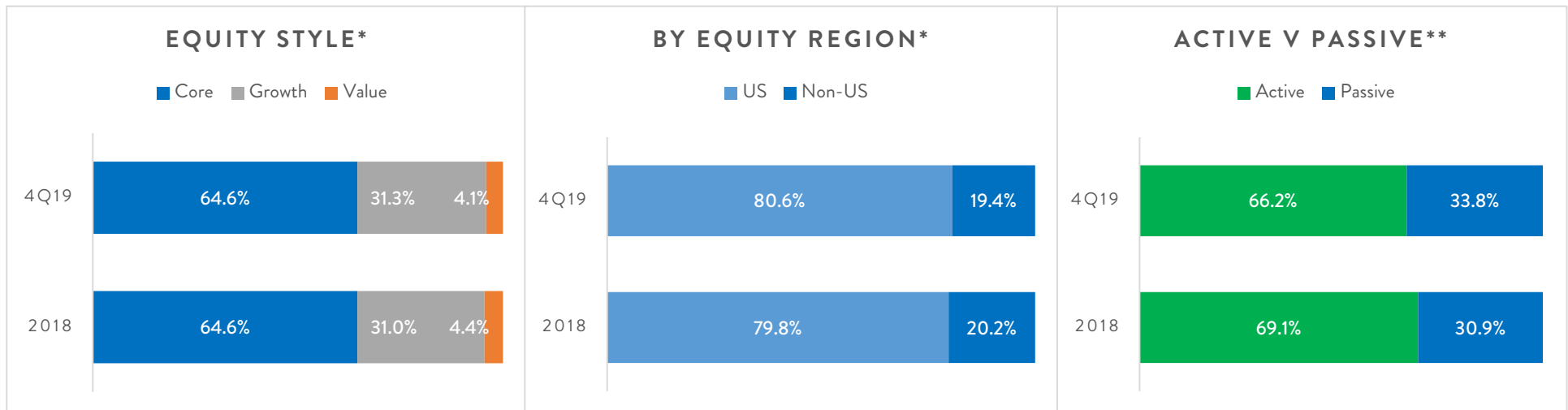
**TOTAL PLAN ASSETS**

**\$864,704,996**



HISTORICAL PLAN ALLOCATION

Asset Class	4Q19	2018	2017	2016	2015	2014	2013	2012
<b>Fixed Income</b>	26.5%	30.2%	N/A	N/A	N/A	N/A	N/A	N/A
<b>Large Cap</b>	22.6%	21.4%	N/A	N/A	N/A	N/A	N/A	N/A
<b>Mid Cap</b>	5.9%	5.4%	N/A	N/A	N/A	N/A	N/A	N/A
<b>Small Cap</b>	8.5%	7.6%	N/A	N/A	N/A	N/A	N/A	N/A
<b>International</b>	8.9%	8.7%	N/A	N/A	N/A	N/A	N/A	N/A
<b>Asset Allocation</b>	24.0%	22.5%	N/A	N/A	N/A	N/A	N/A	N/A
<b>SDBA</b>	0.2%	0.3%	N/A	N/A	N/A	N/A	N/A	N/A
<b>Loans</b>	3.5%	3.9%	N/A	N/A	N/A	N/A	N/A	N/A



\*Excludes Fixed Income, Asset Allocation, SDBA, and Loan assets

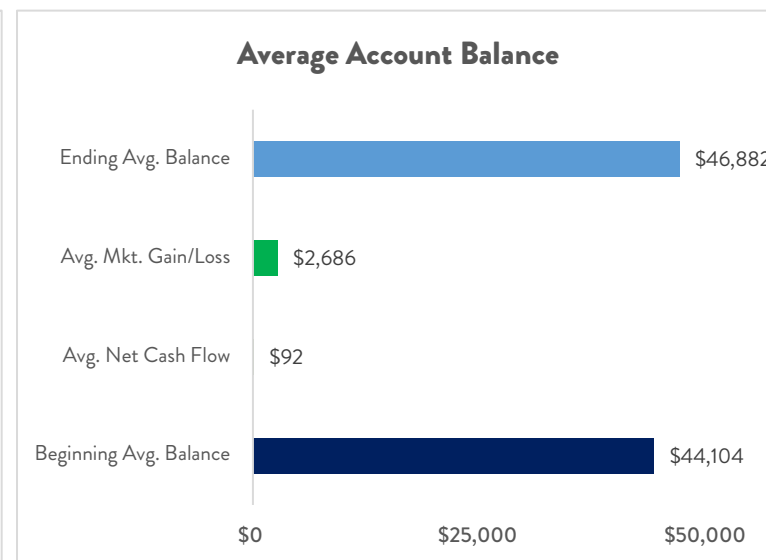
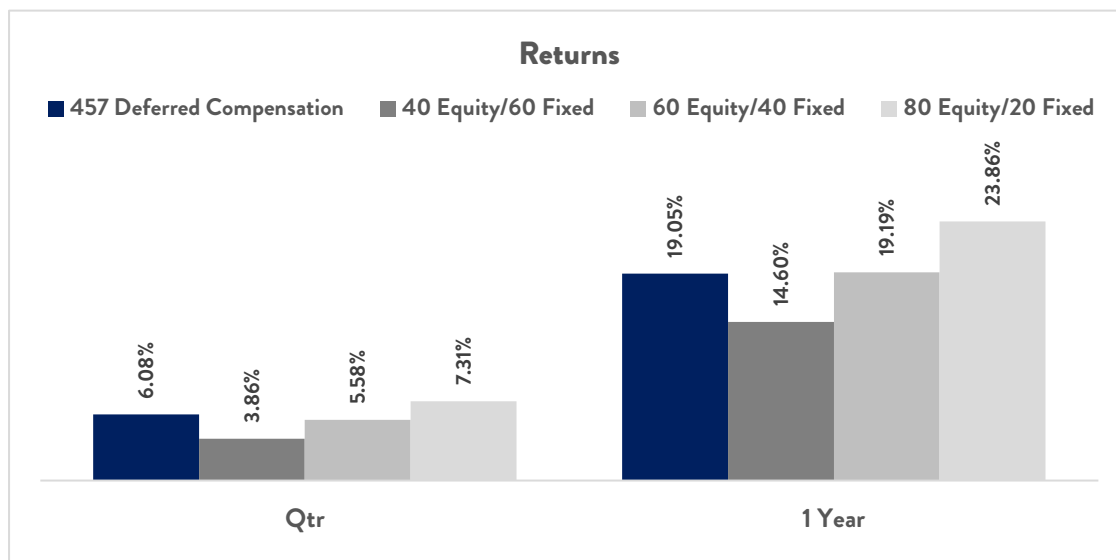
\*\*Excludes Asset Allocation, SDBA, and Loan assets

PLAN LEVEL CASH FLOWS

	Beginning Value	Cash Flow (+)	Cash Flow (-)	Transfer	Market Gain/Loss	Ending Value
<b>Fixed Income</b>	\$225,921,528	\$2,502,323	(\$5,133,762)	\$4,182,289	\$1,787,126	\$229,259,504
<b>Large Cap</b>	\$177,970,439	\$2,396,798	(\$2,459,217)	(\$755,545)	\$18,014,119	\$195,166,593
<b>Mid Cap</b>	\$47,318,396	\$743,164	(\$623,475)	\$119,138	\$3,255,274	\$50,812,497
<b>Small Cap</b>	\$68,042,414	\$1,242,626	(\$865,378)	(\$780,776)	\$5,747,003	\$73,385,888
<b>International</b>	\$71,247,075	\$1,205,408	(\$962,414)	(\$1,251,692)	\$6,637,394	\$76,875,771
<b>Asset Allocation</b>	\$192,812,415	\$6,729,540	(\$3,133,546)	(\$1,471,187)	\$12,271,604	\$207,208,825
<b>SDBA</b>	\$2,001,976	\$0	\$0	(\$42,226)	\$119,804	\$2,079,554
<b>Total</b>	\$785,314,243	\$14,819,859	(\$13,177,792)	\$0	\$47,832,324	\$834,788,633

HISTORICAL PLAN CASH FLOWS

	Beginning Value	Net Cash Flow	Market Gain/Loss	Ending Value
<b>4Q19</b>	\$785,314,243	\$1,642,066	\$47,832,324	\$834,788,633
<b>YTD</b>	\$691,312,582	\$10,850,129	\$132,625,923	\$834,788,633
<b>2018</b>	N/A	N/A	N/A	\$691,312,582
<b>2017</b>	N/A	N/A	N/A	N/A
<b>2016</b>	N/A	N/A	N/A	N/A
<b>2015</b>	N/A	N/A	N/A	N/A
<b>2014</b>	N/A	N/A	N/A	N/A



Equity Indices: Russell 3000, MSCI ACWI ex USA; Fixed Indices: US Treasury 3 Mo T-Bill, BBgBarc Global

Aggregate Bond (rebalanced quarterly)

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# COUNTY OF SAN BERNARDINO

## 401(a) Defined Contribution Plan

# PLAN ASSET ALLOCATION

Fourth Quarter 2019

Fixed Income	Ticker	Assets	%
Stabilizer	-	\$1,400,259	5.7%
Loomis Sayles Investment Grade Bond Y	LSIIX	\$154,140	0.6%
Invesco Oppenheimer International Bd R6	OIBIX	\$40,794	0.2%
Pioneer Global High Yield Y	GHYYX	\$49,585	0.2%
<b>Total</b>		<b>\$1,644,778</b>	<b>6.7%</b>

Large Cap	Ticker	Assets	%
Vanguard Institutional Index Instl Plus	VIIIX	\$726,072	2.9%
American Funds Growth Fund of America R6	RGAGX	\$477,128	1.9%
<b>Total</b>		<b>\$1,203,199</b>	<b>4.9%</b>

Mid Cap	Ticker	Assets	%
Vanguard Mid Cap Index Instl	VMCIX	\$380,944	1.5%
<b>Total</b>		<b>\$380,944</b>	<b>1.5%</b>

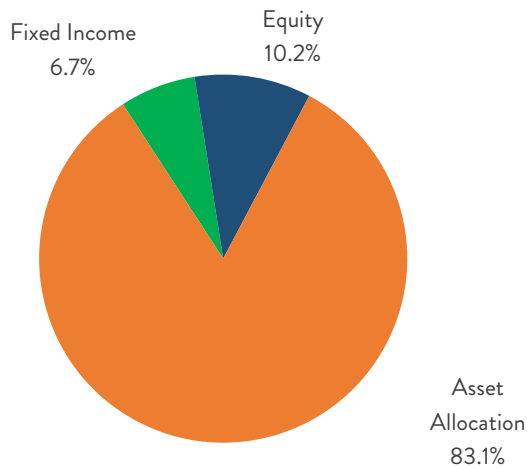
Small Cap	Ticker	Assets	%
Invesco Small Cap Value Y	VSMIX	\$113,975	0.5%
Vanguard Small Cap Index Instl	VSCIX	\$228,413	0.9%
Baron Growth Instl	BGRIX	\$250,714	1.0%
<b>Total</b>		<b>\$593,102</b>	<b>2.4%</b>

International	Ticker	Assets	%
Dodge & Cox International Stock	DODFX	\$61,033	0.2%
Vanguard Total Intl Stock Index I	VTSNX	\$156,219	0.6%
American Funds Capital World Gr & Inc R6	RWIGX	\$128,077	0.5%
<b>Total</b>		<b>\$345,329</b>	<b>1.4%</b>

Asset Allocation	Ticker	Assets	%
Conservative Allocation Portfolio	-	\$679,119	2.8%
Moderate Allocation Portfolio	-	\$998,959	4.1%
Aggressive Allocation Portfolio	-	\$960,719	3.9%
Vanguard Instl Target Retirement Income Instl	VITRX	\$607,905	2.5%
Vanguard Instl Target Retirement 2020 Instl	VITWX	\$3,757,058	15.2%
Vanguard Instl Target Retirement 2025 Instl	VRIVX	\$7,664	0.0%
Vanguard Instl Target Retirement 2030 Instl	VTTWX	\$6,221,141	25.2%
Vanguard Instl Target Retirement 2035 Instl	VITFX	\$609	0.0%
Vanguard Instl Target Retirement 2040 Instl	VIRSX	\$5,323,105	21.6%
Vanguard Instl Target Retirement 2045 Instl	VITLX	\$1,369	0.0%
Vanguard Instl Target Retirement 2050 Instl	VTRLX	\$1,917,655	7.8%
Vanguard Instl Target Retirement 2055 Instl	VIVLX	\$754	0.0%
Vanguard Instl Target Retirement 2060 Instl	VILVX	\$123	0.0%
Vanguard Instl Target Retirement 2065 Instl	VSXFX	\$314	0.0%
<b>Total</b>		<b>\$20,476,496</b>	<b>83.1%</b>

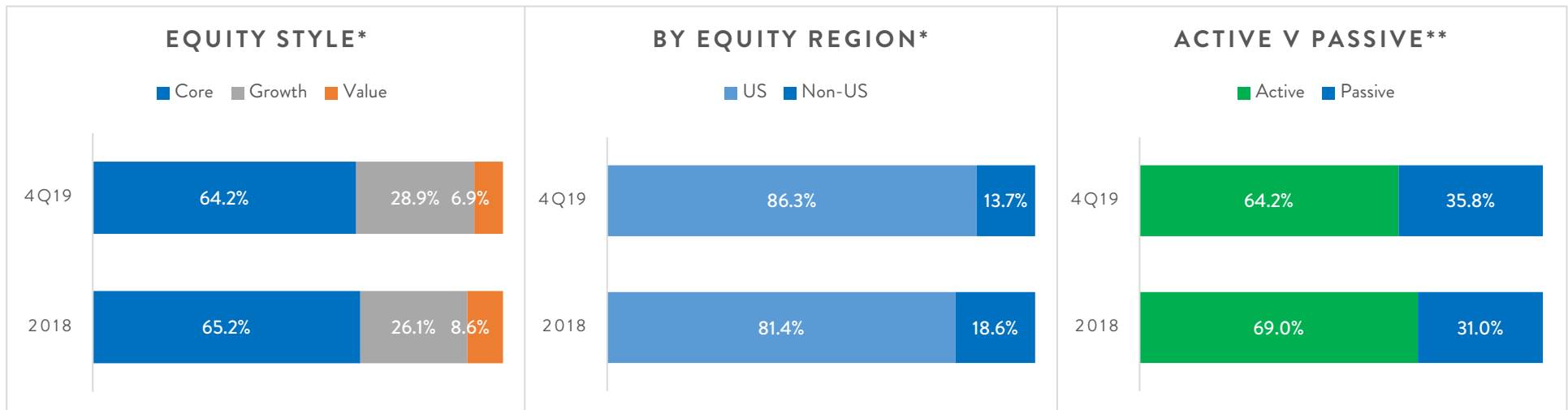
**TOTAL PLAN ASSETS**

**\$24,643,848**



HISTORICAL PLAN ALLOCATION

Asset Class	4Q19	2018	2017	2016	2015	2014	2013	2012
<b>Fixed Income</b>	6.7%	8.7%	N/A	N/A	N/A	N/A	N/A	N/A
<b>Large Cap</b>	4.9%	4.3%	N/A	N/A	N/A	N/A	N/A	N/A
<b>Mid Cap</b>	1.5%	1.4%	N/A	N/A	N/A	N/A	N/A	N/A
<b>Small Cap</b>	2.4%	1.9%	N/A	N/A	N/A	N/A	N/A	N/A
<b>International</b>	1.4%	1.7%	N/A	N/A	N/A	N/A	N/A	N/A
<b>Asset Allocation</b>	83.1%	82.0%	N/A	N/A	N/A	N/A	N/A	N/A



\*Excludes Fixed Income and Asset Allocation assets

\*\*Excludes Asset Allocation assets

# COUNTY OF SAN BERNARDINO

401(a) Defined Contribution Plan

# PLAN ASSET ALLOCATION

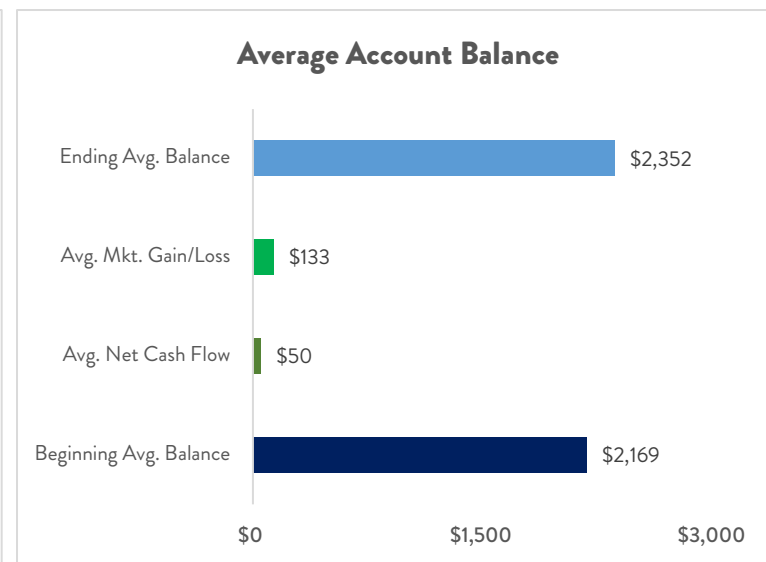
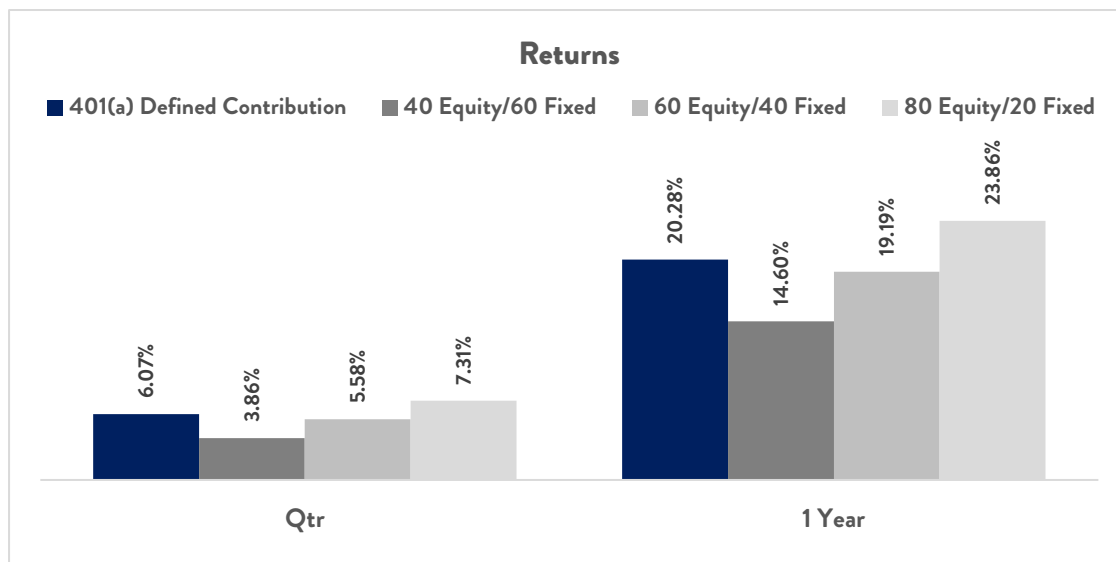
Fourth Quarter 2019

## PLAN LEVEL CASH FLOWS

	Beginning Value	Cash Flow (+)	Cash Flow (-)	Transfer	Market Gain/Loss	Ending Value
<b>Fixed Income</b>	\$1,628,067	\$41,698	(\$38,501)	(\$76)	\$13,591	\$1,644,778
<b>Large Cap</b>	\$1,059,485	\$41,853	(\$8,843)	\$3,036	\$107,668	\$1,203,199
<b>Mid Cap</b>	\$341,753	\$12,462	(\$610)	\$3,001	\$24,339	\$380,944
<b>Small Cap</b>	\$514,480	\$25,378	(\$848)	\$7,418	\$46,675	\$593,102
<b>International</b>	\$303,680	\$9,425	(\$278)	\$3,126	\$29,377	\$345,329
<b>Asset Allocation</b>	\$18,882,383	\$559,386	(\$121,892)	(\$16,504)	\$1,173,123	\$20,476,496
<b>Total</b>	\$22,729,847	\$690,201	(\$170,973)	\$0	\$1,394,773	\$24,643,848

## HISTORICAL PLAN CASH FLOWS

	Beginning Value	Net Cash Flow	Market Gain/Loss	Ending Value
<b>4Q19</b>	\$22,729,847	\$519,228	\$1,394,773	\$24,643,848
<b>YTD</b>	\$18,802,415	\$1,890,811	\$3,950,623	\$24,643,848
<b>2018</b>	N/A	N/A	N/A	\$18,802,415
<b>2017</b>	N/A	N/A	N/A	N/A
<b>2016</b>	N/A	N/A	N/A	N/A
<b>2015</b>	N/A	N/A	N/A	N/A



Equity Indices: Russell 3000, MSCI ACWI ex USA; Fixed Indices: US Treasury 3 Mo T-Bill, BBgBarc Global

Aggregate Bond (rebalanced quarterly)

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# COUNTY OF SAN BERNARDINO

## 401(k) Defined Contribution Plan

# PLAN ASSET ALLOCATION

Fourth Quarter 2019

Fixed Income	Ticker	Assets	%
Stabilizer	-	\$43,363,671	26.2%
Loomis Sayles Investment Grade Bond Y	LSIIX	\$3,703,651	2.2%
Invesco Oppenheimer International Bd R6	OIBIX	\$708,790	0.4%
Pioneer Global High Yield Y	GHYYX	\$1,351,320	0.8%
<b>Total</b>		<b>\$49,127,433</b>	<b>29.7%</b>

Large Cap	Ticker	Assets	%
Vanguard Institutional Index Instl Plus	VIIIIX	\$21,411,955	12.9%
American Funds Growth Fund of America R6	RGAGX	\$19,621,299	11.9%
<b>Total</b>		<b>\$41,033,254</b>	<b>24.8%</b>

Mid Cap	Ticker	Assets	%
Vanguard Mid Cap Index Instl	VMCIX	\$10,432,145	6.3%
<b>Total</b>		<b>\$10,432,145</b>	<b>6.3%</b>

Small Cap	Ticker	Assets	%
Invesco Small Cap Value Y	VSMIX	\$1,427,094	0.9%
Vanguard Small Cap Index Instl	VSCIX	\$6,457,402	3.9%
Baron Growth Instl	BGRIX	\$5,430,998	3.3%
<b>Total</b>		<b>\$13,315,494</b>	<b>8.1%</b>

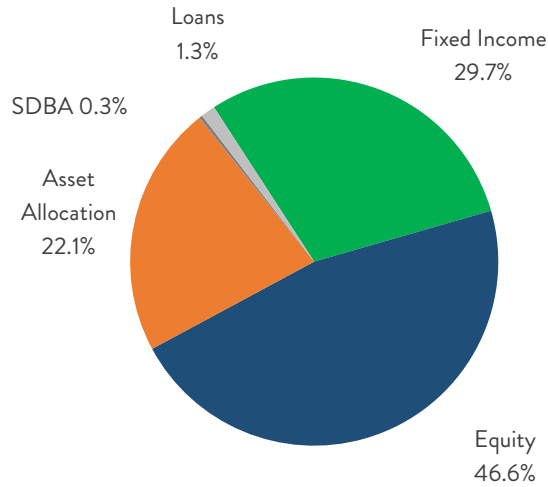
International	Ticker	Assets	%
Dodge & Cox International Stock	DODFX	\$1,846,609	1.1%
Vanguard Total Intl Stock Index I	VTSNX	\$3,657,704	2.2%
American Funds Capital World Gr & Inc R6	RWIGX	\$6,775,888	4.1%
<b>Total</b>		<b>\$12,280,201</b>	<b>7.4%</b>

Asset Allocation	Ticker	Assets	%
Conservative Allocation Portfolio	-	\$6,150,003	3.7%
Moderate Allocation Portfolio	-	\$15,329,299	9.3%
Aggressive Allocation Portfolio	-	\$7,235,879	4.4%
Vanguard Instl Target Retirement Income Instl	VITRX	\$339,833	0.2%
Vanguard Instl Target Retirement 2020 Instl	VITWX	\$1,692,509	1.0%
Vanguard Instl Target Retirement 2025 Instl	VRIVX	\$145,170	0.1%
Vanguard Instl Target Retirement 2030 Instl	VTTWX	\$2,398,174	1.5%
Vanguard Instl Target Retirement 2035 Instl	VITFX	\$267,903	0.2%
Vanguard Instl Target Retirement 2040 Instl	VIRSX	\$1,725,250	1.0%
Vanguard Instl Target Retirement 2045 Instl	VITLX	\$1,870	0.0%
Vanguard Instl Target Retirement 2050 Instl	VTRLX	\$1,323,060	0.8%
Vanguard Instl Target Retirement 2055 Instl	VIVLX	\$802	0.0%
Vanguard Instl Target Retirement 2060 Instl	VILVX	\$1,755	0.0%
Vanguard Instl Target Retirement 2065 Instl	VSXFX	\$0	0.0%
<b>Total</b>		<b>\$36,611,507</b>	<b>22.1%</b>

Miscellaneous	Ticker	Assets	%
Self-Directed Brokerage Account	-	\$477,621	0.3%
Participant Loans	-	\$2,089,834	1.3%
<b>Total</b>		<b>\$2,567,455</b>	<b>1.6%</b>

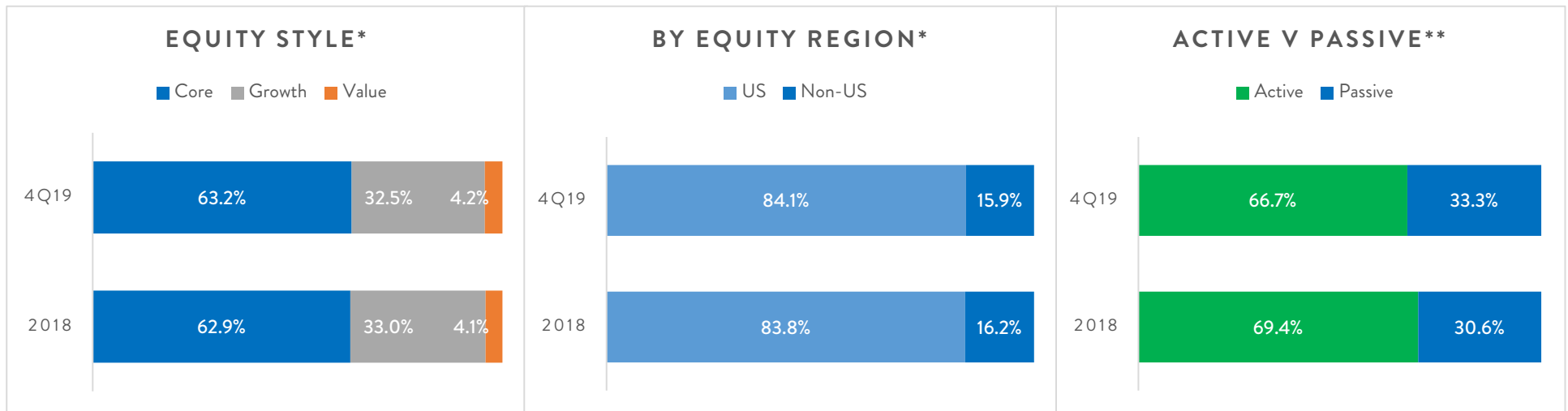
**TOTAL PLAN ASSETS**

**\$165,367,490**



HISTORICAL PLAN ALLOCATION

Asset Class	4Q19	2018	2017	2016	2015	2014	2013	2012
<b>Fixed Income</b>	29.7%	32.9%	N/A	N/A	N/A	N/A	N/A	N/A
<b>Large Cap</b>	24.8%	23.1%	N/A	N/A	N/A	N/A	N/A	N/A
<b>Mid Cap</b>	6.3%	5.8%	N/A	N/A	N/A	N/A	N/A	N/A
<b>Small Cap</b>	8.1%	7.4%	N/A	N/A	N/A	N/A	N/A	N/A
<b>International</b>	7.4%	7.0%	N/A	N/A	N/A	N/A	N/A	N/A
<b>Asset Allocation</b>	22.1%	22.1%	N/A	N/A	N/A	N/A	N/A	N/A
<b>SDBA</b>	0.3%	0.3%	N/A	N/A	N/A	N/A	N/A	N/A
<b>Loans</b>	1.3%	1.4%	N/A	N/A	N/A	N/A	N/A	N/A



\*Excludes Fixed Income, Asset Allocation, SDBA, and Loan assets

\*\*Excludes Asset Allocation, SDBA, and Loan assets

# COUNTY OF SAN BERNARDINO

## 401(k) Defined Contribution Plan

# PLAN ASSET ALLOCATION

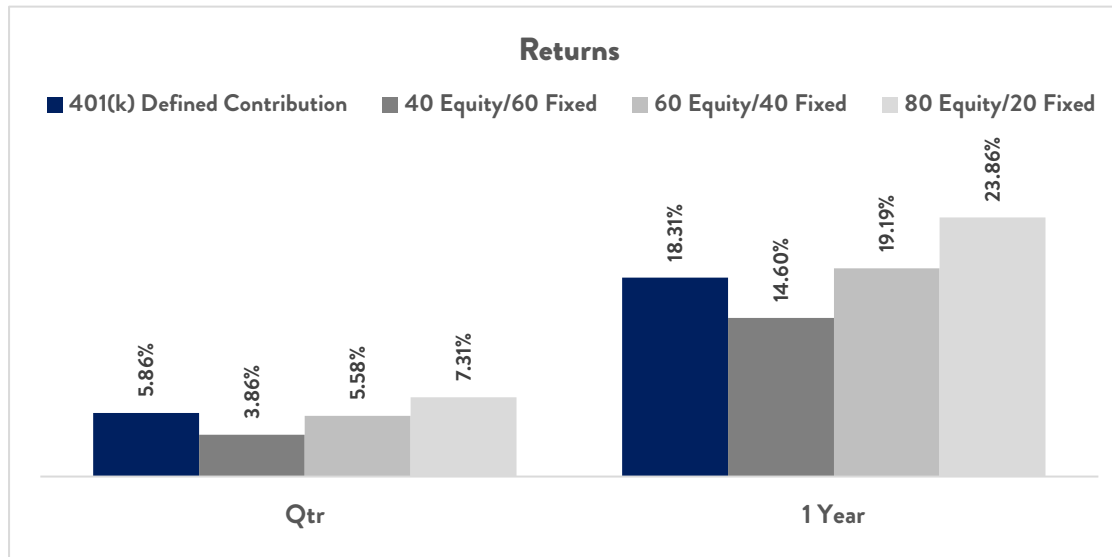
## Fourth Quarter 2019

### PLAN LEVEL CASH FLOWS

	Beginning Value	Cash Flow (+)	Cash Flow (-)	Transfer	Market Gain/Loss	Ending Value
<b>Fixed Income</b>	\$48,650,115	\$545,045	(\$1,206,062)	\$745,914	\$392,420	\$49,127,433
<b>Large Cap</b>	\$37,417,837	\$873,988	(\$303,256)	(\$754,497)	\$3,799,182	\$41,033,254
<b>Mid Cap</b>	\$9,800,839	\$162,410	(\$101,198)	(\$102,806)	\$672,901	\$10,432,145
<b>Small Cap</b>	\$12,131,934	\$288,927	(\$74,467)	(\$65,409)	\$1,034,509	\$13,315,494
<b>International</b>	\$11,195,878	\$240,328	(\$96,381)	(\$117,197)	\$1,057,573	\$12,280,201
<b>Asset Allocation</b>	\$33,701,267	\$1,197,193	(\$646,441)	\$340,291	\$2,019,196	\$36,611,507
<b>SDBA</b>	\$492,905	\$0	\$0	(\$46,295)	\$31,011	\$477,621
<b>Total</b>	\$153,390,776	\$3,307,892	(\$2,427,804)	\$0	\$9,006,793	\$163,277,656

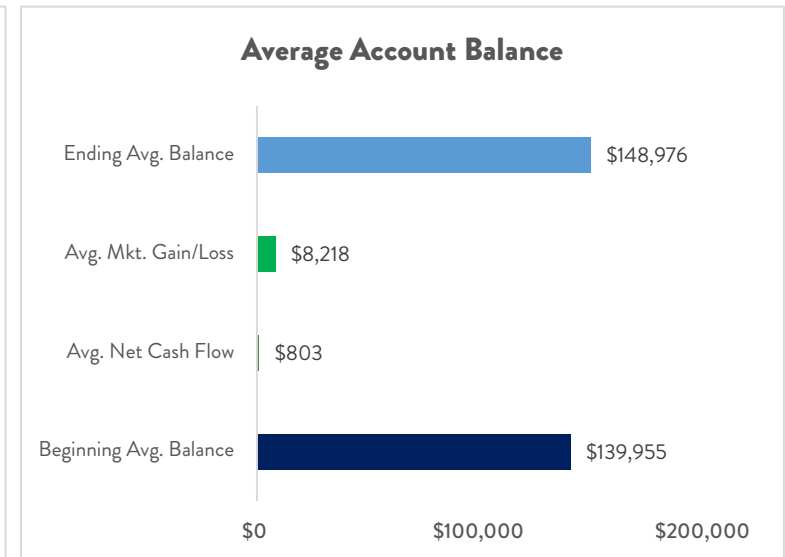
### HISTORICAL PLAN CASH FLOWS

	Beginning Value	Net Cash Flow	Market Gain/Loss	Ending Value
<b>4Q19</b>	\$153,390,776	\$880,088	\$9,006,793	\$163,277,656
<b>YTD</b>	\$136,406,428	\$1,816,408	\$25,054,820	\$163,277,656
<b>2018</b>	N/A	N/A	N/A	\$136,406,428
<b>2017</b>	N/A	N/A	N/A	N/A
<b>2016</b>	N/A	N/A	N/A	N/A
<b>2015</b>	N/A	N/A	N/A	N/A
<b>2014</b>	N/A	N/A	N/A	N/A



Equity Indices: Russell 3000, MSCI ACWI ex USA; Fixed Indices: US Treasury 3 Mo T-Bill, BBgBarc Global

Aggregate Bond (rebalanced quarterly)



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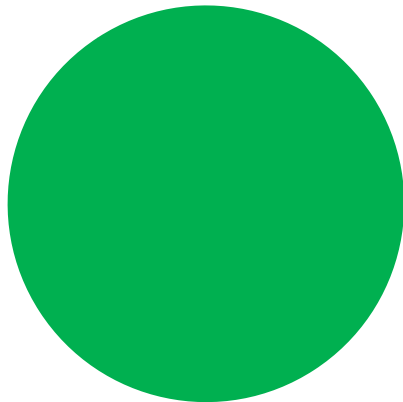
Fixed Income	Ticker	Assets	%
Stabilizer	-	\$37,906,246	100.0%
<b>Total</b>		<b>\$37,906,246</b>	<b>100.0%</b>

**HISTORICAL PLAN CASH FLOWS**

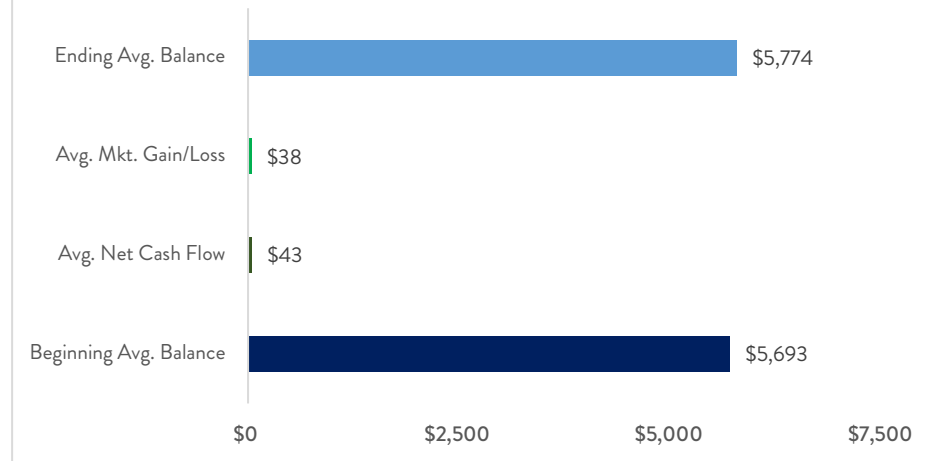
	Beginning Value	Net Cash Flow	Market Gain/Loss	Ending Value
<b>4Q19</b>	\$37,374,391	\$281,833	\$250,022	\$37,906,246
<b>YTD</b>	\$36,665,327	\$292,121	\$948,798	\$37,906,246
<b>2018</b>	N/A	N/A	N/A	\$36,665,327
<b>2017</b>	N/A	N/A	N/A	N/A
<b>2016</b>	N/A	N/A	N/A	N/A
<b>2015</b>	N/A	N/A	N/A	N/A

**TOTAL PLAN ASSETS                    \$37,906,246**

Fixed Income  
100.0%



**Average Account Balance**



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# COUNTY OF SAN BERNARDINO

Retirement Medical Trust

# PLAN ASSET ALLOCATION

Fourth Quarter 2019

Fixed Income	Ticker	Assets	%
Voya Fixed Account	-	\$79,097,265	53.7%
Voya Government Money Market A	VYAXX	\$11,705	0.0%
Loomis Sayles Investment Grade Bond Y	LSIIX	\$302,093	0.2%
Invesco Oppenheimer International Bd R6	OIBIX	\$163,668	0.1%
Pioneer Global High Yield Y	GHYYX	\$215,538	0.1%
<b>Total</b>		<b>\$79,790,269</b>	<b>54.2%</b>

Large Cap	Ticker	Assets	%
Vanguard Institutional Index Instl Plus	VIIIX	\$2,184,702	1.5%
American Funds Growth Fund of America R6	RGAGX	\$2,619,671	1.8%
<b>Total</b>		<b>\$4,804,373</b>	<b>3.3%</b>

Mid Cap	Ticker	Assets	%
Vanguard Mid Cap Index Instl	VMCIX	\$2,163,266	1.5%
<b>Total</b>		<b>\$2,163,266</b>	<b>1.5%</b>

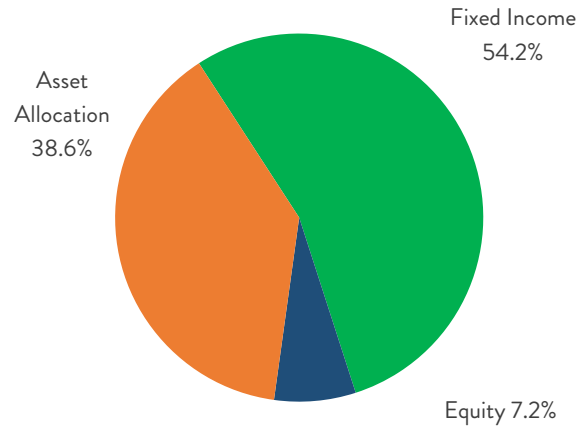
Small Cap	Ticker	Assets	%
Invesco Small Cap Value Y	VSMIX	\$413,160	0.3%
Vanguard Small Cap Index Instl	VSCIX	\$845,494	0.6%
Baron Growth Instl	BGRIX	\$1,340,878	0.9%
<b>Total</b>		<b>\$2,599,532</b>	<b>1.8%</b>

International	Ticker	Assets	%
Dodge & Cox International Stock	DODFX	\$231,171	0.2%
Vanguard Total Intl Stock Index I	VTSNX	\$295,385	0.2%
American Funds Capital World Gr & Inc R6	RWIGX	\$443,786	0.3%
<b>Total</b>		<b>\$970,341</b>	<b>0.7%</b>

Asset Allocation	Ticker	Assets	%
Conservative Allocation Portfolio	-	\$1,461,061	1.0%
Moderate Allocation Portfolio	-	\$4,758,793	3.2%
Aggressive Allocation Portfolio	-	\$4,909,442	3.3%
Vanguard Instl Target Retirement Income Instl	VITRX	\$1,526,843	1.0%
Vanguard Instl Target Retirement 2020 Instl	VITWX	\$11,508,546	7.8%
Vanguard Instl Target Retirement 2025 Instl	VRIVX	\$6,929	0.0%
Vanguard Instl Target Retirement 2030 Instl	VTTWX	\$18,495,549	12.6%
Vanguard Instl Target Retirement 2035 Instl	VITFX	\$0	0.0%
Vanguard Instl Target Retirement 2040 Instl	VIRSX	\$11,543,733	7.8%
Vanguard Instl Target Retirement 2045 Instl	VITLX	\$0	0.0%
Vanguard Instl Target Retirement 2050 Instl	VTRLX	\$2,680,705	1.8%
Vanguard Instl Target Retirement 2055 Instl	VIVLX	\$0	0.0%
Vanguard Instl Target Retirement 2060 Instl	VILVX	\$0	0.0%
Vanguard Instl Target Retirement 2065 Instl	VSXFX	\$90	0.0%
<b>Total</b>		<b>\$56,891,689</b>	<b>38.6%</b>

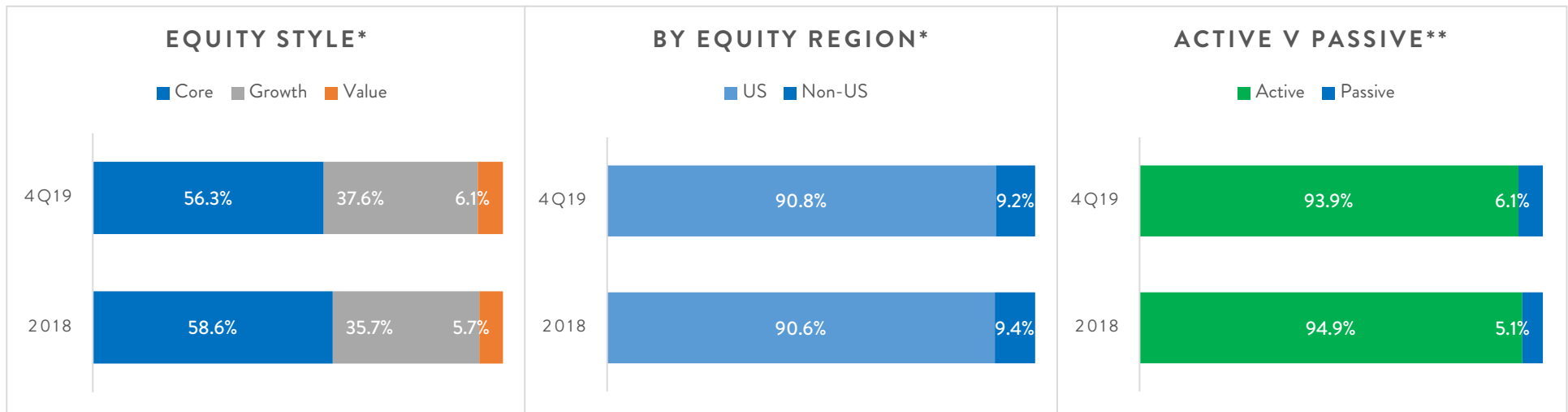
**TOTAL PLAN ASSETS**

**\$147,219,470**



HISTORICAL PLAN ALLOCATION

Asset Class	4Q19	2018	2017	2016	2015	2014	2013	2012
<b>Fixed Income</b>	54.2%	59.5%	N/A	N/A	N/A	N/A	N/A	N/A
<b>Large Cap</b>	3.3%	2.8%	N/A	N/A	N/A	N/A	N/A	N/A
<b>Mid Cap</b>	1.5%	1.3%	N/A	N/A	N/A	N/A	N/A	N/A
<b>Small Cap</b>	1.8%	1.4%	N/A	N/A	N/A	N/A	N/A	N/A
<b>International</b>	0.7%	0.6%	N/A	N/A	N/A	N/A	N/A	N/A
<b>Asset Allocation</b>	38.6%	34.3%	N/A	N/A	N/A	N/A	N/A	N/A



\*Excludes Fixed Income and Asset Allocation assets

\*\*Excludes Asset Allocation assets

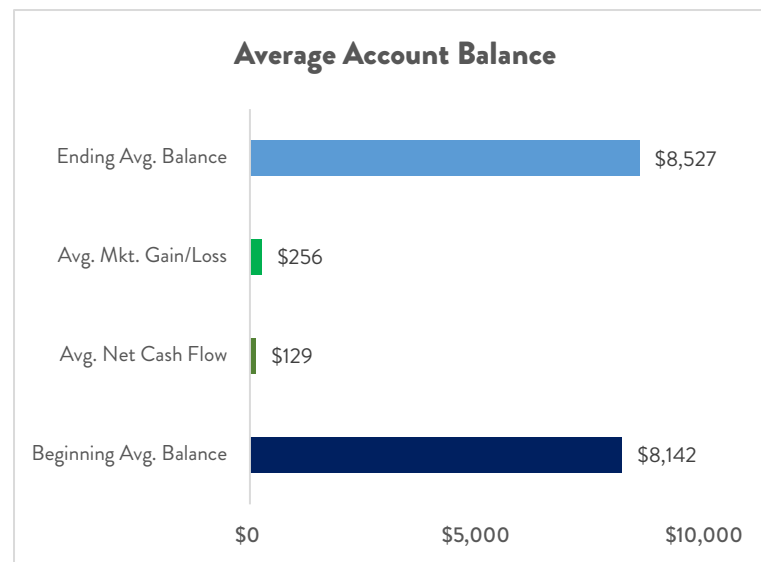
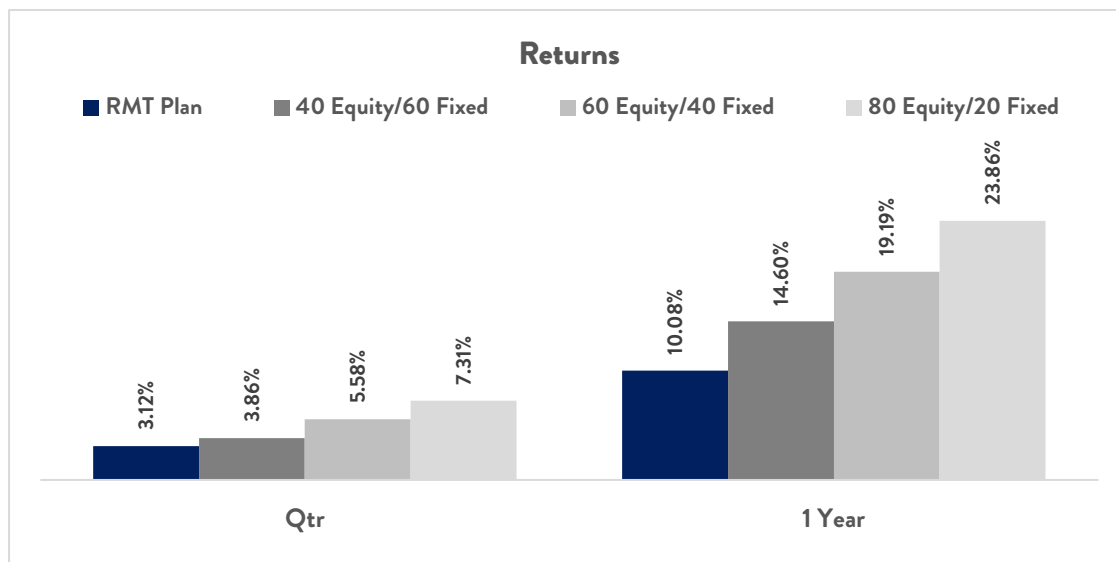


PLAN LEVEL CASH FLOWS

	Beginning Value	Cash Flow (+)	Cash Flow (-)	Transfer	Market Gain/Loss	Ending Value
<b>Fixed Income</b>	\$79,119,445	\$4,136,738	(\$1,389,776)	(\$2,427,808)	\$351,671	\$79,790,269
<b>Large Cap</b>	\$4,333,494	\$0	(\$67,928)	\$91,531	\$447,275	\$4,804,373
<b>Mid Cap</b>	\$2,036,843	\$0	(\$29,005)	\$16,613	\$138,815	\$2,163,266
<b>Small Cap</b>	\$2,293,912	\$653	(\$18,920)	\$121,770	\$202,117	\$2,599,532
<b>International</b>	\$912,006	\$56	(\$9,420)	(\$17,845)	\$85,544	\$970,341
<b>Asset Allocation</b>	\$51,871,348	\$782	(\$387,546)	\$2,215,739	\$3,191,366	\$56,891,689
<b>Total</b>	\$140,567,048	\$4,138,228	(\$1,902,594)	\$0	\$4,416,789	\$147,219,470

HISTORICAL PLAN CASH FLOWS

	Beginning Value	Net Cash Flow	Market Gain/Loss	Ending Value
<b>4Q19</b>	\$140,567,048	\$2,235,634	\$4,416,789	\$147,219,470
<b>YTD</b>	\$124,574,529	\$9,670,091	\$12,974,851	\$147,219,470
<b>2018</b>	N/A	N/A	N/A	\$124,574,529
<b>2017</b>	N/A	N/A	N/A	N/A
<b>2016</b>	N/A	N/A	N/A	N/A
<b>2015</b>	N/A	N/A	N/A	N/A



Equity Indices: Russell 3000, MSCI ACWI ex USA; Fixed Indices: US Treasury 3 Mo T-Bill, BBgBarc Global

Aggregate Bond (rebalanced quarterly)

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# Section 3

Proposed Investment Policy Status

Key: Ⓟ Pass / ● Fail

	Performance Factors	Qualitative Factors	On-Watch Date Initiated	Notes
Stabilizer	Ⓟ	Ⓟ	-	
Voya Fixed Account	Ⓟ	Ⓟ	-	
Voya Government Money Market A	●	Ⓟ	-	Trailing Benchmark and Peer Group for 5 year period.
Loomis Sayles Investment Grade Bond Y	Ⓟ	Ⓟ	-	To be replaced with Sterling Capital Total Return Bond R6 (STRDX).
Invesco Oppenheimer International Bd R6	Ⓟ	Ⓟ	-	To be replaced with Sterling Capital Total Return Bond R6 (STRDX).
Pioneer Global High Yield Y	●	Ⓟ	4Q2018	Trailing Benchmark and Peer Group for 5 year period. To be replaced with Sterling Capital Total Return Bond R6 (STRDX).
Vanguard Institutional Index Instl Plus	Ⓟ	Ⓟ	-	To be replaced with Fidelity 500 Index Instl Premium (FXAIX).
American Funds Growth Fund of America R6	Ⓟ	Ⓟ	-	To be replaced with Hartford Core Equity (HAITX).
Vanguard Mid Cap Index Instl	Ⓟ	Ⓟ	-	To be replaced with Fidelity Mid Cap Index (FSMDX).
Invesco Small Cap Value Y	●	Ⓟ	3Q2018	Trailing Benchmark and Peer Group for 5 year period. To be replaced with Schroders Small Cap.
Vanguard Small Cap Index Instl	Ⓟ	Ⓟ	-	To be replaced with Fidelity Small Cap Index (FSSNX).
Baron Growth Instl	Ⓟ	Ⓟ	-	
Dodge & Cox International Stock	Ⓟ	Ⓟ	3Q2018	Placed on watch due to underperformance. To be replaced with MFS International Diversification R6 (MDIZX).
Vanguard Total Intl Stock Index I	Ⓟ	Ⓟ	-	To be replaced with Fidelity Total International Index Instl Premium (FTIHX).
American Funds Capital World Gr & Inc R6	Ⓟ	Ⓟ	-	To be replaced with MFS International Diversification R6 (MDIZX).
Conservative Allocation Portfolio	Ⓟ	Ⓟ	-	
Moderate Allocation Portfolio	Ⓟ	Ⓟ	-	
Aggressive Allocation Portfolio	Ⓟ	Ⓟ	-	
Vanguard Instl Target Retirement Income Instl	Ⓟ	Ⓟ	-	
Vanguard Instl Target Retirement 2020 Instl	Ⓟ	Ⓟ	-	
Vanguard Instl Target Retirement 2025 Instl	Ⓟ	Ⓟ	-	
Vanguard Instl Target Retirement 2030 Instl	Ⓟ	Ⓟ	-	
Vanguard Instl Target Retirement 2035 Instl	Ⓟ	Ⓟ	-	

Key: Ⓟ Pass / ● Fail

Vanguard Instl Target Retirement 2040 Instl  
 Vanguard Instl Target Retirement 2045 Instl  
 Vanguard Instl Target Retirement 2050 Instl  
 Vanguard Instl Target Retirement 2055 Instl  
 Vanguard Instl Target Retirement 2060 Instl  
 Vanguard Instl Target Retirement 2065 Instl

Performance Factors	Qualitative Factors
Ⓟ	Ⓟ
Ⓟ	Ⓟ
Ⓟ	Ⓟ
Ⓟ	Ⓟ
Ⓟ	Ⓟ
Ⓟ	Ⓟ

Proposed Investment Policy Status

On-Watch Date Initiated	Notes
-	
-	
-	
-	
-	
-	

# COUNTY OF SAN BERNARDINO

All Plans - Combined

# PERFORMANCE REVIEW

Fourth Quarter 2019

	QTR	YTD	1Yr	<i>Annualized</i>			2018	2017	2016	2015	2014	2013
				3Yr	5Yr	10Yr						
<b>Stabilizer</b>	<b>0.67</b>	<b>2.59</b>	<b>2.59</b>	<b>2.53</b>	<b>2.47</b>	<b>2.36</b>	<b>2.50</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
5 Yr Constant Maturity US Treasury Yield	0.40	1.96	1.96	2.20	1.92	1.66	2.75	1.91	1.44	1.53	1.64	1.16
+/- Index	0.27	0.63	0.63	0.33	0.55	0.70	(0.25)	-	-	-	-	-
US Stable Value	<b>5</b>	<b>8</b>	<b>8</b>	<b>6</b>	<b>5</b>	<b>19</b>	<b>8</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
<b>Voya Fixed Account</b>	<b>0.43</b>	<b>1.85</b>	<b>1.85</b>	<b>1.89</b>	<b>2.03</b>	<b>2.36</b>	<b>1.90</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
5 Yr Constant Maturity US Treasury Yield	0.40	1.96	1.96	2.20	1.92	1.66	2.75	1.91	1.44	1.53	1.64	1.16
+/- Index	0.03	(0.11)	(0.11)	(0.31)	0.11	0.70	(0.85)	-	-	-	-	-
US Stable Value	<b>89</b>	<b>83</b>	<b>83</b>	<b>44</b>	<b>19</b>	<b>19</b>	<b>43</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
<b>Voya Government Money Market A</b>	<b>0.32</b>	<b>1.88</b>	<b>1.88</b>	<b>1.22</b>	<b>0.75</b>	<b>0.38</b>	<b>1.50</b>	<b>0.26</b>	<b>0.08</b>	<b>0.02</b>	<b>0.01</b>	<b>0.02</b>
US 90 Day T-Bill	0.39	2.06	2.06	1.64	1.06	0.56	1.94	0.93	0.32	0.05	0.03	0.06
+/- Index	(0.07)	(0.18)	(0.18)	(0.42)	(0.31)	(0.18)	(0.43)	(0.67)	(0.24)	(0.03)	(0.02)	(0.03)
US Money Market - Taxable	<b>68</b>	<b>45</b>	<b>45</b>	<b>55</b>	<b>51</b>	<b>52</b>	<b>45</b>	<b>76</b>	<b>43</b>	<b>25</b>	<b>26</b>	<b>14</b>
<b>Loomis Sayles Investment Grade Bond Y</b>	<b>0.46</b>	<b>9.04</b>	<b>9.04</b>	<b>5.05</b>	<b>3.16</b>	<b>5.06</b>	<b>-0.32</b>	<b>6.66</b>	<b>6.16</b>	<b>-5.08</b>	<b>5.14</b>	<b>1.36</b>
BBgBarc Capital US Aggregate Bond Index	0.18	8.72	8.72	4.03	3.05	3.75	0.01	3.54	2.65	0.55	5.97	-2.02
+/- Index	0.28	0.33	0.33	1.02	0.11	1.31	(0.33)	3.12	3.51	(5.63)	(0.83)	3.38
US Fund Intermediate Core-Plus Bond	<b>40</b>	<b>57</b>	<b>57</b>	<b>10</b>	<b>54</b>	<b>13</b>	<b>31</b>	<b>3</b>	<b>7</b>	<b>99</b>	<b>62</b>	<b>7</b>
<b>Invesco Oppenheimer International Bd R6</b>	<b>4.61</b>	<b>10.05</b>	<b>10.05</b>	<b>4.93</b>	<b>3.59</b>	<b>3.30</b>	<b>-5.53</b>	<b>11.12</b>	<b>6.79</b>	<b>-3.31</b>	<b>0.77</b>	<b>-3.88</b>
BBgBarc Capital Global Agg Ex-USA Index	0.67	5.09	5.09	4.36	1.62	1.50	-2.15	10.51	1.49	-6.02	-3.08	-3.08
+/- Index	3.94	4.97	4.97	0.58	1.97	1.80	(3.38)	0.61	5.30	2.71	3.86	(0.80)
US Fund World Bond	<b>2</b>	<b>7</b>	<b>7</b>	<b>17</b>	<b>8</b>	<b>25</b>	<b>91</b>	<b>9</b>	<b>13</b>	<b>34</b>	<b>55</b>	<b>68</b>

# COUNTY OF SAN BERNARDINO

All Plans - Combined

# PERFORMANCE REVIEW

Fourth Quarter 2019

	QTR	YTD	1Yr	Annualized			2018	2017	2016	2015	2014	2013
				3Yr	5Yr	10Yr						
<b>Pioneer Global High Yield Y</b>	<b>4.16</b>	<b>13.64</b>	<b>13.64</b>	<b>5.92</b>	<b>4.89</b>	<b>5.90</b>	<b>-5.13</b>	<b>10.21</b>	<b>13.57</b>	<b>-5.92</b>	<b>-1.72</b>	<b>5.07</b>
BBgBarc Global High Yield Index	3.50	12.56	12.56	6.05	5.80	7.26	-4.06	10.43	14.27	-2.72	0.01	7.33
+/- Index	0.66	1.08	1.08	(0.13)	(0.91)	(1.36)	(1.07)	(0.22)	(0.70)	(3.20)	(1.73)	(2.26)
US Fund High Yield Bond	1	46	46	30	53	80	93	3	48	82	95	85
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2018	2017	2016	2015	2014	2013
<b>Vanguard Institutional Index Instl Plus</b>	<b>9.07</b>	<b>31.48</b>	<b>31.48</b>	<b>15.26</b>	<b>11.69</b>	<b>13.55</b>	<b>-4.41</b>	<b>21.82</b>	<b>11.95</b>	<b>1.39</b>	<b>13.68</b>	<b>32.37</b>
S&P 500 Index	9.07	31.49	31.49	15.27	11.70	13.56	-4.38	21.83	11.96	1.38	13.69	32.39
+/- Index	0.00	0.00	0.00	(0.02)	(0.01)	(0.01)	(0.02)	(0.02)	(0.01)	0.01	(0.01)	(0.02)
US Fund Large Blend	29	23	23	17	10	7	25	28	26	20	18	41
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2018	2017	2016	2015	2014	2013
<b>American Funds Growth Fund of America R6</b>	<b>11.32</b>	<b>28.54</b>	<b>28.54</b>	<b>16.57</b>	<b>12.75</b>	<b>13.31</b>	<b>-2.60</b>	<b>26.53</b>	<b>8.82</b>	<b>5.70</b>	<b>9.63</b>	<b>34.29</b>
Russell 1000 Growth Index	10.62	36.39	36.39	20.49	14.63	15.22	-1.51	30.21	7.08	5.67	13.05	33.48
+/- Index	0.70	(7.85)	(7.85)	(3.92)	(1.88)	(1.90)	(1.09)	(3.69)	1.74	0.03	(3.42)	0.81
US Fund Large Growth	17	80	80	67	44	56	53	57	9	34	56	44
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2018	2017	2016	2015	2014	2013
<b>Vanguard Mid Cap Index Instl</b>	<b>6.87</b>	<b>31.04</b>	<b>31.04</b>	<b>12.37</b>	<b>9.26</b>	<b>13.09</b>	<b>-9.24</b>	<b>19.29</b>	<b>11.23</b>	<b>-1.33</b>	<b>13.78</b>	<b>35.17</b>
Vanguard US Mid Cap Index	6.88	31.09	31.09	12.39	9.29	13.13	-9.22	19.30	11.25	-1.28	13.83	35.21
+/- Index	0.00	(0.04)	(0.04)	(0.02)	(0.03)	(0.03)	(0.02)	0.00	(0.02)	(0.05)	(0.04)	(0.04)
US Fund Mid-Cap Blend	55	13	13	11	17	7	32	17	73	17	5	40
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2018	2017	2016	2015	2014	2013
<b>Invesco Small Cap Value Y</b>	<b>10.21</b>	<b>32.35</b>	<b>32.35</b>	<b>5.53</b>	<b>4.96</b>	<b>11.24</b>	<b>-25.11</b>	<b>18.58</b>	<b>18.61</b>	<b>-8.64</b>	<b>7.43</b>	<b>44.55</b>
Russell 2000 Value Index	8.49	22.39	22.39	4.77	6.99	10.56	-12.86	7.84	31.74	-7.47	4.22	34.52
+/- Index	1.72	9.96	9.96	0.76	(2.03)	0.68	(12.25)	10.74	(13.13)	(1.17)	3.21	10.03
US Fund Small Value	12	2	2	25	58	20	98	1	87	76	7	5

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# PERFORMANCE REVIEW

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	QTR	YTD	1Yr	Annualized			2018	2017	2016	2015	2014	2013
				3Yr	5Yr	10Yr						
<b>Vanguard Small Cap Index Instl</b>	<b>8.14</b>	<b>27.40</b>	<b>27.40</b>	<b>10.33</b>	<b>8.90</b>	<b>12.83</b>	<b>-9.32</b>	<b>16.25</b>	<b>18.32</b>	<b>-3.63</b>	<b>7.53</b>	<b>37.80</b>
Vanguard US Small Cap Index	8.12	27.35	27.35	10.31	8.86	12.78	-9.33	16.24	18.26	-3.68	7.54	37.77
+/- Index	0.02	0.05	0.05	0.02	0.03	0.05	0.01	0.01	0.05	0.05	(0.01)	0.03
US Fund Small Blend	50	18	18	7	17	9	20	13	70	34	13	46
<b>Baron Growth Instl</b>	<b>8.65</b>	<b>40.50</b>	<b>40.50</b>	<b>20.31</b>	<b>12.18</b>	<b>14.28</b>	<b>-2.67</b>	<b>27.35</b>	<b>6.31</b>	<b>-4.06</b>	<b>4.66</b>	<b>38.69</b>
Russell 2000 Growth Index	11.39	28.48	28.48	12.49	9.34	13.01	-9.31	22.17	11.32	-1.38	5.60	43.30
+/- Index	(2.74)	12.02	12.02	7.82	2.84	1.27	6.64	5.19	(5.01)	(2.68)	(0.95)	(4.62)
US Fund Small Growth	63	4	4	14	18	24	28	20	80	69	31	63
<b>Dodge &amp; Cox International Stock</b>	<b>10.61</b>	<b>22.78</b>	<b>22.78</b>	<b>7.67</b>	<b>3.68</b>	<b>5.76</b>	<b>-17.98</b>	<b>23.94</b>	<b>8.26</b>	<b>-11.35</b>	<b>0.08</b>	<b>26.31</b>
MSCI ACWI Ex-USA Value (Net) Index	8.21	15.71	15.71	6.88	3.65	3.64	-13.97	22.66	8.92	-10.06	-5.10	15.04
+/- Index	2.40	7.06	7.06	0.78	0.03	2.12	(4.01)	1.28	(0.66)	(1.29)	5.18	11.27
US Fund Foreign Large Value	12	7	7	33	62	15	81	37	11	95	4	8
<b>Vanguard Total Intl Stock Index I</b>	<b>9.05</b>	<b>21.56</b>	<b>21.56</b>	<b>9.90</b>	<b>5.88</b>	<b>5.13</b>	<b>-14.39</b>	<b>27.55</b>	<b>4.70</b>	<b>-4.24</b>	<b>-4.15</b>	<b>15.15</b>
Vanguard Total International Stock Index	9.26	21.81	21.81	9.84	5.84	5.13	-14.62	27.41	4.72	-4.29	-3.39	15.76
+/- Index	(0.21)	(0.25)	(0.25)	0.06	0.04	0.01	0.22	0.14	(0.02)	0.05	(0.76)	(0.61)
US Fund Foreign Large Blend	33	51	51	30	29	53	50	23	12	79	33	83
<b>American Funds Capital World Gr &amp; Inc R6</b>	<b>9.35</b>	<b>25.74</b>	<b>25.74</b>	<b>12.29</b>	<b>8.22</b>	<b>8.81</b>	<b>-9.97</b>	<b>25.08</b>	<b>6.85</b>	<b>-1.88</b>	<b>4.36</b>	<b>25.28</b>
MSCI ACWI (Net) Index	8.95	26.60	26.60	12.44	8.41	8.79	-9.41	23.97	7.86	-2.36	4.16	22.80
+/- Index	0.40	(0.86)	(0.86)	(0.15)	(0.18)	0.03	(0.55)	1.11	(1.01)	0.49	0.20	2.47
US Fund World Large Stock	27	51	51	43	44	51	56	33	34	55	30	51



# COUNTY OF SAN BERNARDINO

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	QTR	YTD	1Yr	<i>Annualized</i>			2018	2017	2016	2015	2014	2013
				3Yr	5Yr	10Yr						
<b>Conservative Allocation Portfolio</b>	<b>3.13</b>	<b>9.55</b>	<b>9.55</b>	<b>5.73</b>	<b>4.56</b>	<b>5.56</b>	<b>-0.82</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
Dow Jones Conservative Index	1.47	8.13	8.13	4.35	3.07	3.97	-0.62	5.73	3.01	-0.63	3.86	1.41
+/- Index	1.66	1.42	1.42	1.38	1.49	1.59	(0.20)	-	-	-	-	-
US Fund Conservative Allocation	<b>49</b>	<b>93</b>	<b>93</b>	<b>63</b>	<b>48</b>	<b>62</b>	<b>1</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
<b>Moderate Allocation Portfolio</b>	<b>6.12</b>	<b>18.64</b>	<b>18.64</b>	<b>8.29</b>	<b>6.45</b>	<b>7.99</b>	<b>-6.01</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
Dow Jones Moderate Index	5.41	18.60	18.60	8.99	6.61	7.76	-5.21	15.15	7.67	-1.21	5.35	14.46
+/- Index	0.71	0.04	0.04	(0.70)	(0.16)	0.23	(0.80)	-	-	-	-	-
US Fund Moderate Allocation	<b>16</b>	<b>44</b>	<b>43</b>	<b>41</b>	<b>27</b>	<b>37</b>	<b>50</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
<b>Aggressive Allocation Portfolio</b>	<b>7.81</b>	<b>23.80</b>	<b>23.80</b>	<b>10.27</b>	<b>7.43</b>	<b>9.11</b>	<b>-8.33</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
Dow Jones Aggressive Index	8.79	27.13	27.13	12.35	8.93	10.64	-9.45	23.20	10.98	-2.56	6.59	27.00
+/- Index	(0.98)	(3.33)	(3.33)	(2.08)	(1.50)	(1.53)	1.12	-	-	-	-	-
US Fund Aggressive Allocation	<b>26</b>	<b>39</b>	<b>39</b>	<b>43</b>	<b>39</b>	<b>39</b>	<b>50</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
<b>Vanguard Instl Target Retirement Income Instl</b>	<b>2.66</b>	<b>13.20</b>	<b>13.20</b>	<b>6.39</b>	<b>4.83</b>	<b>5.85</b>	<b>-1.98</b>	<b>8.54</b>	<b>5.29</b>	<b>-0.13</b>	<b>5.58</b>	<b>5.91</b>
Vanguard Retirement Income Index	2.72	13.40	13.40	6.50	4.97	5.96	-1.98	8.67	5.35	0.12	5.76	6.03
+/- Index	(0.06)	(0.20)	(0.20)	(0.11)	(0.14)	(0.11)	0.00	(0.13)	(0.06)	(0.25)	(0.18)	(0.12)
US Fund Target-Date Retirement	<b>40</b>	<b>46</b>	<b>46</b>	<b>29</b>	<b>22</b>	<b>16</b>	<b>10</b>	<b>58</b>	<b>38</b>	<b>11</b>	<b>15</b>	<b>47</b>
<b>Vanguard Instl Target Retirement 2020 Instl</b>	<b>4.47</b>	<b>17.69</b>	<b>17.69</b>	<b>8.76</b>	<b>6.46</b>	<b>8.07</b>	<b>-4.21</b>	<b>14.13</b>	<b>7.04</b>	<b>-0.63</b>	<b>7.16</b>	<b>15.90</b>
Vanguard Retirement 2020 Index	4.55	17.87	17.87	8.87	6.62	8.26	-4.14	14.22	7.17	-0.40	7.37	16.21
+/- Index	(0.08)	(0.18)	(0.18)	(0.11)	(0.16)	(0.19)	(0.07)	(0.09)	(0.13)	(0.23)	(0.21)	(0.31)
US Fund Target-Date 2020	<b>29</b>	<b>22</b>	<b>22</b>	<b>11</b>	<b>10</b>	<b>8</b>	<b>41</b>	<b>13</b>	<b>27</b>	<b>27</b>	<b>1</b>	<b>22</b>

Longer term Institutional share class performance for Vanguard Target Date funds may represent Investor share class performance adjusted for the difference in expense ratios.

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	QTR	YTD	1Yr	<i>Annualized</i>			2018	2017	2016	2015	2014	2013
				3Yr	5Yr	10Yr						
<b>Vanguard Instl Target Retirement 2025 Instl</b>	<b>5.25</b>	<b>19.67</b>	<b>19.67</b>	<b>9.63</b>	<b>7.03</b>	<b>8.63</b>	<b>-5.02</b>	<b>15.94</b>	<b>7.56</b>	<b>-0.80</b>	<b>7.22</b>	<b>18.19</b>
Vanguard Retirement 2025 Index	5.36	19.93	19.93	9.76	7.20	8.83	-5.01	16.08	7.66	-0.58	7.45	18.52
+/- Index	(0.11)	(0.26)	(0.26)	(0.13)	(0.17)	(0.20)	(0.01)	(0.14)	(0.10)	(0.22)	(0.23)	(0.33)
US Fund Target-Date 2025	30	17	17	9	10	11	38	22	23	30	5	31
<b>Vanguard Instl Target Retirement 2030 Instl</b>	<b>6.02</b>	<b>21.14</b>	<b>21.14</b>	<b>10.28</b>	<b>7.46</b>	<b>9.12</b>	<b>-5.82</b>	<b>17.57</b>	<b>7.97</b>	<b>-0.97</b>	<b>7.23</b>	<b>20.55</b>
Vanguard Retirement 2030 Index	6.07	21.33	21.33	10.40	7.61	9.31	-5.74	17.65	8.11	-0.80	7.51	20.88
+/- Index	(0.05)	(0.19)	(0.19)	(0.12)	(0.15)	(0.19)	(0.08)	(0.08)	(0.14)	(0.17)	(0.28)	(0.33)
US Fund Target-Date 2030	28	28	28	19	21	17	32	32	29	36	9	30
<b>Vanguard Instl Target Retirement 2035 Instl</b>	<b>6.68</b>	<b>22.56</b>	<b>22.56</b>	<b>10.91</b>	<b>7.86</b>	<b>9.59</b>	<b>-6.56</b>	<b>19.14</b>	<b>8.39</b>	<b>-1.21</b>	<b>7.29</b>	<b>22.87</b>
Vanguard Retirement 2035 Index	6.79	22.76	22.76	11.04	8.02	9.77	-6.48	19.24	8.55	-1.02	7.57	23.27
+/- Index	(0.11)	(0.20)	(0.20)	(0.13)	(0.16)	(0.18)	(0.08)	(0.10)	(0.16)	(0.19)	(0.28)	(0.40)
US Fund Target-Date 2035	40	39	39	26	24	15	28	38	27	40	9	28
<b>Vanguard Instl Target Retirement 2045 Instl</b>	<b>8.02</b>	<b>25.07</b>	<b>25.07</b>	<b>11.86</b>	<b>8.47</b>	<b>10.04</b>	<b>-7.87</b>	<b>21.47</b>	<b>8.94</b>	<b>-1.51</b>	<b>7.22</b>	<b>24.43</b>
Vanguard Retirement 2045 Index	8.15	25.36	25.36	12.01	8.65	10.25	-7.77	21.54	9.13	-1.25	7.61	24.79
+/- Index	(0.13)	(0.29)	(0.29)	(0.15)	(0.18)	(0.21)	(0.10)	(0.07)	(0.19)	(0.26)	(0.39)	(0.36)
US Fund Target-Date 2045	29	32	32	24	21	16	37	23	25	48	13	31
<b>Vanguard Instl Target Retirement 2050 Instl</b>	<b>8.02</b>	<b>25.05</b>	<b>25.05</b>	<b>11.85</b>	<b>8.47</b>	<b>10.04</b>	<b>-7.87</b>	<b>21.47</b>	<b>8.95</b>	<b>-1.51</b>	<b>7.25</b>	<b>24.41</b>
Vanguard Retirement 2050 Index	8.15	25.36	25.36	12.01	8.65	10.25	-7.77	21.54	9.13	-1.25	7.61	24.79
+/- Index	(0.13)	(0.31)	(0.31)	(0.16)	(0.18)	(0.21)	(0.10)	(0.07)	(0.18)	(0.26)	(0.36)	(0.38)
US Fund Target-Date 2050	31	36	36	26	22	15	30	30	28	51	19	32

Longer term Institutional share class performance for Vanguard Target Date funds may represent Investor share class performance adjusted for the difference in expense ratios.

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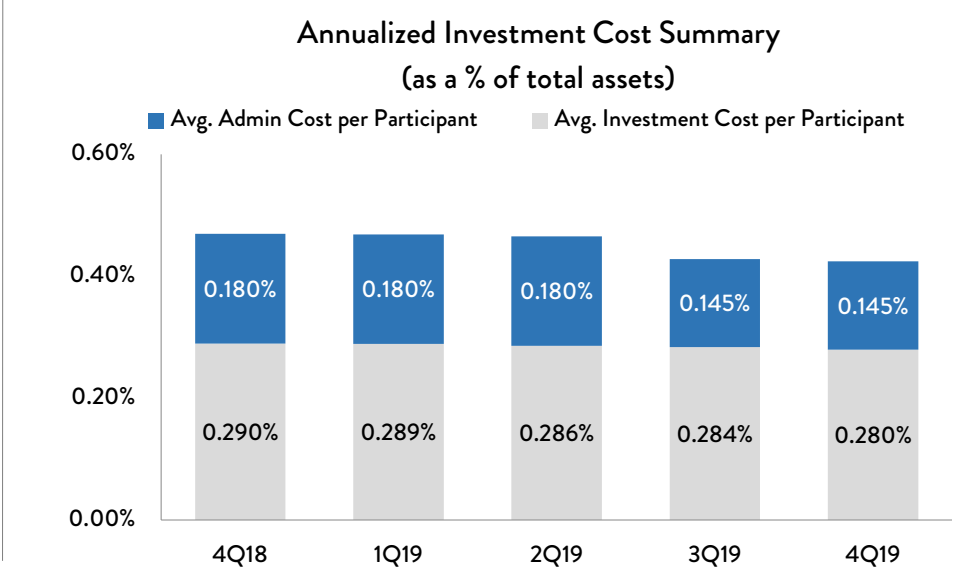
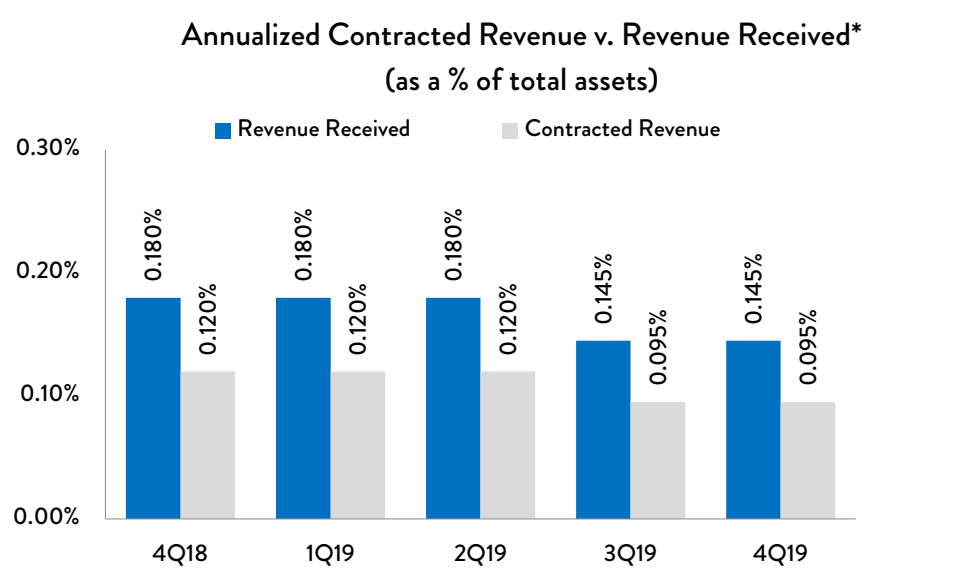
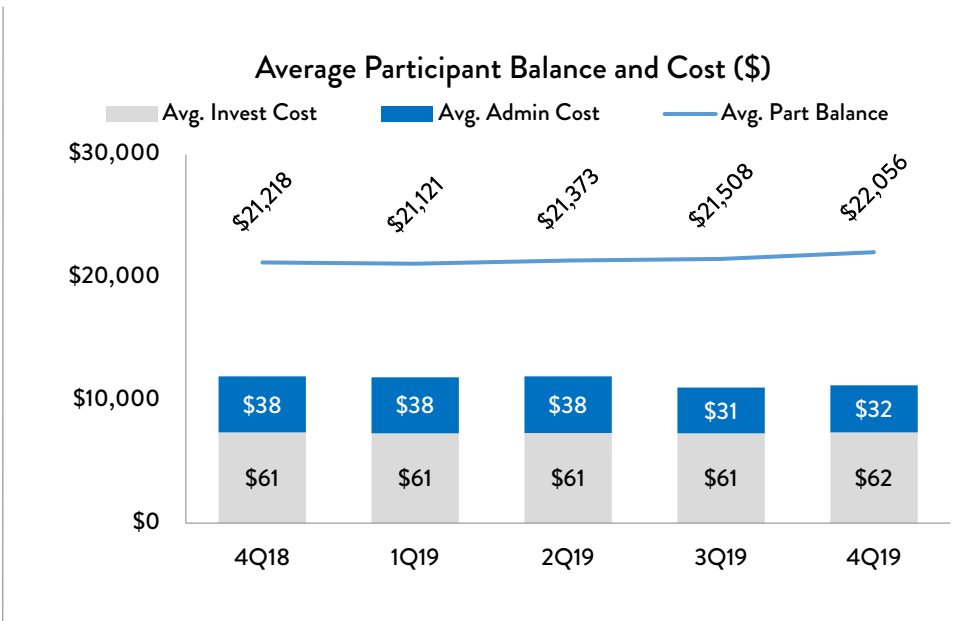
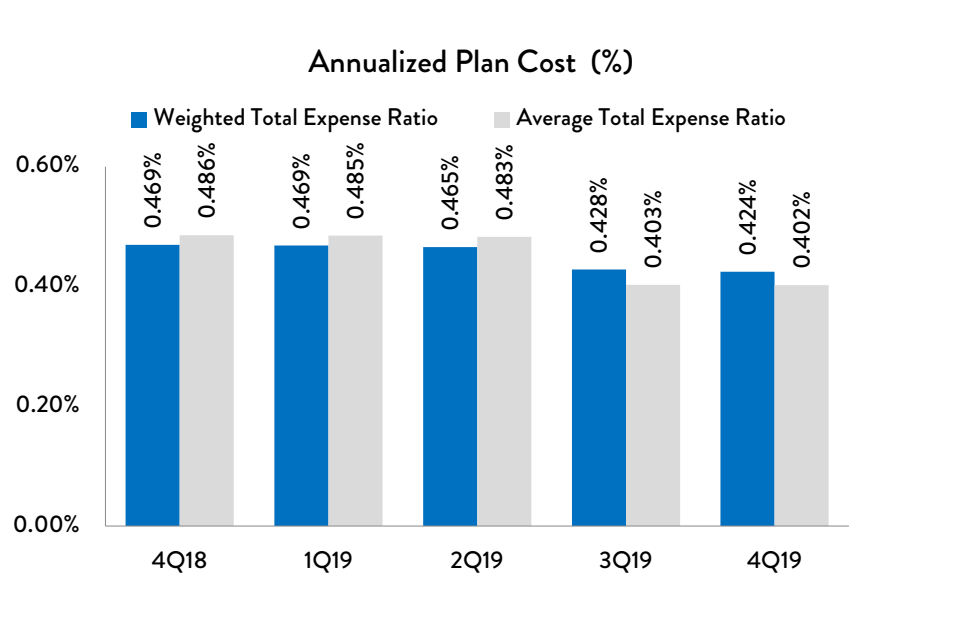
# PERFORMANCE REVIEW

Fourth Quarter 2019

	QTR	YTD	1Yr	<i>Annualized</i>			2018	2017	2016	2015	2014	2013
				3Yr	5Yr	10Yr						
<b>Vanguard Instl Target Retirement 2055 Instl</b>	<b>8.03</b>	<b>25.06</b>	<b>25.06</b>	<b>11.87</b>	<b>8.44</b>	<b>-</b>	<b>-7.84</b>	<b>21.47</b>	<b>8.94</b>	<b>-1.66</b>	<b>7.25</b>	<b>24.39</b>
Vanguard Retirement 2055 Index	8.15	25.36	25.36	12.01	8.65	-	-7.77	21.54	9.13	-1.25	7.61	24.79
+/- Index	(0.12)	(0.30)	(0.30)	(0.14)	(0.21)	-	(0.07)	(0.07)	(0.19)	(0.41)	(0.36)	(0.40)
<b>US Fund Target-Date 2055</b>	<b>35</b>	<b>39</b>	<b>39</b>	<b>29</b>	<b>27</b>	<b>-</b>	<b>30</b>	<b>40</b>	<b>28</b>	<b>53</b>	<b>17</b>	<b>35</b>
	<b>QTR</b>	<b>YTD</b>	<b>1Yr</b>	<b>3Yr</b>	<b>5Yr</b>	<b>10Yr</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>
<b>Vanguard Instl Target Retirement 2060 Instl</b>	<b>8.04</b>	<b>25.13</b>	<b>25.13</b>	<b>11.86</b>	<b>8.44</b>	<b>-</b>	<b>-7.88</b>	<b>21.42</b>	<b>8.94</b>	<b>-1.61</b>	<b>7.23</b>	<b>24.42</b>
Vanguard Retirement 2060 Index	8.15	25.36	25.36	12.01	8.65	-	-7.77	21.54	9.13	-1.25	7.61	24.79
+/- Index	(0.11)	(0.23)	(0.23)	(0.15)	(0.21)	-	(0.11)	(0.12)	(0.19)	(0.36)	(0.38)	(0.37)
<b>US Fund Target-Date 2060+</b>	<b>43</b>	<b>47</b>	<b>47</b>	<b>34</b>	<b>55</b>	<b>-</b>	<b>29</b>	<b>43</b>	<b>21</b>	<b>77</b>	<b>10</b>	<b>50</b>
	<b>QTR</b>	<b>YTD</b>	<b>1Yr</b>	<b>3Yr</b>	<b>5Yr</b>	<b>10Yr</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>
<b>Vanguard Instl Target Retirement 2065 Instl</b>	<b>8.01</b>	<b>25.15</b>	<b>25.15</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-7.84</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Vanguard Retirement 2065 Index	8.15	25.36	25.36	-	-	-	-7.77	-	-	-	-	-
+/- Index	(0.14)	(0.21)	(0.21)	-	-	-	(0.07)	-	-	-	-	-
<b>US Fund Target-Date 2060+</b>	<b>41</b>	<b>52</b>	<b>52</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>30</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

Longer term Institutional share class performance for Vanguard Target Date funds may represent Investor share class performance adjusted for the difference in expense ratios.

# Section 4



\*Beginning July 1, 2019 revenue received is 0.145% annually on all assets excluding SDBA. Contracted revenue is 0.095% annually on all assets excluding SDBA.

# COUNTY OF SAN BERNARDINO

All Plans - Combined

# PLAN FEE ANALYSIS

Fourth Quarter 2019

*Annualized*

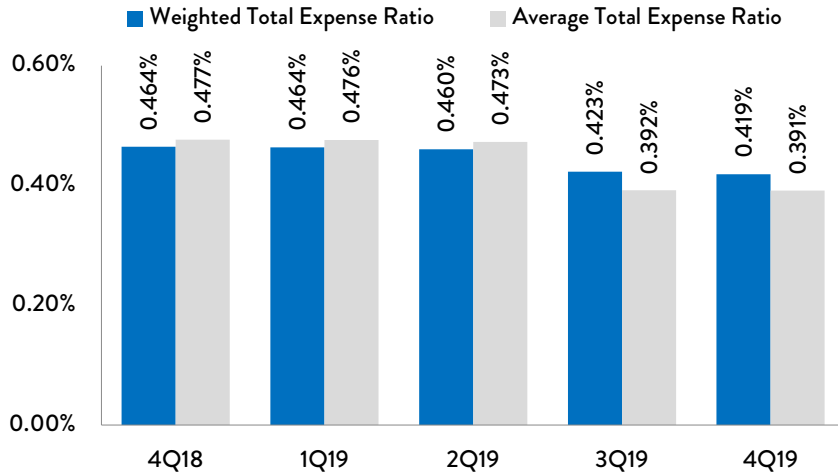
Fund	Ticker	Quarter Average			Annualized	
		Assets	Net Expense Ratio	Admin Fee	Est. Total Invest. Cost	Est. Total Admin. Cost
Stabilizer	-	\$278,014,922	0.44%	0.145%	\$1,223,266	\$403,122
Voya Fixed Account**	-	\$78,781,574	0.41%	0.145%	\$323,004	\$114,233
Voya Government Money Market A	VYAXX	\$11,422	0.40%	0.145%	\$46	\$17
Loomis Sayles Investment Grade Bond Y*	LSIIX	\$27,106,428	0.36%	0.145%	\$97,583	\$39,304
Invesco Oppenheimer International Bd R6	OIBIX	\$4,476,965	0.56%	0.145%	\$25,071	\$6,492
Pioneer Global High Yield Y*	GHYYX	\$6,819,577	0.67%	0.145%	\$45,691	\$9,888
Vanguard Institutional Index Instl Plus	VIIIX	\$121,620,391	0.02%	0.145%	\$24,324	\$176,350
American Funds Growth Fund of America R6	RGAGX	\$109,873,947	0.31%	0.145%	\$340,609	\$159,317
Vanguard Mid Cap Index Instl	VMCIX	\$61,643,341	0.04%	0.145%	\$24,657	\$89,383
Invesco Small Cap Value Y*	VSMIX	\$8,125,437	0.62%	0.145%	\$50,378	\$11,782
Vanguard Small Cap Index Instl	VSCIX	\$41,845,691	0.04%	0.145%	\$16,738	\$60,676
Baron Growth Instl*	BGRIX	\$36,467,250	0.88%	0.145%	\$320,912	\$52,878
Dodge & Cox International Stock*	DODFX	\$11,726,467	0.53%	0.145%	\$62,150	\$17,003
Vanguard Total Intl Stock Index I	VTSNX	\$24,648,646	0.08%	0.145%	\$19,719	\$35,741
American Funds Capital World Gr & Inc R6	RWIGX	\$50,690,028	0.44%	0.145%	\$223,036	\$73,501
Conservative Allocation Portfolio	-	\$28,275,744	0.32%	0.145%	\$90,482	\$41,000
Moderate Allocation Portfolio*	-	\$81,404,072	0.22%	0.145%	\$179,089	\$118,036
Aggressive Allocation Portfolio*	-	\$57,632,494	0.14%	0.145%	\$80,685	\$83,567
Vanguard Instl Target Retirement Income Instl	VITRX	\$6,072,025	0.09%	0.145%	\$5,465	\$8,804
Vanguard Instl Target Retirement 2020 Instl	VITWX	\$28,644,334	0.09%	0.145%	\$25,780	\$41,534
Vanguard Instl Target Retirement 2025 Instl	VRIVX	\$313,249	0.09%	0.145%	\$282	\$454
Vanguard Instl Target Retirement 2030 Instl	VTTWX	\$43,375,332	0.09%	0.145%	\$39,038	\$62,894
Vanguard Instl Target Retirement 2035 Instl	VITFX	\$202,939	0.09%	0.145%	\$183	\$294
Vanguard Instl Target Retirement 2040 Instl	VIRSX	\$38,427,232	0.09%	0.145%	\$34,585	\$55,719
Vanguard Instl Target Retirement 2045 Instl	VITLX	\$11,172	0.09%	0.145%	\$10	\$16
Vanguard Instl Target Retirement 2050 Instl	VTRLX	\$24,797,650	0.09%	0.145%	\$22,318	\$35,957
Vanguard Instl Target Retirement 2055 Instl	VIVLX	\$20,468	0.09%	0.145%	\$18	\$30
Vanguard Instl Target Retirement 2060 Instl	VILVX	\$21,816	0.09%	0.145%	\$20	\$32
Vanguard Instl Target Retirement 2065 Instl	VSXFX	\$29,436	0.09%	0.145%	\$26	\$43
Self-Directed Brokerage Account	-	\$2,526,028	-	0.000%	-	\$0
<b>TOTAL</b>		<b>\$1,173,606,080</b>			<b>\$3,275,166</b>	<b>\$1,698,066</b>

Plan Administration Cost	Quarter	Annualized
Contracted Revenue to Voya (9.5 bps excluding SDBA - est):	\$278,132	\$1,112,526
Additional Administrative Allowance (5 bps excluding SDBA - est):	\$146,385	\$585,540
<b>Total Plan Administration Cost (14.5 bps excluding SDBA - est):</b>	<b>\$424,517</b>	<b>\$1,698,066</b>

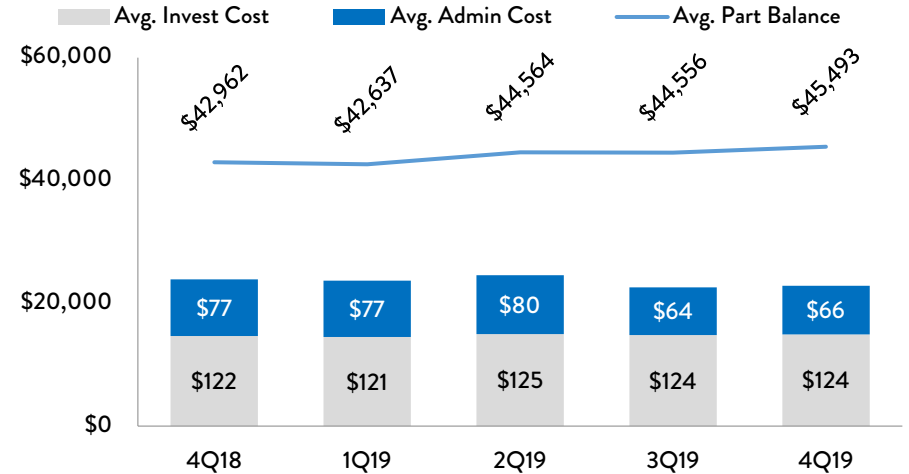
\*Revenue derived from funds credited to participant accounts in which they are held. For fee reporting purposes, the credit has been used to offset the reported fund expense ratio.

\*\*No explicit expense ratio given for Voya Fixed Account. An expense ratio of 0.41% is assumed for reporting purposes.

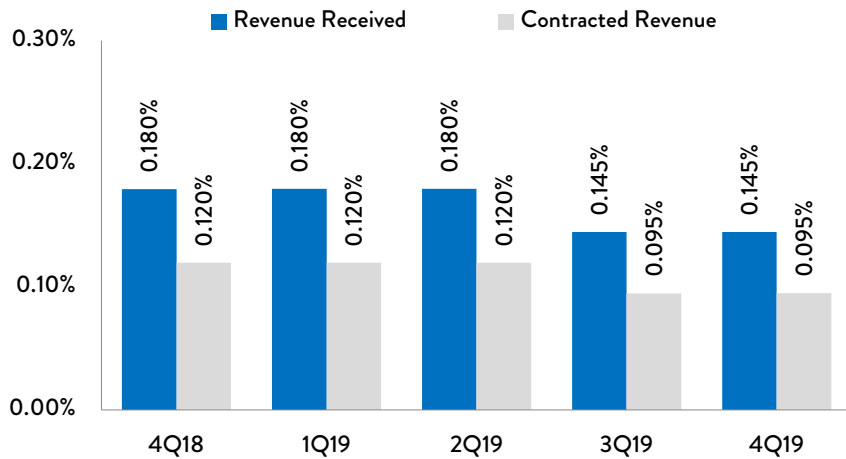
Annualized Plan Cost (%)



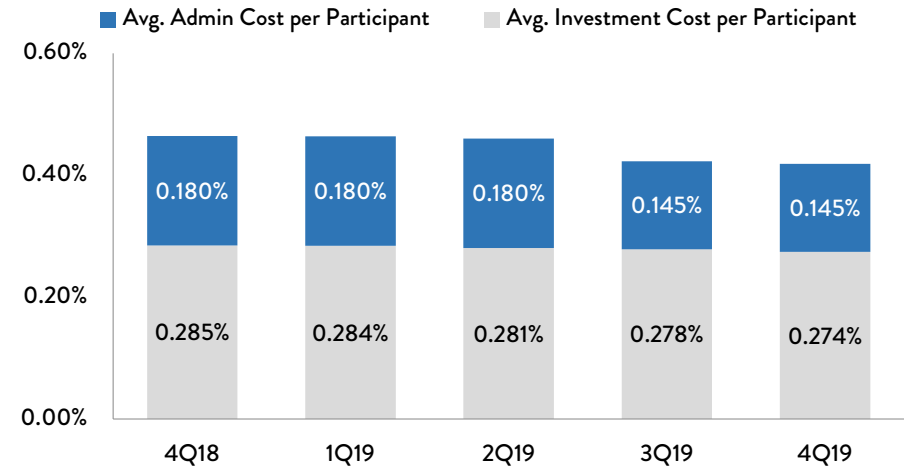
Average Participant Balance and Cost (\$)



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



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



\*Revenue received is 0.145% annually on all assets excluding SDBA. Contracted revenue is 0.095% annually on all assets excluding SDBA.

**COUNTY OF SAN BERNARDINO**

**457 Deferred Compensation Plan**

**PLAN FEE ANALYSIS**

Fourth Quarter 2019

*Annualized*

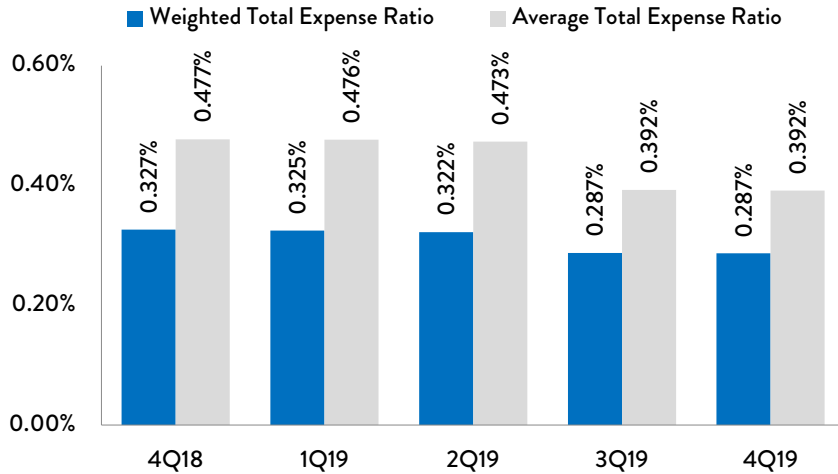
Fund	Ticker	Quarter Average			Annualized	
		Assets	Net Expense Ratio	Admin Fee	Est. Total Invest. Cost	Est. Total Admin. Cost
Stabilizer	-	\$195,722,300	0.44%	0.145%	\$861,178	\$283,797
Loomis Sayles Investment Grade Bond Y*	LSIIX	\$23,025,708	0.36%	0.145%	\$82,893	\$33,387
Invesco Oppenheimer International Bd R6	OIBIX	\$3,596,158	0.56%	0.145%	\$20,138	\$5,214
Pioneer Global High Yield Y*	GHYYX	\$5,246,350	0.67%	0.145%	\$35,151	\$7,607
Vanguard Institutional Index Instl Plus	VIIIX	\$98,351,755	0.02%	0.145%	\$19,670	\$142,610
American Funds Growth Fund of America R6	RGAGX	\$88,216,761	0.31%	0.145%	\$273,472	\$127,914
Vanguard Mid Cap Index Instl	VMCIX	\$49,065,446	0.04%	0.145%	\$19,626	\$71,145
Invesco Small Cap Value Y*	VSMIX	\$6,318,310	0.62%	0.145%	\$39,174	\$9,162
Vanguard Small Cap Index Instl	VSCIX	\$34,592,917	0.04%	0.145%	\$13,837	\$50,160
Baron Growth Instl*	BGRIX	\$29,802,924	0.88%	0.145%	\$262,266	\$43,214
Dodge & Cox International Stock*	DODFX	\$9,679,265	0.53%	0.145%	\$51,300	\$14,035
Vanguard Total Intl Stock Index I	VTSNX	\$20,751,251	0.08%	0.145%	\$16,601	\$30,089
American Funds Capital World Gr & Inc R6	RWIGX	\$43,630,907	0.44%	0.145%	\$191,976	\$63,265
Conservative Allocation Portfolio	-	\$20,215,523	0.32%	0.145%	\$64,690	\$29,313
Moderate Allocation Portfolio*	-	\$61,127,779	0.22%	0.145%	\$134,481	\$88,635
Aggressive Allocation Portfolio*	-	\$45,105,362	0.14%	0.145%	\$63,148	\$65,403
Vanguard Instl Target Retirement Income Instl	VITRX	\$3,641,468	0.09%	0.145%	\$3,277	\$5,280
Vanguard Instl Target Retirement 2020 Instl	VITWX	\$12,173,362	0.09%	0.145%	\$10,956	\$17,651
Vanguard Instl Target Retirement 2025 Instl	VRIVX	\$231,093	0.09%	0.145%	\$208	\$335
Vanguard Instl Target Retirement 2030 Instl	VTTWX	\$17,311,309	0.09%	0.145%	\$15,580	\$25,101
Vanguard Instl Target Retirement 2035 Instl	VITFX	\$68,662	0.09%	0.145%	\$62	\$100
Vanguard Instl Target Retirement 2040 Instl	VIRSX	\$20,821,609	0.09%	0.145%	\$18,739	\$30,191
Vanguard Instl Target Retirement 2045 Instl	VITLX	\$9,540	0.09%	0.145%	\$9	\$14
Vanguard Instl Target Retirement 2050 Instl	VTRLX	\$19,235,125	0.09%	0.145%	\$17,312	\$27,891
Vanguard Instl Target Retirement 2055 Instl	VIVLX	\$19,679	0.09%	0.145%	\$18	\$29
Vanguard Instl Target Retirement 2060 Instl	VILVX	\$20,876	0.09%	0.145%	\$19	\$30
Vanguard Instl Target Retirement 2065 Instl	VSXFX	\$29,234	0.09%	0.145%	\$26	\$42
Self-Directed Brokerage Account	-	\$2,040,765	-	0.000%	-	\$0
<b>TOTAL</b>		<b>\$810,051,438</b>			<b>\$2,215,806</b>	<b>\$1,171,615</b>

Plan Administration Cost	Quarter	Annualized
Plan Generated Revenue (est):	\$292,904	\$1,171,615
Contracted Revenue (est):	\$191,903	\$767,610
Net Excess/(Deficit) (est):	\$101,001	\$404,005

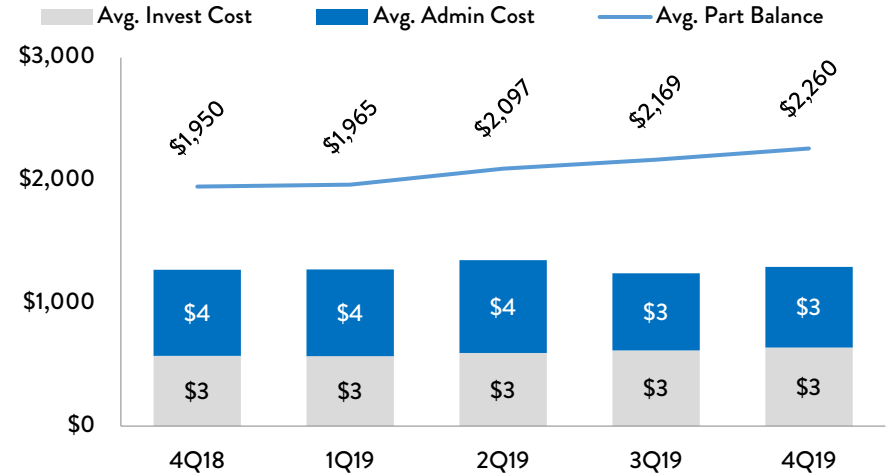
\*Revenue derived from funds credited to participant accounts in which they are held. For fee reporting purposes, the credit has been used to offset the reported fund expense ratio.



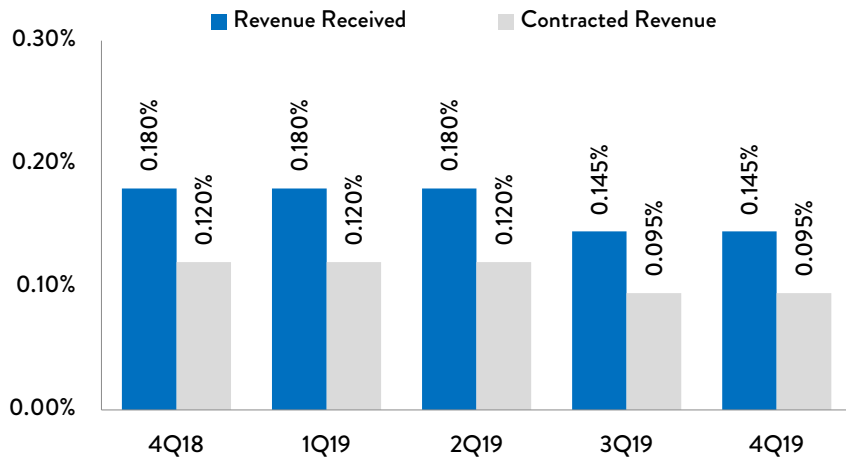
Annualized Plan Cost (%)



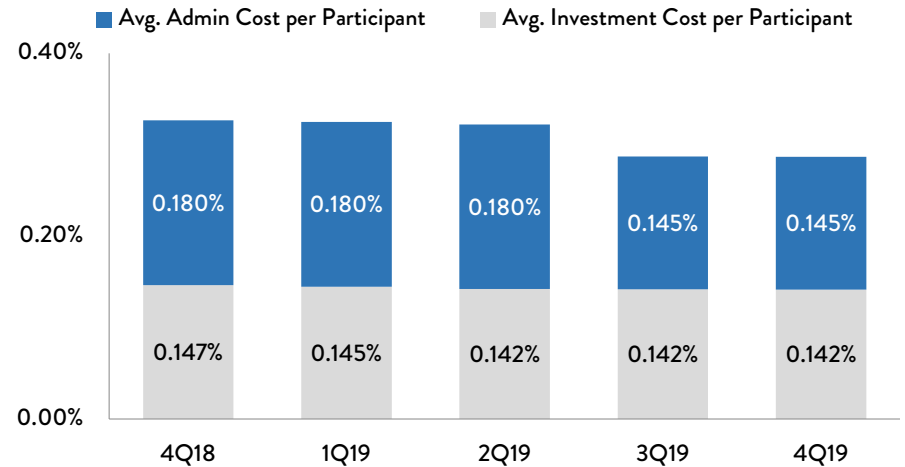
Average Participant Balance and Cost (\$)



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



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



\*Revenue received is 0.145% annually on all assets excluding SDBA. Contracted revenue is 0.095% annually on all assets excluding SDBA.

**COUNTY OF SAN BERNARDINO**

**401(a) Defined Contribution Plan**

**PLAN FEE ANALYSIS**

Fourth Quarter 2019

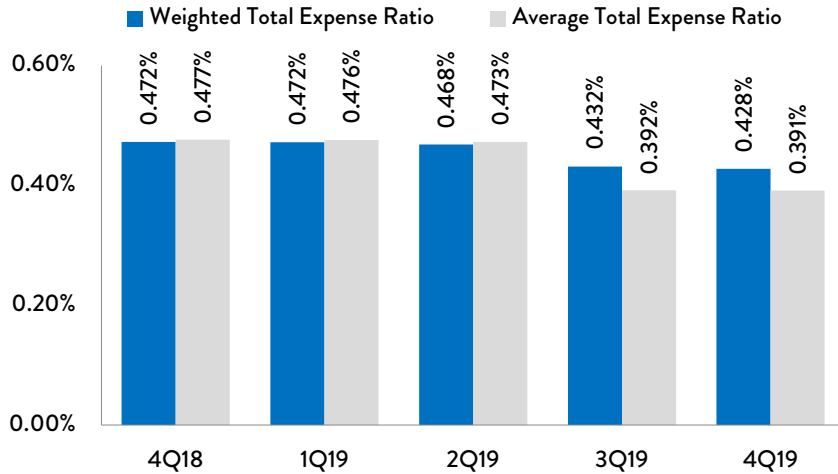
*Annualized*

Fund	Ticker	Quarter Average Assets	Net Expense Ratio	Admin Fee	Est. Total Invest. Cost	Est. Total Admin. Cost
Stabilizer	-	\$1,399,069	0.44%	0.145%	\$6,156	\$2,029
Loomis Sayles Investment Grade Bond Y*	LSIIX	\$152,050	0.36%	0.145%	\$547	\$220
Invesco Oppenheimer International Bd R6	OIBIX	\$39,305	0.56%	0.145%	\$220	\$57
Pioneer Global High Yield Y*	GHYYX	\$45,999	0.67%	0.145%	\$308	\$67
Vanguard Institutional Index Instl Plus	VIIIIX	\$685,714	0.02%	0.145%	\$137	\$994
American Funds Growth Fund of America R6	RGAGX	\$445,629	0.31%	0.145%	\$1,381	\$646
Vanguard Mid Cap Index Instl	VMCIX	\$361,348	0.04%	0.145%	\$145	\$524
Invesco Small Cap Value Y*	VSMIX	\$106,505	0.62%	0.145%	\$660	\$154
Vanguard Small Cap Index Instl	VSCIX	\$216,209	0.04%	0.145%	\$86	\$314
Baron Growth Instl*	BGRIX	\$231,078	0.88%	0.145%	\$2,033	\$335
Dodge & Cox International Stock*	DODFX	\$56,990	0.53%	0.145%	\$302	\$83
Vanguard Total Intl Stock Index I	VTSNX	\$147,248	0.08%	0.145%	\$118	\$214
American Funds Capital World Gr & Inc R6	RWIGX	\$120,267	0.44%	0.145%	\$529	\$174
Conservative Allocation Portfolio	-	\$664,139	0.32%	0.145%	\$2,125	\$963
Moderate Allocation Portfolio*	-	\$957,927	0.22%	0.145%	\$2,107	\$1,389
Aggressive Allocation Portfolio*	-	\$914,071	0.14%	0.145%	\$1,280	\$1,325
Vanguard Instl Target Retirement Income Instl	VITRX	\$598,427	0.09%	0.145%	\$539	\$868
Vanguard Instl Target Retirement 2020 Instl	VITWX	\$3,666,876	0.09%	0.145%	\$3,300	\$5,317
Vanguard Instl Target Retirement 2025 Instl	VRIVX	\$6,102	0.09%	0.145%	\$5	\$9
Vanguard Instl Target Retirement 2030 Instl	VTTWX	\$5,985,106	0.09%	0.145%	\$5,387	\$8,678
Vanguard Instl Target Retirement 2035 Instl	VITFX	\$325	0.09%	0.145%	\$0	\$0
Vanguard Instl Target Retirement 2040 Instl	VIRSX	\$5,072,604	0.09%	0.145%	\$4,565	\$7,355
Vanguard Instl Target Retirement 2045 Instl	VITLX	\$697	0.09%	0.145%	\$1	\$1
Vanguard Instl Target Retirement 2050 Instl	VTRLX	\$1,812,557	0.09%	0.145%	\$1,631	\$2,628
Vanguard Instl Target Retirement 2055 Instl	VIVLX	\$388	0.09%	0.145%	\$0	\$1
Vanguard Instl Target Retirement 2060 Instl	VILVX	\$63	0.09%	0.145%	\$0	\$0
Vanguard Instl Target Retirement 2065 Instl	VSXFX	\$157	0.09%	0.145%	\$0	\$0
<b>TOTAL</b>		<b>\$23,686,848</b>			<b>\$33,565</b>	<b>\$34,346</b>

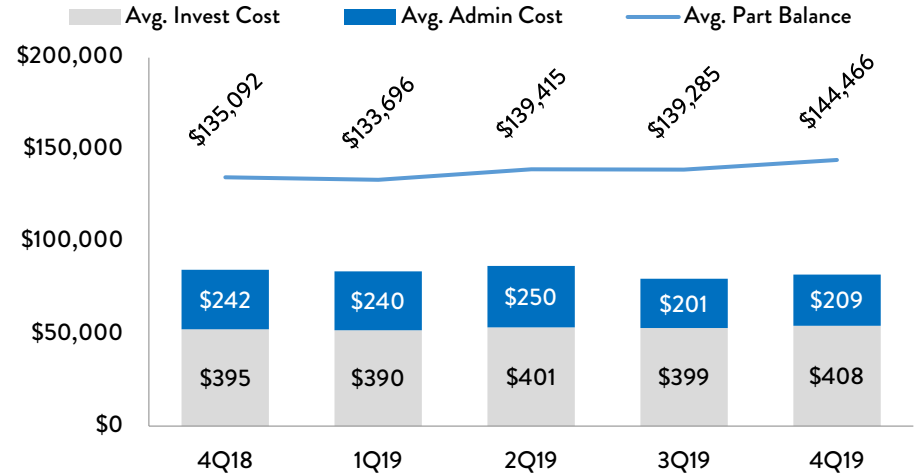
Plan Administration Cost	Quarter	Annualized
Plan Generated Revenue (est):	\$8,586	\$34,346
Contracted Revenue (est):	\$5,626	\$22,503
Net Excess/(Deficit) (est):	\$2,961	\$11,843

\*Revenue derived from funds credited to participant accounts in which they are held. For fee reporting purposes, the credit has been used to offset the reported fund expense ratio.

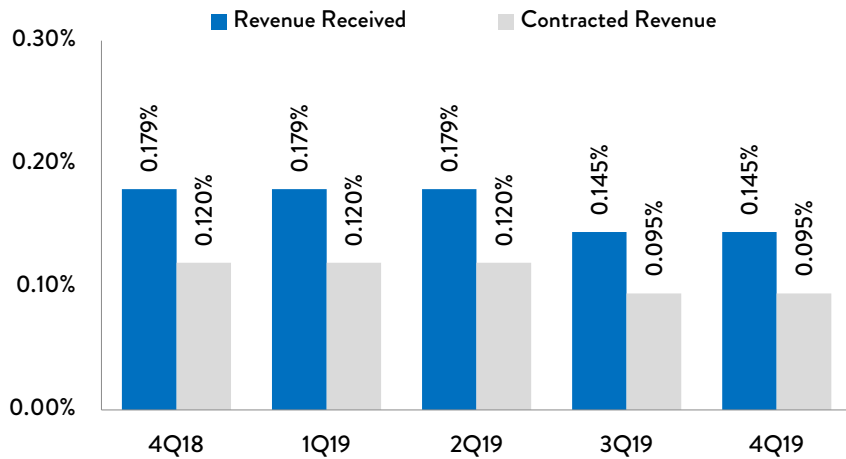
Annualized Plan Cost (%)



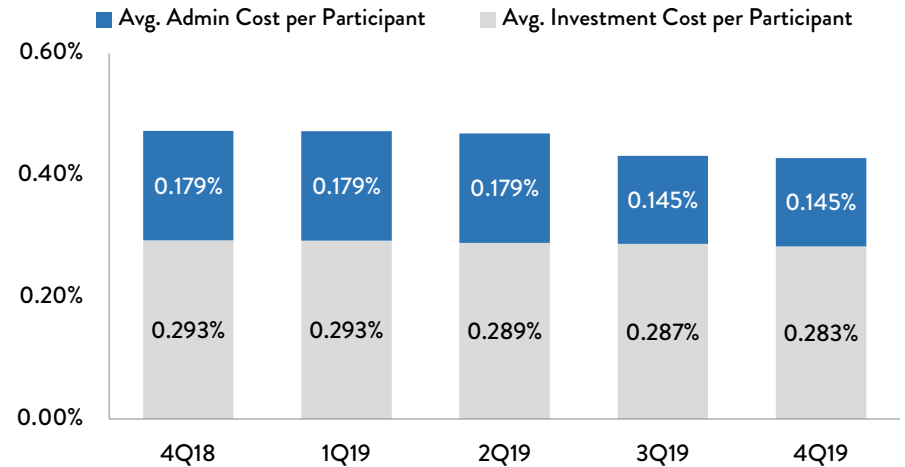
Average Participant Balance and Cost (\$)



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



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



\*Revenue received is 0.145% annually on all assets excluding SDBA. Contracted revenue is 0.095% annually on all assets excluding SDBA.

**COUNTY OF SAN BERNARDINO**

**401(k) Defined Contribution Plan**

**PLAN FEE ANALYSIS**

Fourth Quarter 2019

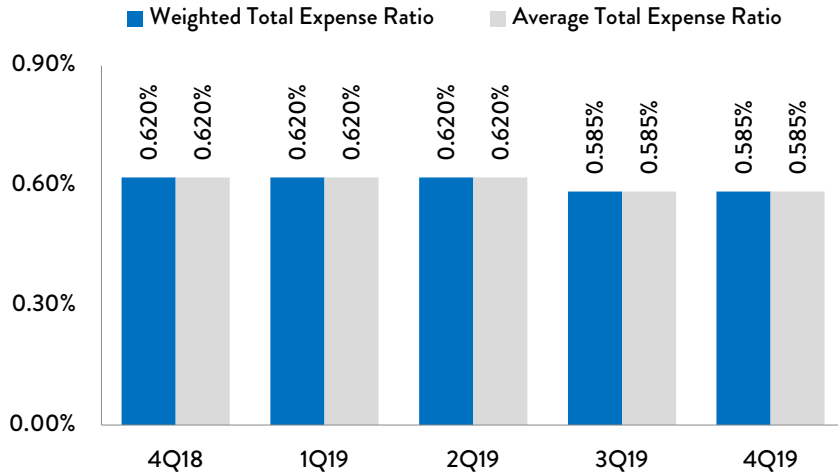
*Annualized*

Fund	Ticker	Quarter Average Assets	Net Expense Ratio	Admin Fee	Est. Total Invest. Cost	Est. Total Admin. Cost
Stabilizer	-	\$43,253,234	0.44%	0.145%	\$190,314	\$62,717
Loomis Sayles Investment Grade Bond Y*	LSIIX	\$3,632,200	0.36%	0.145%	\$13,076	\$5,267
Invesco Oppenheimer International Bd R6	OIBIX	\$687,616	0.56%	0.145%	\$3,851	\$997
Pioneer Global High Yield Y*	GHYYX	\$1,315,725	0.67%	0.145%	\$8,815	\$1,908
Vanguard Institutional Index Instl Plus	VIIIIX	\$20,478,905	0.02%	0.145%	\$4,096	\$29,694
American Funds Growth Fund of America R6	RGAGX	\$18,746,641	0.31%	0.145%	\$58,115	\$27,183
Vanguard Mid Cap Index Instl	VMCIX	\$10,116,492	0.04%	0.145%	\$4,047	\$14,669
Invesco Small Cap Value Y*	VSMIX	\$1,323,972	0.62%	0.145%	\$8,209	\$1,920
Vanguard Small Cap Index Instl	VSCIX	\$6,224,090	0.04%	0.145%	\$2,490	\$9,025
Baron Growth Instl*	BGRIX	\$5,175,652	0.88%	0.145%	\$45,546	\$7,505
Dodge & Cox International Stock*	DODFX	\$1,763,011	0.53%	0.145%	\$9,344	\$2,556
Vanguard Total Intl Stock Index I	VTSNX	\$3,459,227	0.08%	0.145%	\$2,767	\$5,016
American Funds Capital World Gr & Inc R6	RWIGX	\$6,515,801	0.44%	0.145%	\$28,670	\$9,448
Conservative Allocation Portfolio	-	\$5,986,645	0.32%	0.145%	\$19,157	\$8,681
Moderate Allocation Portfolio*	-	\$14,670,091	0.22%	0.145%	\$32,274	\$21,272
Aggressive Allocation Portfolio*	-	\$6,893,681	0.14%	0.145%	\$9,651	\$9,996
Vanguard Instl Target Retirement Income Instl	VITRX	\$338,347	0.09%	0.145%	\$305	\$491
Vanguard Instl Target Retirement 2020 Instl	VITWX	\$1,645,153	0.09%	0.145%	\$1,481	\$2,385
Vanguard Instl Target Retirement 2025 Instl	VRIVX	\$72,585	0.09%	0.145%	\$65	\$105
Vanguard Instl Target Retirement 2030 Instl	VTTWX	\$2,489,105	0.09%	0.145%	\$2,240	\$3,609
Vanguard Instl Target Retirement 2035 Instl	VITFX	\$133,952	0.09%	0.145%	\$121	\$194
Vanguard Instl Target Retirement 2040 Instl	VIRSX	\$1,660,969	0.09%	0.145%	\$1,495	\$2,408
Vanguard Instl Target Retirement 2045 Instl	VITLX	\$935	0.09%	0.145%	\$1	\$1
Vanguard Instl Target Retirement 2050 Instl	VTRLX	\$1,263,646	0.09%	0.145%	\$1,137	\$1,832
Vanguard Instl Target Retirement 2055 Instl	VIVLX	\$401	0.09%	0.145%	\$0	\$1
Vanguard Instl Target Retirement 2060 Instl	VILVX	\$877	0.09%	0.145%	\$1	\$1
Vanguard Instl Target Retirement 2065 Instl	VSXFX	\$0	0.09%	0.145%	\$0	\$0
Self-Directed Brokerage Account	-	\$485,263	-	0.000%	-	\$0
<b>TOTAL</b>		<b>\$158,334,216</b>			<b>\$447,266</b>	<b>\$228,881</b>

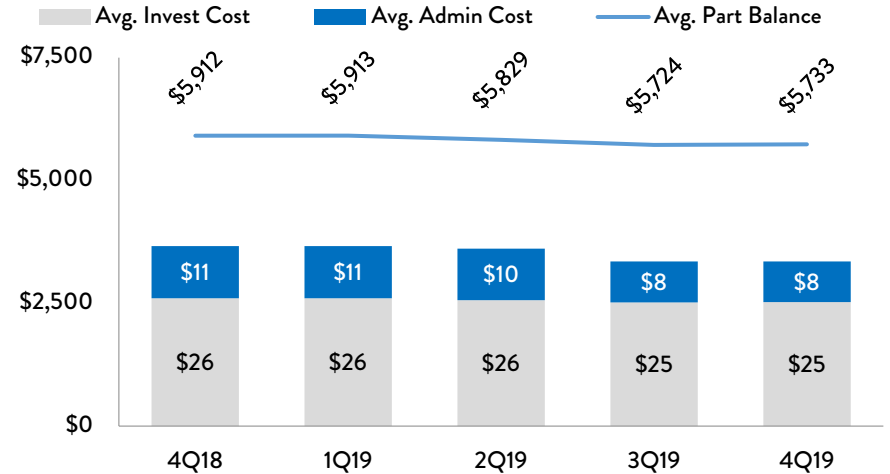
Plan Administration Cost	Quarter	Annualized
Plan Generated Revenue (est):	\$57,220	\$228,881
Contracted Revenue (est):	\$37,489	\$149,957
Net Excess/(Deficit) (est):	\$19,731	\$78,924

\*Revenue derived from funds credited to participant accounts in which they are held. For fee reporting purposes, the credit has been used to offset the reported fund expense ratio.

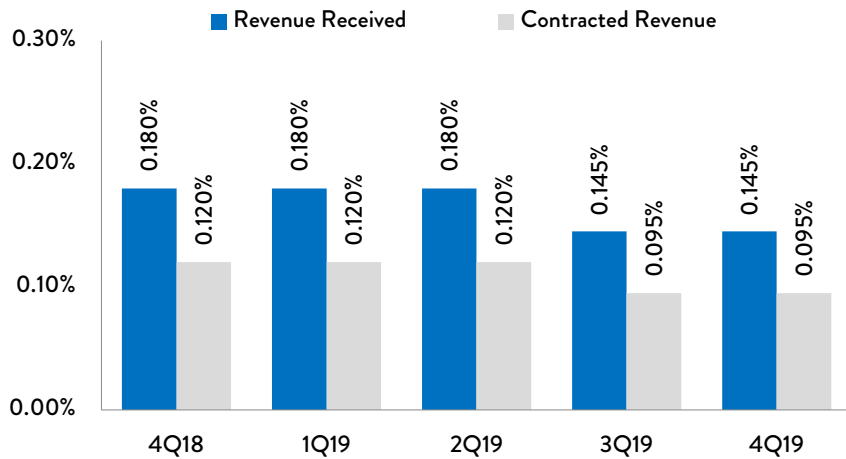
**Annualized Plan Cost (%)**



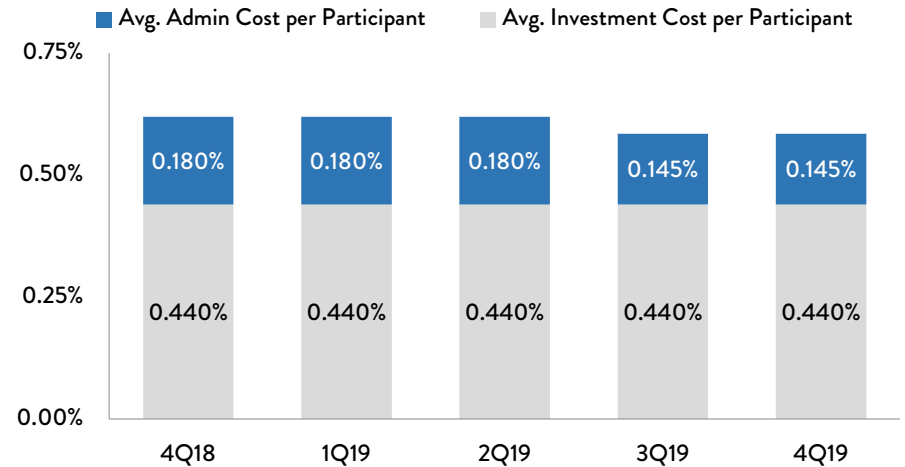
**Average Participant Balance and Cost (\$)**



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



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



\*Revenue received is 0.145% annually on all assets excluding SDBA. Contracted revenue is 0.095% annually on all assets excluding SDBA.

**COUNTY OF SAN BERNARDINO**  
**PST Deferred Compensation Retirement Plan**

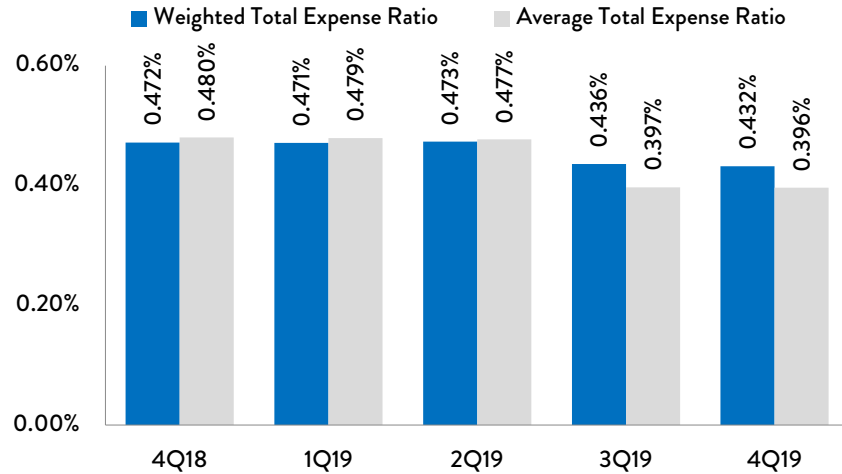
**PLAN FEE ANALYSIS**  
**Fourth Quarter 2019**

*Annualized*

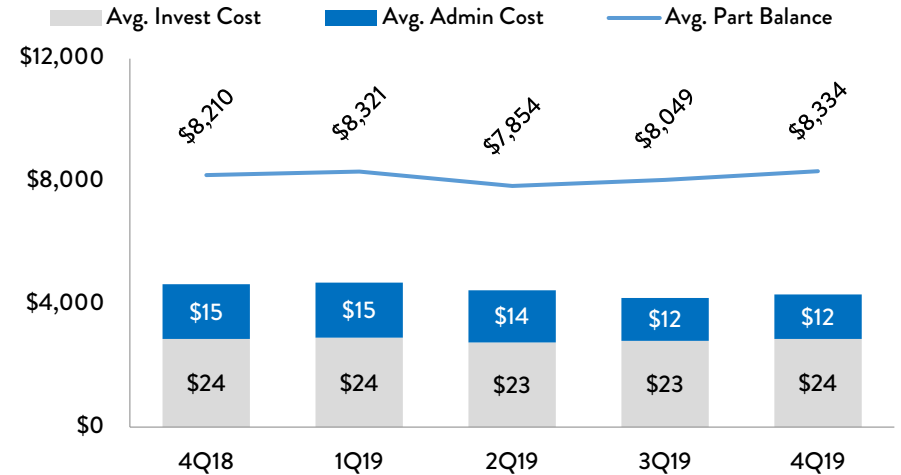
Fund	Ticker	Quarter Average Assets	Net Expense Ratio	Admin Fee	Est. Total Invest. Cost	Est. Total Admin. Cost
Stabilizer	-	\$37,640,319	0.44%	0.145%	\$165,617	\$54,578
TOTAL		\$37,640,319			\$165,617	\$54,578

Plan Administration Cost	Quarter	Annualized
Plan Generated Revenue (est):	\$13,645	\$54,578
Contracted Revenue (est):	\$8,940	\$35,758
Net Excess/(Deficit) (est):	\$4,705	\$18,820

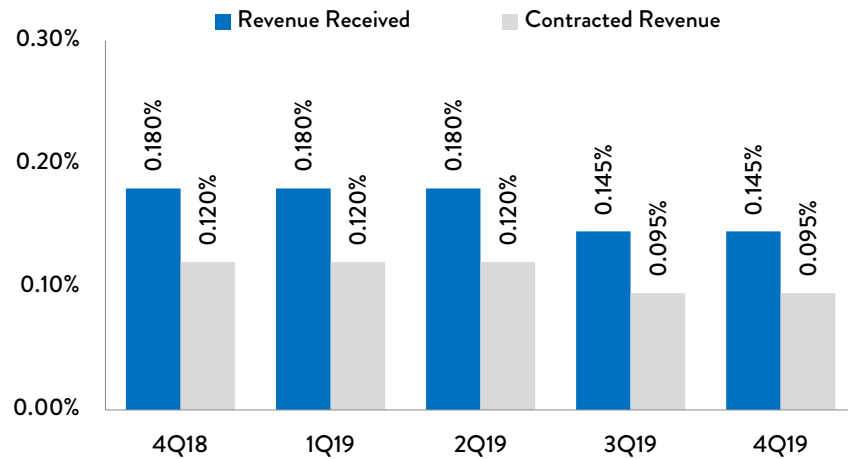
Annualized Plan Cost (%)



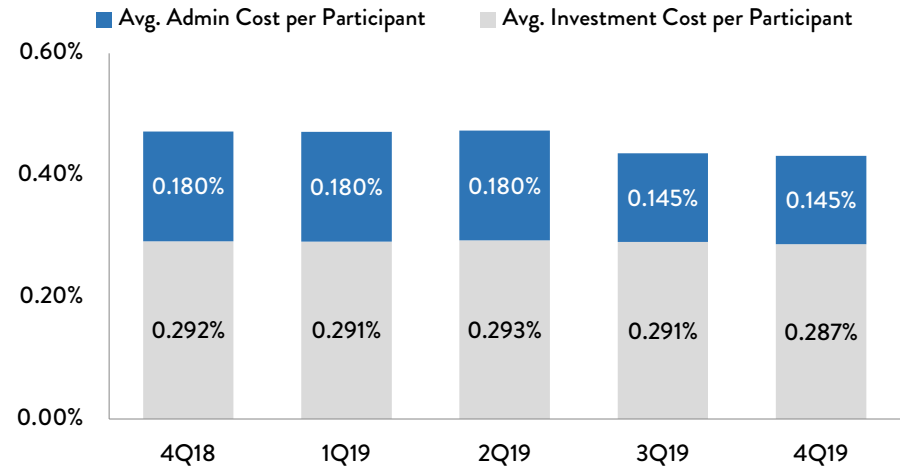
Average Participant Balance and Cost (\$)



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



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



\*Revenue received is 0.145% annually on all assets excluding SDBA. Contracted revenue is 0.095% annually on all assets excluding SDBA.

# COUNTY OF SAN BERNARDINO

## Retirement Medical Trust

# PLAN FEE ANALYSIS

Fourth Quarter 2019

*Annualized*

Fund	Ticker	Quarter Average Assets	Net Expense Ratio	Admin Fee	Est. Total Invest. Cost	Est. Total Admin. Cost
Voya Fixed Account**	-	\$78,781,574	0.41%	0.145%	\$323,004	\$114,233
Voya Government Money Market A	VYAXX	\$11,422	0.40%	0.145%	\$46	\$17
Loomis Sayles Investment Grade Bond Y*	LSIIX	\$296,471	0.36%	0.145%	\$1,067	\$430
Invesco Oppenheimer International Bd R6	OIBIX	\$153,886	0.56%	0.145%	\$862	\$223
Pioneer Global High Yield Y*	GHYYX	\$211,504	0.67%	0.145%	\$1,417	\$307
Vanguard Institutional Index Instl Plus	VIIIIX	\$2,104,017	0.02%	0.145%	\$421	\$3,051
American Funds Growth Fund of America R6	RGAGX	\$2,464,917	0.31%	0.145%	\$7,641	\$3,574
Vanguard Mid Cap Index Instl	VMCIX	\$2,100,054	0.04%	0.145%	\$840	\$3,045
Invesco Small Cap Value Y*	VSMIX	\$376,650	0.62%	0.145%	\$2,335	\$546
Vanguard Small Cap Index Instl	VSCIX	\$812,475	0.04%	0.145%	\$325	\$1,178
Baron Growth Instl*	BGRIX	\$1,257,596	0.88%	0.145%	\$11,067	\$1,824
Dodge & Cox International Stock*	DODFX	\$227,201	0.53%	0.145%	\$1,204	\$329
Vanguard Total Intl Stock Index I	VTSNX	\$290,919	0.08%	0.145%	\$233	\$422
American Funds Capital World Gr & Inc R6	RWIGX	\$423,054	0.44%	0.145%	\$1,861	\$613
Conservative Allocation Portfolio	-	\$1,409,438	0.32%	0.145%	\$4,510	\$2,044
Moderate Allocation Portfolio*	-	\$4,648,276	0.22%	0.145%	\$10,226	\$6,740
Aggressive Allocation Portfolio*	-	\$4,719,380	0.14%	0.145%	\$6,607	\$6,843
Vanguard Instl Target Retirement Income Instl	VITRX	\$1,493,784	0.09%	0.145%	\$1,344	\$2,166
Vanguard Instl Target Retirement 2020 Instl	VITWX	\$11,158,943	0.09%	0.145%	\$10,043	\$16,180
Vanguard Instl Target Retirement 2025 Instl	VRIVX	\$3,470	0.09%	0.145%	\$3	\$5
Vanguard Instl Target Retirement 2030 Instl	VTTWX	\$17,589,812	0.09%	0.145%	\$15,831	\$25,505
Vanguard Instl Target Retirement 2035 Instl	VITFX	\$0	0.09%	0.145%	\$0	\$0
Vanguard Instl Target Retirement 2040 Instl	VIRSX	\$10,872,050	0.09%	0.145%	\$9,785	\$15,764
Vanguard Instl Target Retirement 2045 Instl	VITLX	\$0	0.09%	0.145%	\$0	\$0
Vanguard Instl Target Retirement 2050 Instl	VTRLX	\$2,486,322	0.09%	0.145%	\$2,238	\$3,605
Vanguard Instl Target Retirement 2055 Instl	VIVLX	\$0	0.09%	0.145%	\$0	\$0
Vanguard Instl Target Retirement 2060 Instl	VILVX	\$0	0.09%	0.145%	\$0	\$0
Vanguard Instl Target Retirement 2065 Instl	VSXFX	\$45	0.09%	0.145%	\$0	\$0
<b>TOTAL</b>		<b>\$143,893,259</b>			<b>\$412,911</b>	<b>\$208,645</b>

Plan Administration Cost	Quarter	Annualized
Plan Generated Revenue (est):	\$52,161	\$208,645
Contracted Revenue (est):	\$34,175	\$136,699
Net Excess/(Deficit) (est):	\$17,987	\$71,947

\*Revenue derived from funds credited to participant accounts in which they are held. For fee reporting purposes, the credit has been used to offset the reported fund expense ratio.

\*\*No explicit expense ratio given for the Voya Fixed Account. An expense ratio of 0.41% is assumed for reporting purposes.



# Section 5

Asset Class: **Asset Allocation**  
Category: **Lifestyle**

## FUND FACTS

Inception Date: **October 1, 2004**

Investment advisory fee for period ended  
September 30, 2019: **0.15%**

12b-1 fee: **0.00%**

Other expenses: **0.03%**

Total fund annual expenses without  
waivers or reductions for period ended  
September 30, 2019: **0.18%**

Total waivers, recoupments, and  
reductions: **-0.01%**

Net fund annual expenses after waivers  
or reductions for period ended  
September 30, 2019: **0.17%**

Turnover rate: **15%**

If offered through a retirement program,  
additional fees and expenses may be  
charged under that program.

### Important Information

Category is interpreted by Voya® using  
Fund Company and/or Morningstar  
category information.

Investment advisory fee reflects a  
weighted blend of fees charged by the  
underlying investment options within the  
Lifestyle Portfolio, based upon the  
percentage allocations designated by  
San Bernardino and detailed within the  
Strategy section.

This Portfolio is not a registered  
investment company, and interests in the  
Portfolio have not been registered with  
the Securities and Exchange  
Commission. It is only available to  
participants in the San Bernardino  
qualified retirement program. Only  
eligible participants in the plan may  
invest in the Portfolio.

**You can obtain copies of free  
prospectuses for the underlying  
funds which contain the underlying  
information on the charges and  
expenses for the funds at any time by  
calling your local Voya  
representative. Other fees and  
expenses may be charged under your**

**retirement program. More  
information is included in the  
enrollment material.**

Each sub-fund description must  
accompany this Lifestyle Portfolio  
description.

### Investment Objective

The investment objective of the  
Aggressive Allocation Portfolio is to  
provide long-term growth of capital with  
income as a minor consideration.  
Eighty-five percent (85%) of the total  
fund assets are allocated to equities and  
fifteen percent (15%) are allocated to  
fixed income securities. It is the most  
aggressive of the three Lifestyle funds in  
terms of its potential for the greatest  
investment return as well as the greatest  
risk. It is most suitable for participants  
who are able to remain invested for ten  
or more years, or who are comfortable  
with the higher short-term fluctuations  
that are characteristic of investing in  
equity markets.

### Strategy

The strategy for the Aggressive  
Allocation Portfolio is to invest in a  
combination of active and passive  
investments in the following proportions:  
---7% in the Loomis Sayles Investment  
Grade Bond – Class Y, which seeks high  
total investment return through a  
combination of current income and  
capital appreciation.

---6% in the Oppenheimer International  
Bond Fund – Class I, which seeks total  
return.

---32% in the Vanguard® Total  
International Stock Index Fund -  
Institutional Shares which seeks to track  
the performance of a benchmark index  
that measures the investment return of  
stocks issued by companies located in  
developed and emerging markets,  
excluding the United States.

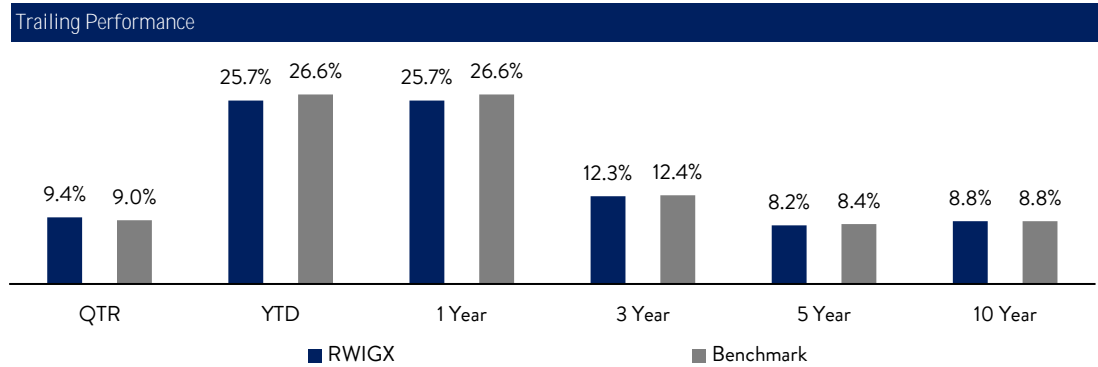
---48% in the Vanguard® Total Stock  
Market Index Fund - Institutional Shares,  
which seeks to track the performance of  
a benchmark index that measures the  
investment return of the overall stock  
market.

---7% Pioneer Global High Yield Fund -  
Class Y Shares, which seeks to  
maximize total return through a  
combination of income and capital  
appreciation.

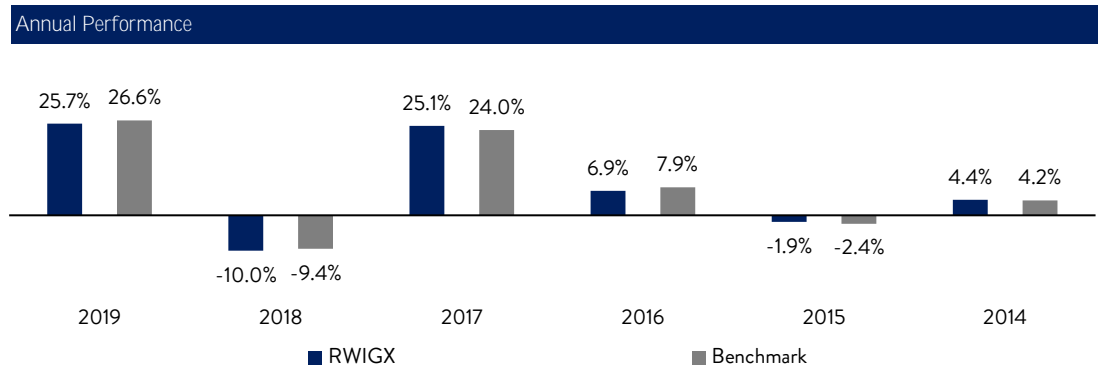
### Principal Risks

All equity (both U.S. and International)  
and fixed income investments exhibit  
certain risk characteristics that include  
the potential for loss of principal value.  
Generally, the probability of loss of  
principal is greater with investment funds  
that also provide the greatest potential  
for investment return. International  
stocks do carry additional risks that  
relate to currency and political  
uncertainty. The risks of Lifestyle  
Portfolios are based on the proportionate  
risk characteristics of the underlying sub-  
funds described above.

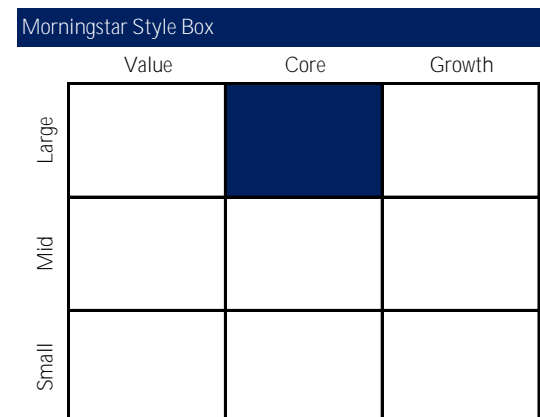
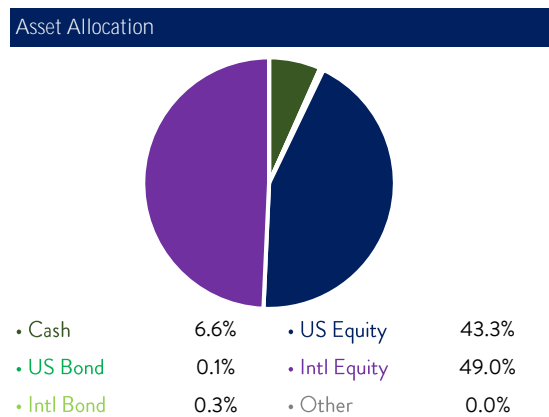
Product Details	
Name	American Funds Capital World Gr&Inc R6
Ticker	RWIGX
Expense Ratio	0.440%
Morningstar Category	US Fund World Large Stock
Benchmark	MSCI ACWI NR USD
Inception Date	5/1/2009
Longest Tenured Manager	Sung Lee
Longest Manager Tenure	13.92 Years
Fund Size	\$103,600,782,313



Fund Characteristics	RWIGX	+/- Category
% Assets in Top 10 Holdings	16.76%	-8.36%
Average Market Cap (mil)	\$83,282	\$2,819
P/E Ratio (TTM)	20.11	-0.63
P/B Ratio (TTM)	2.71	0.09
Est. Dividend Yield	2.60%	0.47%



Sector Allocations	RWIGX	Category	+/- Category
Materials	4.1%	3.9%	0.2%
Communication Services	9.3%	8.7%	0.6%
Consumer Discretionary	10.6%	11.2%	-0.6%
Consumer Staples	8.5%	8.6%	-0.1%
Healthcare	13.7%	13.3%	0.4%
Industrials	9.6%	12.4%	-2.8%
Real Estate	3.7%	2.1%	1.6%
Technology	13.4%	15.7%	-2.3%
Energy	6.8%	3.6%	3.1%
Financial Services	15.5%	17.5%	-2.0%
Utilities	4.8%	2.9%	1.9%
Other	0.0%	0.0%	0.0%



American Funds Capital World Gr&Inc R6

RWIGX

Fund Fact Sheet

Data as of 12/31/2019

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• RWIGX	9.35%	25.74%	25.74%	12.29%	8.22%	8.81%
• Benchmark	8.95%	26.60%	26.60%	12.44%	8.41%	8.79%
+/- Benchmark	0.40%	-0.86%	-0.86%	-0.15%	-0.18%	0.03%
Peer Group Rank	32	56	56	46	47	53

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• RWIGX	9.35%	-0.55%	3.00%	12.25%
• Benchmark	8.95%	-0.03%	3.61%	12.18%
+/- Benchmark	0.40%	-0.52%	-0.61%	0.07%

Annual Performance	2019	2018	2017	2016	2015	2014
• RWIGX	25.74%	-9.97%	25.08%	6.85%	-1.88%	4.36%
• Benchmark	26.60%	-9.41%	23.97%	7.86%	-2.36%	4.16%
+/- Benchmark	-0.86%	-0.55%	1.11%	-1.01%	0.49%	0.20%
Peer Group Rank	56	56	41	31	62	35

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• RWIGX	-11.60%	1.23%	0.18%	0.43%
• Benchmark	-12.75%	4.28%	0.53%	-0.96%
+/- Benchmark	1.15%	-3.05%	-0.36%	1.40%

Rolling 5-Year Performance	01/2015 - 12/2019	10/2014 - 09/2019	07/2014 - 06/2019	04/2014 - 03/2019	01/2014 - 12/2018	10/2013 - 09/2018
• RWIGX	8.22%	6.31%	6.03%	6.34%	4.26%	8.48%
• Benchmark	8.41%	6.65%	6.16%	6.45%	4.26%	8.67%
+/- Benchmark	-0.18%	-0.34%	-0.13%	-0.11%	0.00%	-0.19%
Peer Group Rank	47	56	50	48	44	51

5-Year Quarterly Performance	4Q17	3Q17	2Q17	1Q17
• RWIGX	5.13%	5.11%	5.29%	7.50%
• Benchmark	5.73%	5.18%	4.27%	6.91%
+/- Benchmark	-0.60%	-0.07%	1.02%	0.60%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	0.47	0.00	0.32	0.00	0.35	0.00
Beta	0.94	1.00	0.93	1.00	0.96	1.00
Standard Deviation	10.87	11.38	11.07	11.78	12.85	13.19
Sharpe Ratio	0.96	0.94	0.67	0.65	0.68	0.66
Information Ratio	-0.07	-	-0.09	-	0.01	-
Treynor Ratio	11.27	10.73	7.69	7.30	8.59	8.20
Upside Capture Ratio	94.97	100.00	93.66	100.00	96.74	100.00
Downside Capture Ratio	90.82	100.00	91.01	100.00	94.69	100.00

5-Year Quarterly Performance	4Q16	3Q16	2Q16	1Q16
• RWIGX	-0.15%	5.11%	1.44%	0.36%
• Benchmark	1.19%	5.30%	0.99%	0.24%
+/- Benchmark	-1.34%	-0.19%	0.45%	0.12%

5-Year Quarterly Performance	4Q15	3Q15	2Q15	1Q15
• RWIGX	4.08%	-8.54%	0.34%	2.74%
• Benchmark	5.03%	-9.45%	0.35%	2.31%
+/- Benchmark	-0.95%	0.91%	-0.01%	0.43%

All data and information on this fact sheet is taken from sources believed to be accurate but is not guaranteed to be accurate, complete, or correct.

# American Funds Capital World Gr&Inc R6 (USD)

**Morningstar Analyst Rating™ Overall Morningstar Rating™ Standard Index Category Index Morningstar Cat**  
**Gold** **★★★★** **722 US Fund World Large Stock** **MSCI ACWI EX USA NR USD** **MSCI ACWI NR USD** **US Fund World Large Stock**  
 05-09-2019

Performance 12-31-2019					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2017	7.50	5.29	5.11	5.13	25.08
2018	0.43	0.18	1.23	-11.60	-9.97
2019	12.25	3.00	-0.55	9.35	25.74
Trailing Returns					
	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	25.74	12.29	8.22	8.81	11.28
Std 12-31-2019	25.74	—	8.22	8.81	11.28
Total Return	25.74	12.29	8.22	8.81	11.28
+/- Std Index	4.22	2.42	2.72	3.85	—
+/- Cat Index	-0.86	-0.15	-0.18	0.03	—
% Rank Cat	51	43	44	51	—
No. in Cat	873	722	605	362	—

7-day Yield Subsidized Unsubsidized  
 30-day SEC Yield 12-31-19 1.92 1.92

**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 800-421-4225 or visit [www.americafunds.com](http://www.americafunds.com).

Fees and Expenses	
<b>Sales Charges</b>	<b>NA</b>
<b>Front-End Load %</b>	<b>NA</b>
<b>Deferred Load %</b>	<b>NA</b>
<b>Fund Expenses</b>	0.37
Management Fees %	0.37
12bt Expense %	NA
<b>Net Expense Ratio %</b>	<b>0.44</b>
<b>Gross Expense Ratio %</b>	<b>0.44</b>
<b>Risk and Return Profile</b>	

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

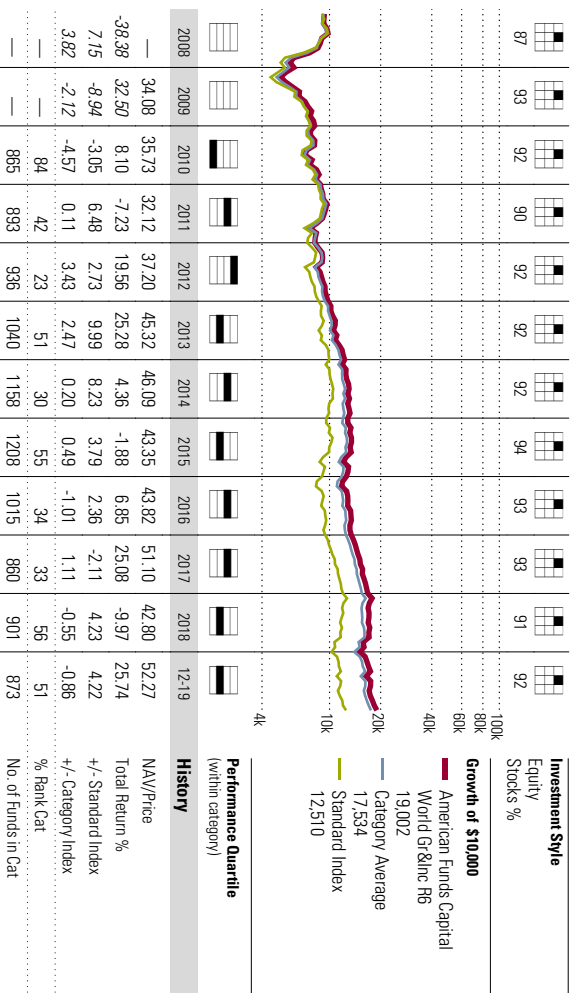
	3 Yr	5 Yr	10 Yr
Standard Deviation	10.87	11.07	12.85
Mean	12.29	8.22	8.81
Sharpe Ratio	0.97	0.67	0.88

MPI Statistics	Standard Index	Best Fit Index
Alpha	2.83	0.47
Beta	0.92	0.94
R-Squared	94.44	96.43
12-Month Yield	1.98%	1.98%
Potential Cap Gains Exp	29.70%	29.70%

**Operations**  
 Family: American Funds  
 Manager: Multiple  
 Tenure: 13.9 Years  
 Objective: Growth and Income  
 Base Currency: USD

Ticker: RWIGX  
 ISIN: US1405438102  
 Minimum Initial Purchase: \$250  
 Min Auto Investment Plan: \$250  
 Purchase Constraints: A

Incept: 05-01-2009  
 Type: M/F  
 Total Assets: \$103,600.78 mil



Portfolio Analysis 12-31-2019			
<b>Asset Allocation %</b>	Net %	Long %	Short %
Cash	6.63	6.63	0.00
US Stocks	43.34	43.34	0.00
Non-US Stocks	49.03	49.03	0.00
Bonds	0.47	0.47	0.00
Other/Not Cstfd	0.54	0.54	0.00
Total	100.00	100.00	0.00

Equity Style		Portfolio Statistics	
Value	Share Growth	Port Avg	Rel Index
Large	Med	P/E Ratio TTM	20.1
Mid	Ext	P/C Ratio TTM	11.9
Small	Low	P/B Ratio TTM	2.7
		Geo Avg Mkt Cap	83292
		Geo Avg Mkt Cap	2.25

Fixed-Income Style		Credit Quality Breakdown	
High	Med	Avg Eff Maturity	6.48
Mid	Low	Avg Eff Duration	—
Low	—	Avg Wtd Coupon	—
		Avg Wtd Price	—

Regional Exposure		Sector Weightings	
Americas	51.9	Cyclical	33.9
Greater Europe	30.0	Basic Materials	4.1
Greater Asia	18.1	Consumer Cyclical	10.6
		Financial Services	15.5
		Real Estate	3.7
		Sensitive	39.1
		Communication Services	9.3
		Energy	6.8
		Industrials	9.6
		Technology	13.4
		Defensive	27.0
		Consumer Defensive	8.5
		Healthcare	13.7
		Utilities	4.8

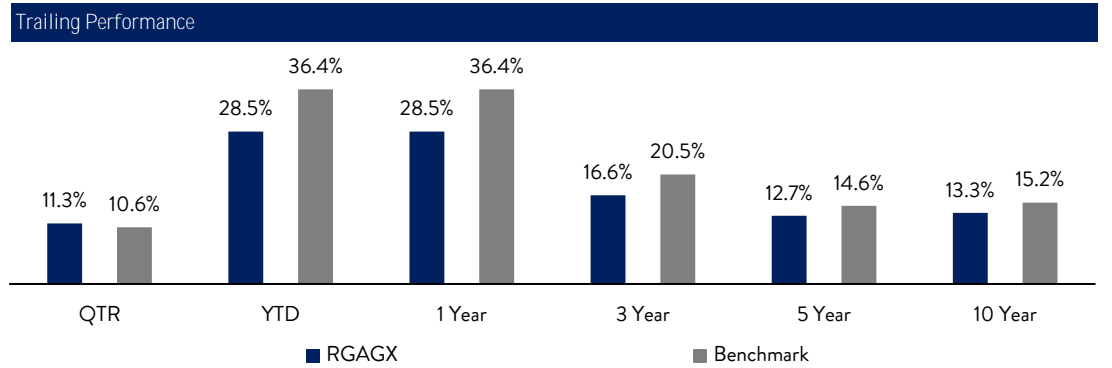
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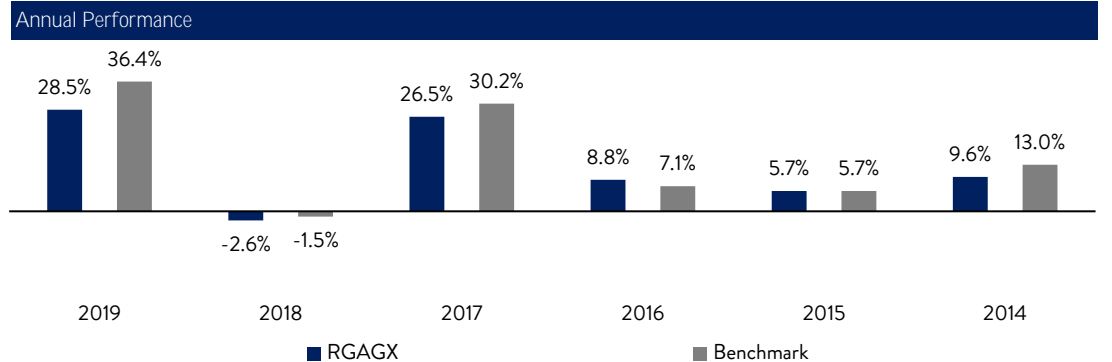
American Funds Growth Fund of Amer R6  
RGAGX

Fund Fact Sheet  
Data as of 12/31/2019

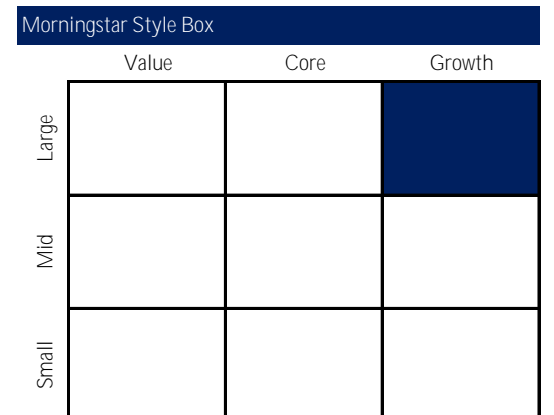
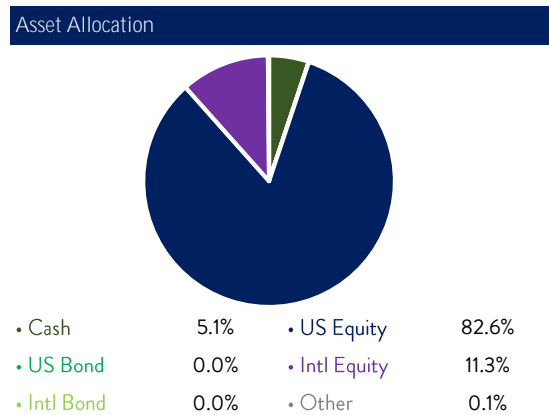
Product Details	
Name	American Funds Growth Fund of Amer R6
Ticker	RGAGX
Expense Ratio	0.310%
Morningstar Category	US Fund Large Growth
Benchmark	Russell 1000 Growth TR USD
Inception Date	5/1/2009
Longest Tenured Manager	Donald D. O'Neal
Longest Manager Tenure	26.17 Years
Fund Size	\$205,476,590,984



Fund Characteristics	RGAGX	+/- Category
% Assets in Top 10 Holdings	31.36%	-15.99%
Average Market Cap (mil)	\$107,632	-\$82,564
P/E Ratio (TTM)	26.34	-2.64
P/B Ratio (TTM)	4.11	-1.97
Est. Dividend Yield	1.01%	0.04%



Sector Allocations	RGAGX	Category	+/- Category
Materials	1.8%	1.7%	0.0%
Communication Services	18.8%	15.0%	3.8%
Consumer Discretionary	11.8%	13.2%	-1.4%
Consumer Staples	3.5%	4.6%	-1.2%
Healthcare	17.9%	14.7%	3.1%
Industrials	8.2%	8.7%	-0.4%
Real Estate	1.4%	2.2%	-0.8%
Technology	20.5%	25.8%	-5.2%
Energy	4.0%	0.9%	3.1%
Financial Services	12.0%	12.5%	-0.5%
Utilities	0.0%	0.7%	-0.7%
Other	0.0%	0.0%	0.0%



American Funds Growth Fund of Amer R6  
RGAGX

Fund Fact Sheet  
Data as of 12/31/2019

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• RGAGX	11.32%	28.54%	28.54%	16.57%	12.75%	13.31%
• Benchmark	10.62%	36.39%	36.39%	20.49%	14.63%	15.22%
+/- Benchmark	0.70%	-7.85%	-7.85%	-3.92%	-1.88%	-1.90%
Peer Group Rank	15	80	80	69	44	57

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• RGAGX	11.32%	-2.06%	3.53%	13.87%
• Benchmark	10.62%	1.49%	4.64%	16.10%
+/- Benchmark	0.70%	-3.55%	-1.11%	-2.23%

Annual Performance	2019	2018	2017	2016	2015	2014
• RGAGX	28.54%	-2.60%	26.53%	8.82%	5.70%	9.63%
• Benchmark	36.39%	-1.51%	30.21%	7.08%	5.67%	13.05%
+/- Benchmark	-7.85%	-1.09%	-3.69%	1.74%	0.03%	-3.42%
Peer Group Rank	80	53	62	11	39	60

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• RGAGX	-15.06%	5.05%	5.97%	3.01%
• Benchmark	-15.89%	9.17%	5.76%	1.42%
+/- Benchmark	0.82%	-4.12%	0.22%	1.59%

Rolling 5-Year Performance	01/2015 - 12/2019	10/2014 - 09/2019	07/2014 - 06/2019	04/2014 - 03/2019	01/2014 - 12/2018	10/2013 - 09/2018
• RGAGX	12.75%	10.97%	11.54%	11.87%	9.22%	14.91%
• Benchmark	14.63%	13.39%	13.39%	13.50%	10.40%	16.58%
+/- Benchmark	-1.88%	-2.42%	-1.85%	-1.63%	-1.19%	-1.67%
Peer Group Rank	44	56	54	48	37	42

5-Year Quarterly Performance	4Q17	3Q17	2Q17	1Q17
• RGAGX	7.01%	5.09%	4.00%	8.18%
• Benchmark	7.86%	5.90%	4.67%	8.91%
+/- Benchmark	-0.86%	-0.80%	-0.67%	-0.73%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	-2.58	0.00	-1.06	0.00	-1.31	0.00
Beta	0.96	1.00	0.95	1.00	0.97	1.00
Standard Deviation	13.11	13.26	12.76	12.92	13.17	13.15
Sharpe Ratio	1.11	1.35	0.92	1.04	0.97	1.10
Information Ratio	-1.14	-	-0.55	-	-0.62	-
Treynor Ratio	15.54	18.77	12.21	13.52	13.06	14.63
Upside Capture Ratio	89.44	100.00	92.99	100.00	94.20	100.00
Downside Capture Ratio	102.57	100.00	99.44	100.00	101.59	100.00

5-Year Quarterly Performance	4Q16	3Q16	2Q16	1Q16
• RGAGX	1.68%	6.58%	2.96%	-2.47%
• Benchmark	1.01%	4.58%	0.61%	0.74%
+/- Benchmark	0.67%	2.00%	2.34%	-3.21%

5-Year Quarterly Performance	4Q15	3Q15	2Q15	1Q15
• RGAGX	7.84%	-6.63%	1.45%	3.47%
• Benchmark	7.32%	-5.29%	0.12%	3.84%
+/- Benchmark	0.53%	-1.34%	1.33%	-0.37%

All data and information on this fact sheet is taken from sources believed to be accurate but is not guaranteed to be accurate, complete, or correct.

# American Funds Growth Fund of Amer R6 (USD)

**Morningstar Analyst Rating™ Overall Morningstar Rating™ Standard Index Category Index Morningstar Cat**  
**Bronze** 05-31-2019 **★★★★** 1,218 US Fund Large Growth **S&P 500 TR USD** Russell 1000 **Morningstar Cat**  
 US Fund Large Growth **Growth TR USD**

Performance 12-31-2019					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2017	8.18	4.00	5.09	7.01	26.53
2018	3.01	5.97	5.05	-15.06	-2.80
2019	13.87	3.53	-2.06	11.32	28.54
Trailing Returns					
	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	28.54	16.57	12.75	13.31	15.01
Std 12-31-2019	28.54	—	12.75	13.31	15.01
Total Return	28.54	16.57	12.75	13.31	15.01
+/- Std Index	-2.95	1.30	1.05	-0.25	—
+/- Cat Index	-7.85	-3.92	-1.88	-1.90	—
% Rank Cat	80	67	44	56	—
No. in Cat	1360	1218	1086	811	—

	Subsidized	Unsubsidized
7-day Yield	—	—
30-day SEC Yield 12-31-19	0.65	0.65

**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.

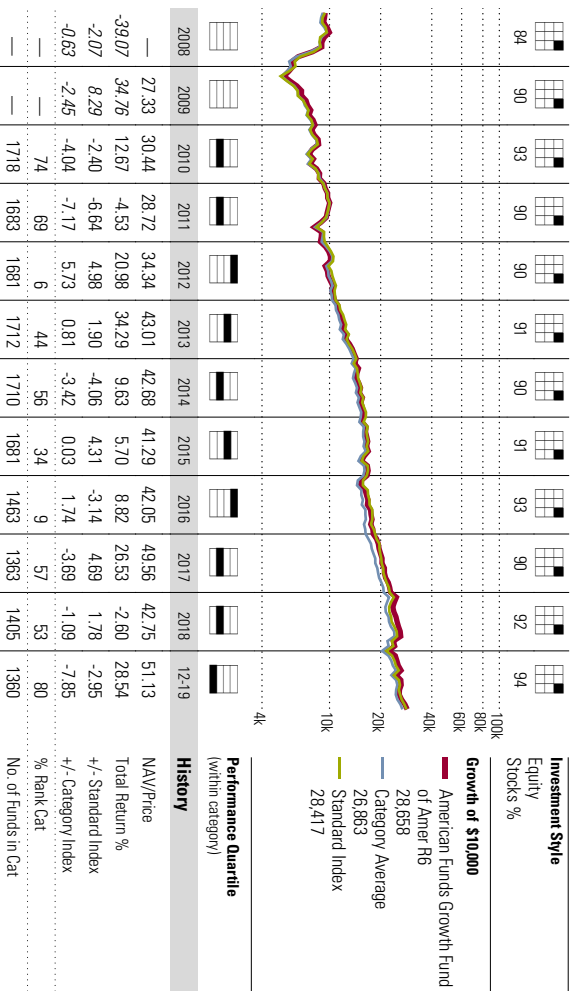
Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-421-4225 or visit [www.americanfunds.com](http://www.americanfunds.com).

Fees and Expenses	
<b>Sales Charges</b>	<b>NA</b>
<b>Front-End Load %</b>	<b>NA</b>
<b>Deferred Load %</b>	<b>NA</b>
<b>Fund Expenses</b>	0.27
Management Fees %	NA
12b1 Expense %	NA
<b>Net Expense Ratio %</b>	<b>0.31</b>
<b>Gross Expense Ratio %</b>	<b>0.31</b>
<b>Risk and Return Profile</b>	

	3 Yr	5 Yr	10 Yr
Morningstar Rating™	1218 funds	1086 funds	811 funds
	<b>3★</b>	<b>3★</b>	<b>3★</b>
Morningstar Risk	Avg	-Avg	-Avg
Morningstar Return	Avg	Avg	Avg
Standard Deviation	3 Yr	5 Yr	10 Yr
	13.11	12.76	13.17
Mean	16.57	12.75	13.31
Sharpe Ratio	1.11	0.92	0.98

MPI Statistics	Standard Index	Best Fit Index
Alpha	0.88	-3.89
Beta	1.03	0.97
R-Squared	89.95	95.95
12-Month Yield	—	1.00%
Potential Cap Gains Exp	—	52.25%

Operations	
Family:	American Funds
Manager:	Multiple
Tenure:	26.2 Years
Objective:	Growth
Base Currency:	USD



Portfolio Analysis 12-31-2019					
Asset Allocation %	Net %	Long %	Short %	Share Cng	Share Holdings:
Cash	4.69	5.08	0.39	09-2019	318 Total Stocks, 1 Total Fixed-Income, 35% Turnover Ratio
US Stocks	82.96	82.96	0.00	—	55 mil Facebook Inc A
Non-US Stocks	11.39	11.39	0.00	—	67 mil Microsoft Corp
Bonds	0.04	0.04	0.00	—	29 mil Netflix Inc
Other/Not Cstfd	0.92	0.92	0.00	—	4 mil Amazon.com Inc
Total	100.00	100.39	0.39	—	23 mil Unitedhealth Group Inc

Equity Style		Portfolio Statistics	
Value	Brand Growth	Port Avg	Rel Index
Large	Med Small	26.3	1.17
High	Med Low	16.5	1.14
—	—	4.1	1.21
—	—	10.7632	0.87
—	—	0.87	0.57

Fixed-Income Style		Credit Quality Breakdown	
Lat	Med Ext	Avg Eff Maturity	—
High	Med Low	Avg Eff Duration	—
—	—	Avg Wtd Coupon	11.00
—	—	Avg Wtd Price	—

Sector Weightings		Stocks %	Rel Std Index
<b>Cyclical</b>		<b>27.0</b>	<b>0.88</b>
Basic Materials		1.8	0.77
Consumer Cyclical		11.8	1.23
Financial Services		12.0	0.76
Real Estate		1.4	0.48
<b>Sensitive</b>		<b>1.17</b>	<b>1.81</b>
Communication Services		18.8	1.81
Energy		4.0	0.92
Industrials		8.2	0.86
Technology		20.5	1.04
<b>Defensive</b>		<b>21.4</b>	<b>0.85</b>
Consumer Defensive		3.5	0.46
Healthcare		17.9	1.24
Utilities		0.0	0.01

Regional Exposure		Stocks %	Rel Std Index
Americas		89.0	0.90
Greater Europe		6.1	6.77
Greater Asia		4.9	95.96

Operations	
Ticker:	RGAGX
ISIN:	US33998748178
Minimum Initial Purchase:	\$250
Min Auto Investment Plan:	\$50
Purchase Constraints:	A
Incept:	05-01-2009
Type:	MF
Total Assets:	\$205,476.59 mil

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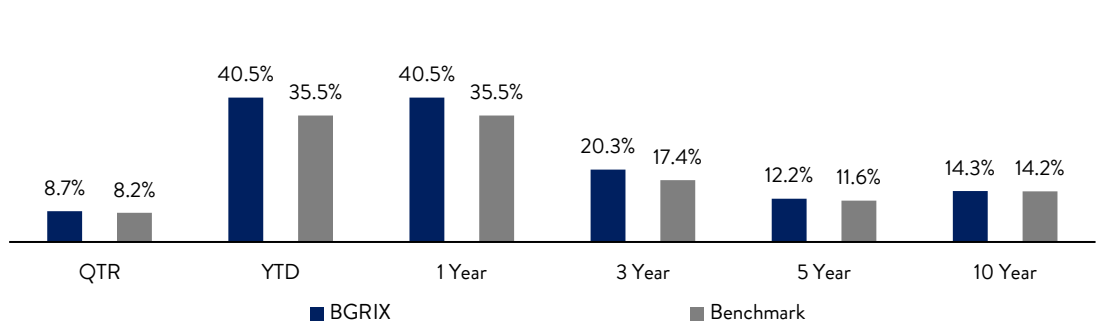




**Product Details**

Name	Baron Growth Instl
Ticker	BGRIX
Expense Ratio	1.030%
Morningstar Category	US Fund Mid-Cap Growth
Benchmark	Russell Mid Cap Growth TR USD
Inception Date	5/29/2009
Longest Tenured Manager	Ronald Baron
Longest Manager Tenure	25.08 Years
Fund Size	\$7,285,586,283

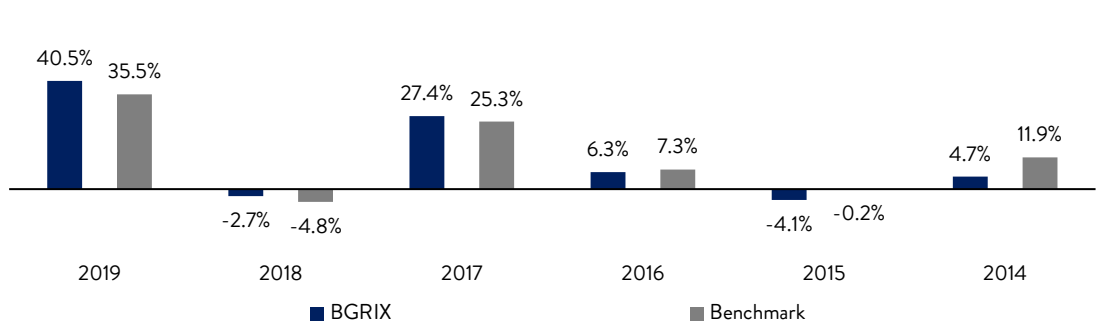
**Trailing Performance**



**Fund Characteristics**

BGRIX	+/- Category	
% Assets in Top 10 Holdings	51.76%	24.48%
Average Market Cap (mil)	\$9,185	-\$5,521
P/E Ratio (TTM)	32.63	1.66
P/B Ratio (TTM)	4.33	-0.42
Est. Dividend Yield	1.01%	0.38%

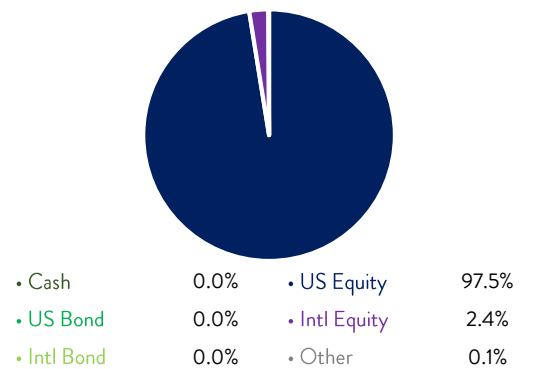
**Annual Performance**



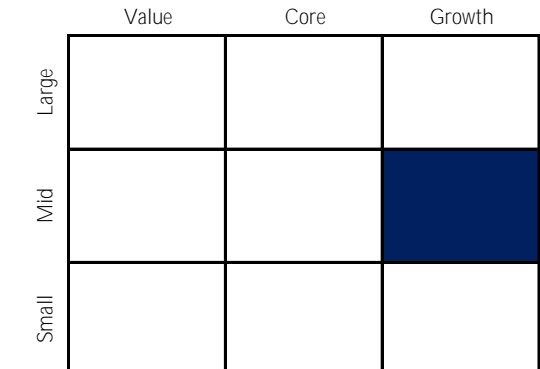
**Sector Allocations**

BGRIX	Category	+/- Category	
Materials	0.0%	2.6%	-2.6%
Communication Services	3.0%	3.3%	-0.2%
Consumer Discretionary	22.5%	14.6%	7.9%
Consumer Staples	1.0%	2.9%	-1.9%
Healthcare	10.0%	20.4%	-10.4%
Industrials	2.7%	16.0%	-13.3%
Real Estate	14.9%	4.8%	10.1%
Technology	18.3%	23.3%	-5.0%
Energy	0.0%	1.4%	-1.4%
Financial Services	27.6%	10.1%	17.4%
Utilities	0.0%	0.6%	-0.6%
Other	0.0%	0.0%	0.0%

**Asset Allocation**



**Morningstar Style Box**



Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• BGRIX	8.65%	40.50%	40.50%	20.31%	12.18%	14.28%
• Benchmark	8.17%	35.47%	35.47%	17.36%	11.60%	14.24%
+/- Benchmark	0.48%	5.03%	5.03%	2.96%	0.57%	0.04%
Peer Group Rank	29	7	7	13	29	24

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• BGRIX	8.65%	-0.69%	7.03%	21.67%
• Benchmark	8.17%	-0.67%	5.40%	19.62%
+/- Benchmark	0.48%	-0.02%	1.62%	2.05%

Annual Performance	2019	2018	2017	2016	2015	2014
• BGRIX	40.50%	-2.67%	27.35%	6.31%	-4.06%	4.66%
• Benchmark	35.47%	-4.75%	25.27%	7.33%	-0.20%	11.90%
+/- Benchmark	5.03%	2.08%	2.09%	-1.02%	-3.86%	-7.24%
Peer Group Rank	7	24	29	44	85	76

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• BGRIX	-18.53%	7.94%	8.01%	2.47%
• Benchmark	-15.99%	7.57%	3.16%	2.17%
+/- Benchmark	-2.54%	0.36%	4.85%	0.30%

Rolling 5-Year Performance	01/2015 - 12/2019	10/2014 - 09/2019	07/2014 - 06/2019	04/2014 - 03/2019	01/2014 - 12/2018	10/2013 - 09/2018
• BGRIX	12.18%	11.89%	11.31%	9.94%	5.76%	11.90%
• Benchmark	11.60%	11.12%	11.10%	10.89%	7.42%	13.00%
+/- Benchmark	0.57%	0.78%	0.20%	-0.95%	-1.66%	-1.10%
Peer Group Rank	29	24	33	41	56	51

5-Year Quarterly Performance	4Q17	3Q17	2Q17	1Q17
• BGRIX	5.35%	3.23%	6.06%	10.41%
• Benchmark	6.81%	5.28%	4.21%	6.89%
+/- Benchmark	-1.45%	-2.05%	1.85%	3.51%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	1.90	0.00	0.69	0.00	0.78	0.00
Beta	1.06	1.00	0.99	1.00	0.95	1.00
Standard Deviation	15.56	14.07	14.39	13.65	14.53	14.54
Sharpe Ratio	1.16	1.09	0.80	0.80	0.96	0.95
Information Ratio	0.63	-	0.12	-	0.01	-
Treynor Ratio	17.62	15.64	11.13	10.50	14.46	13.65
Upside Capture Ratio	111.03	100.00	102.17	100.00	97.44	100.00
Downside Capture Ratio	104.05	100.00	99.89	100.00	94.83	100.00

5-Year Quarterly Performance	4Q16	3Q16	2Q16	1Q16
• BGRIX	-0.08%	2.59%	3.38%	0.31%
• Benchmark	0.46%	4.59%	1.56%	0.58%
+/- Benchmark	-0.53%	-2.00%	1.82%	-0.27%

5-Year Quarterly Performance	4Q15	3Q15	2Q15	1Q15
• BGRIX	1.40%	-8.66%	-1.11%	4.75%
• Benchmark	4.12%	-7.99%	-1.14%	5.38%
+/- Benchmark	-2.72%	-0.67%	0.04%	-0.63%

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# Baron Growth Instl (USD)

**Morningstar Analyst Rating™ Overall Morningstar Rating™**  
 **Bronze**  
 08-28-2019

**Standard Index** S&P 500 TR USD  
**Category Index** Russell Mid Cap Growth TR USD  
**Morningstar Cat** US Fund Mid-Cap Growth

Performance 12-31-2019					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2017	10.41	6.06	3.23	5.35	27.35
2018	2.47	8.01	7.94	-18.53	-2.67
2019	21.67	7.03	-0.69	8.65	40.50
Trailing Returns					
	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	40.50	20.31	12.18	14.28	15.65
Std 12-31-2019	40.50	—	12.18	14.28	15.65
Total Return	40.50	20.31	12.18	14.28	15.65
+/- Std Index	9.02	5.04	0.48	0.72	—
+/- Cat Index	5.03	2.96	0.57	0.04	—
% Rank Cat	6	11	27	20	—
No. in Cat	618	565	501	385	—

7-day Yield Subsidized —  
 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 800-992-2786 or visit [www.barrontfunds.com](http://www.barrontfunds.com).

## Fees and Expenses

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

**Fund Expenses**  
 Management Fees % 1.00  
 12b1 Expense % 0.00  
**Net Expense Ratio %** 1.03  
**Gross Expense Ratio %** 1.03  
**Risk and Return Profile**

	3 Yr	5 Yr	10 Yr
Morningstar Rating™	555 funds	501 funds	385 funds
	4★	4★	4★
Morningstar Risk	+Avg	Avg	Avg
Morningstar Return	+Avg	+Avg	+Avg

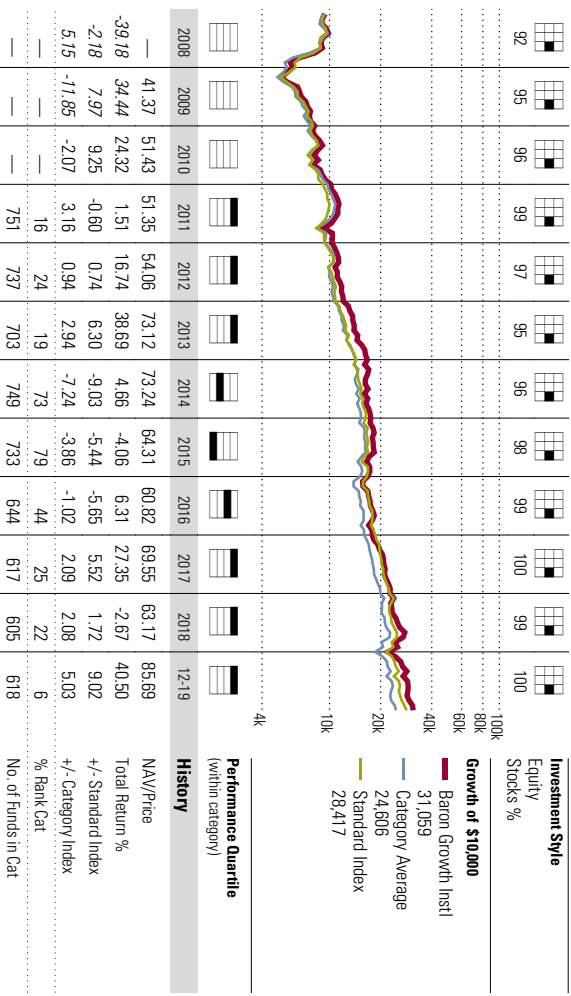
Standard Deviation 15.56 14.39 14.54  
 Mean 20.31 12.18 14.28  
 Sharpe Ratio 1.16 0.80 0.96

MPI Statistics	Standard Index	Best Fit Index
Alpha	1.32	Morningstar US Mid Growth TR USD
Beta	2.68	1.32
R-Squared	1.16	1.04
12-Month Yield	81.60	90.91
Potential Cap Gains Exp	—	75.96%

**Operations**  
 Family: Baron Capital Group  
 Manager: Multiple  
 Tenure: 25.1 Years  
 Objective: Growth

Base Currency: USD  
 Ticker: BGRX  
 ISIN: US0682787041  
 Minimum Initial Purchase: \$1 mil

Purchase Constraints: A  
 Incept: 05-29-2009  
 Type: MIF  
 Total Assets: \$7,285.59 mil



**Portfolio Analysis 12-31-2019**

Asset Allocation %	Net %	Long %	Short %
Cash	0.00	0.00	0.00
US Stocks	97.46	97.46	0.00
Non-US Stocks	2.44	2.44	0.00
Bonds	0.00	0.00	0.00
Other/Not Cstfd	0.09	0.09	0.00
Total	100.00	100.00	0.00

**Equity Style**

Value	Brand	Geom	Port	Rel	Rel
Avg	Index	Cat	Avg	Index	Cat
P/E Ratio TTM	32.6	1.44	1.05		
P/C Ratio TTM	19.9	1.38	0.96		
P/B Ratio TTM	4.3	1.27	0.91		
Geo Avg Mkt Cap	9185	0.07	0.62		

**Fixed-Income Style**

Value	Brand	Geom	Avg Eff	Avg Eff	Avg
Avg	Index	Cat	Maturity	Duration	Wld Coupon
AAA					
AA					
A					
BBB					
BB					
B					
Below B					
NR					

**Credit Quality Breakdown** —

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

**Regional Exposure**

Stocks %	Rel Std Index
Americas	97.6
Greater Europe	2.4
Greater Asia	0.0

**Share Class**

Share Class	Share	Holdings:	Net Assets
since	Amount	57 Total Stocks, 0 Total Fixed-Income, 2% Turnover Ratio	%
09-2019	2 mil	Vail Resorts Inc	6.85
	810,000	CoStar Group Inc	6.67
	2 mil	MSCo Inc	6.39
	10 mil	Arch Capital Group Ltd	5.71
	2 mil	Ansys Inc	5.31
	2 mil	Gartner Inc A	4.64
	1 mil	FactSet Research Systems Inc	4.61
	3 mil	Choice Hotels International Inc	4.27
	1 mil	IDEXX Laboratories Inc	3.84
	2 mil	Bright Horizons Family Solutions I	3.45
	2 mil	Primerica Inc	3.34
	5 mil	Gaming and Leisure Properties Inc	3.20
	9 mil	Iridium Communications Inc	3.00
	4 mil	SS&C Technologies Holdings Inc	2.96
	2 mil	Marriott Vacations Worldwide Corp	2.75

**Sector Weightings**

Sector	Stocks %	Rel Std Index
<b>Cyclical</b>	<b>64.9</b>	<b>2.11</b>
Basic Materials	0.0	0.00
Consumer Cyclical	22.5	2.35
Financial Services	27.6	1.73
Real Estate	14.9	5.08
<b>Sensitive</b>	<b>24.1</b>	<b>0.55</b>
Communication Services	3.0	0.29
Energy	0.0	0.00
Industrials	2.7	0.28
Technology	18.3	0.93
<b>Defensive</b>	<b>11.0</b>	<b>0.44</b>
Consumer Defensive	1.0	0.13
Healthcare	10.0	0.70
Utilities	0.0	0.00

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Asset Class: **Asset Allocation**  
Category: **Lifestyle**

#### FUND FACTS

Inception Date: **October 1, 2004**

Investment advisory fee for period ended  
September 30, 2019: **0.01%**

12b-1 fee: **0.00%**

Other expenses: **0.31%**

Total fund annual expenses without  
waivers or reductions for period ended  
September 30, 2019: **0.32%**

Total waivers, recoupments, and  
reductions: **0.00%**

Net fund annual expenses after waivers  
or reductions for period ended  
September 30, 2019: **0.32%**

Turnover rate: **1%**

If offered through a retirement program,  
additional fees and expenses may be  
charged under that program.

#### Important Information

Category is interpreted by Voya® using  
Fund Company and/or Morningstar  
category information.

Investment advisory fee reflects a  
weighted blend of fees charged by the  
underlying investment options within the  
Lifestyle Portfolio, based upon the  
percentage allocations designated by  
San Bernardino and detailed within the  
Strategy section.

This Portfolio is not a registered  
investment company, and interests in the  
Portfolio have not been registered with  
the Securities and Exchange  
Commission. It is only available to  
participants in the San Bernardino  
qualified retirement program. Only  
eligible participants in the plan may  
invest in the Portfolio.

**You can obtain copies of free  
prospectuses for the underlying  
funds which contain additional  
information on the charges and  
expenses for the funds at any time by  
calling Your local Voya  
representative. Other fees and  
expenses may be charged under your  
retirement program. More**

**Information is included in the  
enrollment material.**

#### Investment Objective

The investment objective of the  
Conservative Allocation Portfolio is to  
provide total returns with an emphasis  
on income and lower volatility of  
principal. Thirty percent (30%) of the  
total fund assets are allocated to equities  
and seventy percent (70%) are allocated  
to fixed income securities. It is the most  
conservative of the three Lifestyle Funds  
in terms of its potential for investment  
return, but also has the lowest risk of the  
Lifestyle Funds. It is most suitable for  
participants who are close to retirement,  
need access to their money within five  
years, or are not comfortable with the  
higher short-term fluctuations that are  
characteristic of investing a large portion  
of their portfolio in equity markets.

All equity (both U.S. and International)  
and fixed income investments exhibit  
certain risk characteristics that include  
the potential for loss of principal value.  
Generally, the probability of loss of  
principal is greater with investment funds  
that also provide the greatest potential  
for investment return. International  
stocks carry additional risks that relate to  
currency and political uncertainty. The  
risks of Lifestyle Portfolios are based on  
the proportionate risk characteristics of  
the underlying sub-funds described  
above.

#### Strategy

The strategy for the Conservative  
Allocation Portfolio is to invest in a  
combination of active and passive  
investments in the following proportions:  
--- 70% in the San Bernardino Stable  
Value Option where stability of principal  
is the primary objective. Stabilizer<sup>SM</sup>  
guarantees a minimum rate of interest  
for the life of the contract, and may credit  
a higher interest rate from time to time.  
The current rate is subject to change, but  
will never fall below the guaranteed  
minimum.

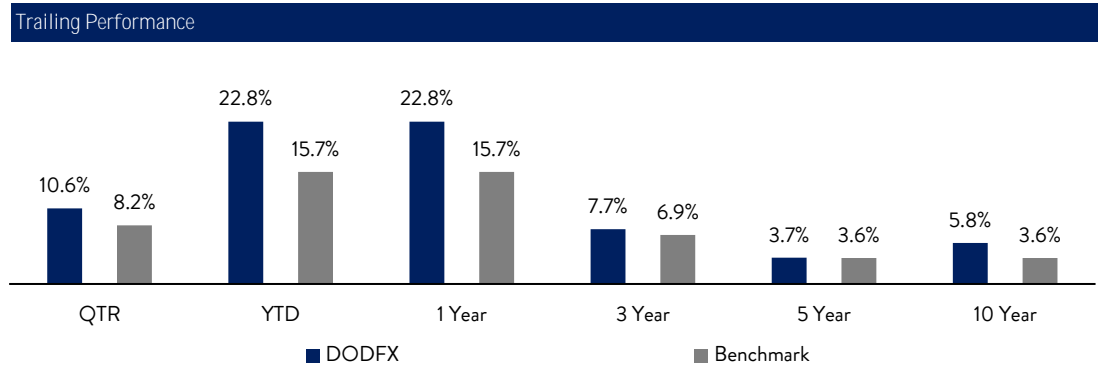
---12% in the Vanguard® Total  
International Stock Market Index Fund –  
Institutional Shares, which seeks to track  
the performance of a benchmark index  
that measures the investment return of  
stocks issued by companies located in  
developed and emerging markets,  
excluding the United States.

--- 18% in the Vanguard® Total Stock  
Market Index Fund - Institutional Shares,  
which seeks to track the performance of  
a benchmark index that measures the  
investment return of the overall stock  
market.

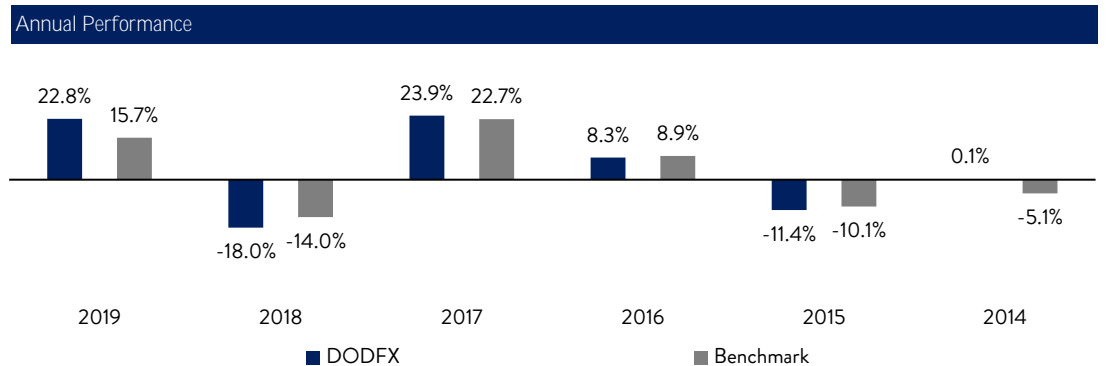
Each sub-fund description contains more  
detailed information regarding the sub-  
funds' Investment Advisers, Portfolio  
Managers, Investment Objectives,  
Strategies and Principal Risks, and must  
accompany this Lifestyle Portfolio  
description.

#### Principal Risks

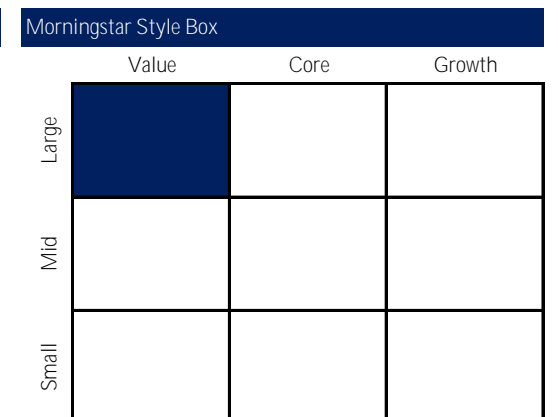
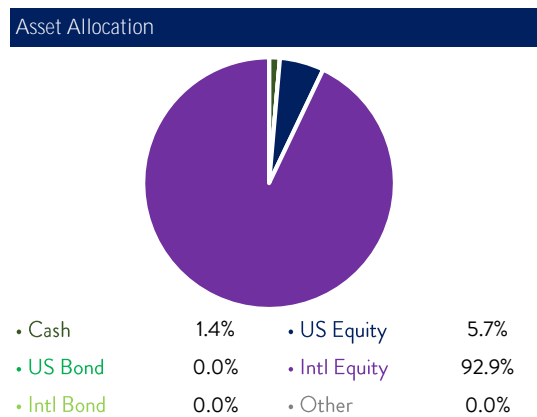
Product Details	
Name	Dodge & Cox International Stock
Ticker	DODFX
Expense Ratio	0.630%
Morningstar Category	US Fund Foreign Large Value
Benchmark	MSCI ACWI Ex USA Value NR USD
Inception Date	5/1/2001
Longest Tenured Manager	Bryan Cameron;Diana S. Strandberg;
Longest Manager Tenure	18.67 Years
Fund Size	\$50,227,952,236



Fund Characteristics	DODFX	+/- Category
% Assets in Top 10 Holdings	28.79%	14.48%
Average Market Cap (mil)	\$45,934	\$14,053
P/E Ratio (TTM)	15.13	1.27
P/B Ratio (TTM)	1.13	-0.09
Est. Dividend Yield	3.49%	-0.73%



Sector Allocations	DODFX	Category	+/- Category
Materials	5.8%	8.7%	-2.8%
Communication Services	9.9%	8.4%	1.5%
Consumer Discretionary	7.2%	9.7%	-2.5%
Consumer Staples	1.5%	7.1%	-5.6%
Healthcare	15.7%	9.4%	6.4%
Industrials	8.5%	13.6%	-5.1%
Real Estate	1.3%	2.0%	-0.7%
Technology	8.4%	5.8%	2.7%
Energy	9.2%	8.6%	0.7%
Financial Services	31.5%	23.7%	7.7%
Utilities	0.9%	3.2%	-2.3%
Other	0.0%	0.0%	0.0%



Dodge & Cox International Stock  
DODFX

Fund Fact Sheet  
Data as of 12/31/2019

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• DODFX	10.61%	22.78%	22.78%	7.67%	3.68%	5.76%
• Benchmark	8.21%	15.71%	15.71%	6.88%	3.65%	3.64%
+/- Benchmark	2.40%	7.06%	7.06%	0.78%	0.03%	2.12%
Peer Group Rank	11	4	4	22	52	15

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• DODFX	10.61%	-1.66%	2.81%	9.78%
• Benchmark	8.21%	-2.80%	1.57%	8.33%
+/- Benchmark	2.40%	1.14%	1.25%	1.46%

Annual Performance	2019	2018	2017	2016	2015	2014
• DODFX	22.78%	-17.98%	23.94%	8.26%	-11.35%	0.08%
• Benchmark	15.71%	-13.97%	22.66%	8.92%	-10.06%	-5.10%
+/- Benchmark	7.06%	-4.01%	1.28%	-0.66%	-1.29%	5.18%
Peer Group Rank	4	75	37	19	88	2

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• DODFX	-12.39%	0.81%	-5.12%	-2.14%
• Benchmark	-10.71%	1.72%	-3.84%	-1.50%
+/- Benchmark	-1.68%	-0.90%	-1.28%	-0.64%

Rolling 5-Year Performance	01/2015 - 12/2019	10/2014 - 09/2019	07/2014 - 06/2019	04/2014 - 03/2019	01/2014 - 12/2018	10/2013 - 09/2018
• DODFX	3.68%	0.64%	0.42%	0.85%	-0.48%	3.74%
• Benchmark	3.65%	0.89%	0.29%	1.08%	-0.38%	2.87%
+/- Benchmark	0.03%	-0.25%	0.13%	-0.23%	-0.09%	0.87%
Peer Group Rank	52	60	40	43	40	34

5-Year Quarterly Performance	4Q17	3Q17	2Q17	1Q17
• DODFX	1.21%	6.94%	4.75%	9.32%
• Benchmark	4.23%	5.99%	4.08%	6.68%
+/- Benchmark	-3.03%	0.95%	0.67%	2.64%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	0.24	0.00	-0.02	0.00	2.02	0.00
Beta	1.13	1.00	1.08	1.00	1.05	1.00
Standard Deviation	13.96	11.91	14.96	13.29	16.42	15.21
Sharpe Ratio	0.48	0.47	0.24	0.25	0.39	0.27
Information Ratio	0.20	-	0.01	-	0.53	-
Treynor Ratio	5.25	5.17	2.37	2.54	4.93	3.05
Upside Capture Ratio	112.92	100.00	108.32	100.00	109.96	100.00
Downside Capture Ratio	113.31	100.00	109.57	100.00	101.01	100.00

5-Year Quarterly Performance	4Q16	3Q16	2Q16	1Q16
• DODFX	3.36%	10.15%	-1.20%	-3.76%
• Benchmark	3.29%	7.79%	-1.76%	-0.42%
+/- Benchmark	0.07%	2.35%	0.57%	-3.34%

5-Year Quarterly Performance	4Q15	3Q15	2Q15	1Q15
• DODFX	0.83%	-15.38%	-0.30%	4.20%
• Benchmark	1.43%	-13.60%	0.47%	2.14%
+/- Benchmark	-0.60%	-1.79%	-0.77%	2.07%

All data and information on this fact sheet is taken from sources believed to be accurate but is not guaranteed to be accurate, complete, or correct.

# Dodge & Cox International Stock (USD)

**Morningstar Analyst Rating™ Overall Morningstar Rating™ Standard Index** **Category Index** **Morningstar Cat**  
**Gold** **★★★★** **304 US Fund Foreign Large** **MSCI ACWI EX** **MSCI ACWI EX** **US Fund Foreign Large**  
 06-25-2019 **Value** **USA NR USD** **USA Value NR USD** **Value**

Performance 12-31-2019					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2017	9.32	4.75	6.94	1.21	23.94
2018	-2.14	-5.12	0.81	-12.39	-17.98
2019	9.78	2.81	-1.66	10.61	22.78
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	22.78	7.67	3.68	5.76	7.22
Std 12-31-2019	22.78	—	3.68	5.76	7.22
Total Return	22.78	7.67	3.68	5.76	7.22
+/- Std Index	1.27	-2.20	-1.83	0.79	—
+/- Cat Index	7.06	0.78	0.03	2.12	—
% Rank Cat	7	33	62	15	—
No. in Cat	346	304	253	165	—

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 800-621-3979 or visit [www.dodgeandcox.com](http://www.dodgeandcox.com).

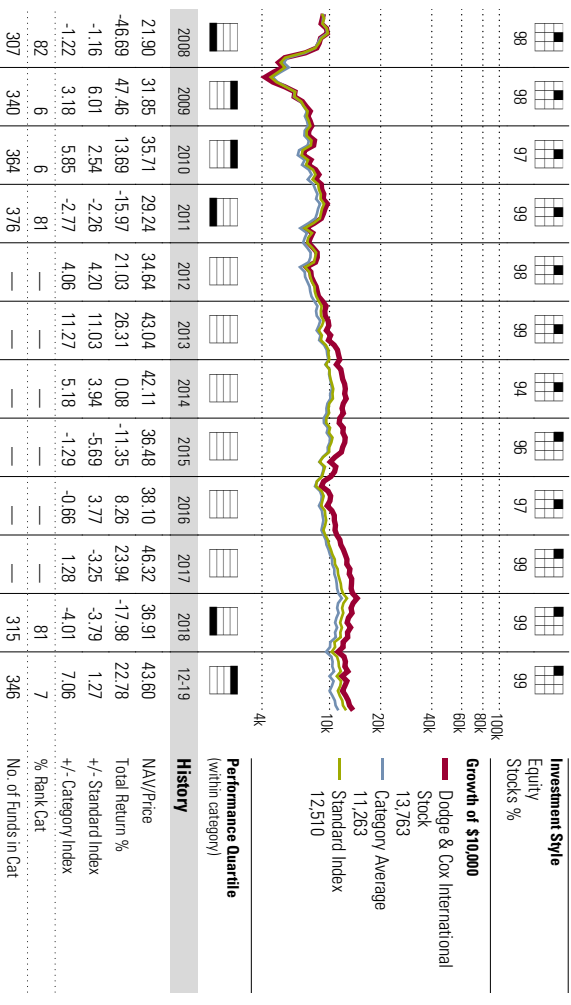
Fees and Expenses			
<b>Sales Charges</b>			
<b>Front-End Load %</b>	<b>NA</b>		
<b>Deferred Load %</b>	<b>NA</b>		
<b>Fund Expenses</b>			
Management Fees %	0.60		
12b1 Expense %	NA		
<b>Net Expense Ratio %</b>	<b>0.63</b>		
<b>Gross Expense Ratio %</b>	<b>0.63</b>		
<b>Risk and Return Profile</b>			
	3 Yr	5 Yr	10 Yr
Morningstar Rating™	3★	2★	4★
Morningstar Risk	High	High	High
Morningstar Return	+Avg	Avg	+Avg
	304 funds	253 funds	165 funds

MPT Statistics					
	Standard Index	Best Fit Index	MSCI EAFE Value	NR USD	NR USD
Alpha	-3.06	0.79			
Beta	1.16	1.15			
R-Squared	91.26	94.21			
12-Month Yield	—	—			
Potential Cap Gains Exp	—	1.95%			

**Operations**  
 Family: Dodge & Cox  
 Manager: Multiple  
 Tenure: 18.7 Years  
 Objective: Foreign Stock  
 Base Currency: USD

Ticker: DODFX  
 ISIN: US2562061034  
 Minimum Initial Purchase: \$2,500  
 Minimum IRA Purchase: \$1,000  
 Purchase Constraints: —

Incept: 05-01-2001  
 Type: M/F  
 Total Assets: \$50,227.95 mil



Portfolio Analysis 12-31-2019									
Asset Allocation %					Net Assets				
	Net %	Long %	Short %	Share Clng	Share Holdings:	70 Total Stocks	3 Total Fixed-Income		Net Assets %
Cash	1.31	1.39	0.08	09-2019	Amount	17% Turnover Ratio			
US Stocks	5.70	5.71	0.00		16 mil	Sanofi SA			3.27
Non-US Stocks	93.11	93.11	0.00		27 mil	BNP Paribas			3.21
Bonds	0.00	0.00	0.00		210 mil	ICICI Bank Ltd			3.14
Other/Not Clsfd	-0.13	0.00	0.13		118 mil	UBS Group AG			2.96
Total	100.00	100.21	0.21		4 mil	Roche Holding AG Dividend Right Ce			2.84

Equity Style				Portfolio Statistics			
Value	Brand	Geom		P/E Ratio	TTM	P/C Ratio	TTM
Large	Med	Ext		8.6	0.89	1.17	1.17
Mid	Med	Low		1.1	0.68	0.93	0.93
Small				Geo Avg Mkt Cap	45934	1.24	1.44

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

Regional Exposure				Sector Weightings			
	Stocks %	Rel Std Index	Bond %	Cyclical	Stocks %	Rel Std Index	
Americas	15.8	1.49		Basic Materials	45.8	1.08	
Greater Europe	59.3	1.32		Consumer Cyclical	5.8	0.80	
Greater Asia	24.8	0.56		Consumer Services	7.2	0.69	
				Financial Services	31.5	1.47	
				Real Estate	1.3	0.41	
				Sensitive	36.1	1.01	
				Communication Services	9.9	1.32	
				Energy	9.2	1.37	
				Industrials	8.5	0.71	
				Technology	8.4	0.88	
				Defensive	18.1	0.83	
				Consumer Defensive	1.5	0.16	
				Healthcare	15.7	1.72	
				Utilities	0.9	0.28	

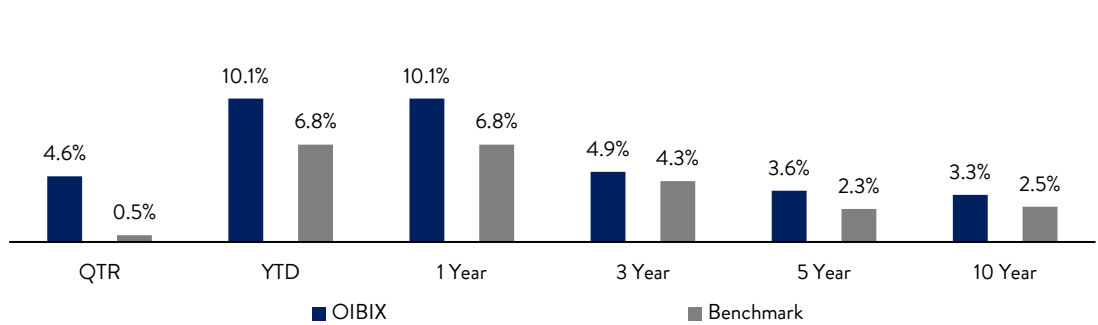
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**Product Details**

Name	Invesco Oppenheimer International Bd R6
Ticker	OIBIX
Expense Ratio	0.560%
Morningstar Category	US Fund World Bond
Benchmark	BBgBarc Global Aggregate TR USD
Inception Date	1/27/2012
Longest Tenured Manager	Hemant Bajjal
Longest Manager Tenure	7.00 Years
Fund Size	\$3,647,049,411

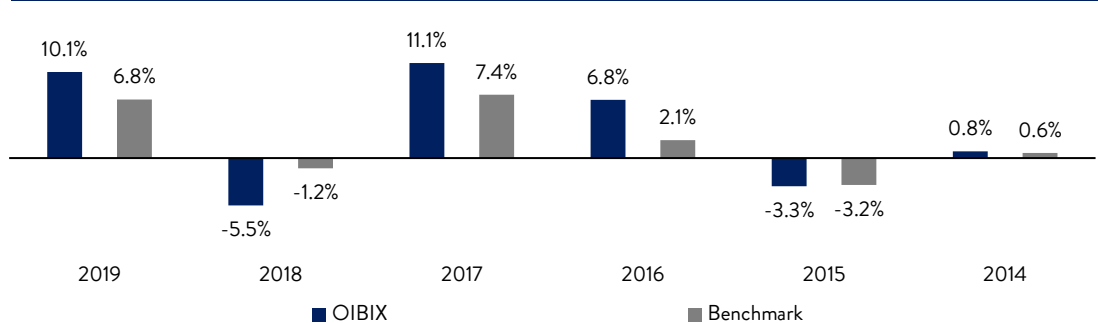
**Trailing Performance**



**Fund Characteristics**

	OIBIX	+/- Category
% Assets in Top 10 Holdings	12.81%	5.32%
Average Eff Duration	3.85	-0.67
Average Eff Maturity	12.69	4.72
Average Credit Quality	BB	BBB (Cat Avg.)
Average Coupon	6.45%	2.43%

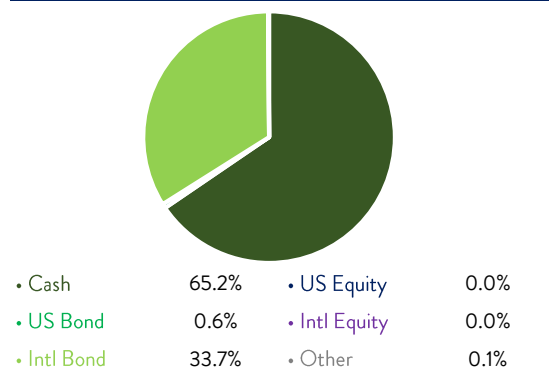
**Annual Performance**



**Sector Allocations**

	OIBIX	Category	+/- Category
Government	26.9%	47.8%	-20.9%
Municipal	0.0%	0.0%	0.0%
Bank Loan	0.0%	0.6%	-0.6%
Convertible	0.5%	0.7%	-0.2%
Corporate Bond	5.0%	16.0%	-11.0%
Preferred Stock	0.0%	0.0%	0.0%
Agency MBS	2.0%	4.2%	-2.2%
Non-Agency RMBS	0.0%	1.0%	-1.0%
Commercial MBS	0.0%	0.2%	-0.2%
Asset-Backed	0.0%	2.5%	-2.4%
Cash & Equivalents	9.6%	24.1%	-14.5%
Other	55.9%	3.0%	52.9%

**Asset Allocation**



**Morningstar Style Box**

	Low IR Sens	Mod IR Sens	Ext IR Sens
High Qual			
Med Qual			
Low Qual			



Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• OIBIX	4.61%	10.05%	10.05%	4.93%	3.59%	3.30%
• Benchmark	0.49%	6.84%	6.84%	4.27%	2.31%	2.48%
+/- Benchmark	4.13%	3.22%	3.22%	0.66%	1.29%	0.82%
Peer Group Rank	3	7	7	15	5	22

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• OIBIX	4.61%	-2.68%	4.36%	3.58%
• Benchmark	0.49%	0.72%	3.29%	2.20%
+/- Benchmark	4.13%	-3.40%	1.07%	1.38%

Annual Performance	2019	2018	2017	2016	2015	2014
• OIBIX	10.05%	-5.53%	11.12%	6.79%	-3.31%	0.77%
• Benchmark	6.84%	-1.20%	7.39%	2.09%	-3.15%	0.59%
+/- Benchmark	3.22%	-4.33%	3.73%	4.71%	-0.16%	0.19%
Peer Group Rank	7	86	17	8	13	49

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• OIBIX	-0.44%	-0.79%	-6.84%	2.66%
• Benchmark	1.20%	-0.92%	-2.78%	1.36%
+/- Benchmark	-1.64%	0.13%	-4.05%	1.30%

Rolling 5-Year Performance	01/2015 - 12/2019	10/2014 - 09/2019	07/2014 - 06/2019	04/2014 - 03/2019	01/2014 - 12/2018	10/2013 - 09/2018
• OIBIX	3.59%	2.52%	2.61%	2.25%	1.78%	2.04%
• Benchmark	2.31%	1.99%	1.20%	1.04%	1.08%	0.75%
+/- Benchmark	1.29%	0.52%	1.41%	1.21%	0.70%	1.29%
Peer Group Rank	5	15	5	9	13	12

5-Year Quarterly Performance	4Q17	3Q17	2Q17	1Q17
• OIBIX	1.35%	2.55%	3.04%	3.76%
• Benchmark	1.08%	1.76%	2.60%	1.76%
+/- Benchmark	0.27%	0.78%	0.44%	2.00%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	1.12	0.00	1.62	0.00	0.74	0.00
Beta	0.87	1.00	0.79	1.00	1.10	1.00
Standard Deviation	6.81	3.58	6.35	4.49	6.99	4.62
Sharpe Ratio	0.49	0.71	0.41	0.29	0.42	0.43
Information Ratio	0.11	-	0.24	-	0.17	-
Treynor Ratio	3.69	2.56	3.15	1.20	2.47	1.89
Upside Capture Ratio	97.39	100.00	86.01	100.00	105.99	100.00
Downside Capture Ratio	75.64	100.00	55.12	100.00	93.21	100.00

5-Year Quarterly Performance	4Q16	3Q16	2Q16	1Q16
• OIBIX	-4.13%	3.59%	3.20%	4.20%
• Benchmark	-7.07%	0.82%	2.89%	5.90%
+/- Benchmark	2.94%	2.77%	0.31%	-1.70%

5-Year Quarterly Performance	4Q15	3Q15	2Q15	1Q15
• OIBIX	-0.85%	-1.49%	-1.78%	0.78%
• Benchmark	-0.92%	0.85%	-1.18%	-1.92%
+/- Benchmark	0.08%	-2.34%	-0.60%	2.70%

All data and information on this fact sheet is taken from sources believed to be accurate but is not guaranteed to be accurate, complete, or correct.

# Invesco Oppenheimer International Bd R6 (USD)

<b>Morningstar Quantitative Rating™</b> Negative <sup>0</sup> 12-31-2019	<b>Overall Morningstar Rating™</b> ★★★★ 181 US Fund World Bond	<b>Standard Index</b> BBBarc US Agg Bond TR USD	<b>Category Index</b> BBBarc Global Aggregate TR USD	<b>Morningstar Cat</b> US Fund World Bond
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**Performance 12-31-2019**

Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2017	3.76	3.04	2.55	1.35	11.12
2018	2.66	-6.84	-0.79	-0.44	-5.33
2019	3.58	4.36	-2.68	4.61	10.05

Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	10.05	4.93	3.59	—	2.87
Std 12-31-2019	10.05	—	3.59	—	2.87
Total Return	10.05	4.93	3.59	3.30	2.87

+/- Std Index	1.34	0.90	0.54	-0.45	—
+/- Cat Index	3.21	0.66	1.28	0.82	—

% Rank Cat	7	17	8	25	—
No. in Cat	210	181	171	102	—

7-day Yield 01-24-20 0.00 <sup>1</sup>  
 30-day SEC Yield 12-31-19 6.11 <sup>1</sup>  
 1. Contractual waiver. Expires 05-28-2021

**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 800-959-4246 or visit www.invesco.com.

**Fees and Expenses**

<b>Sales Charges</b>	
<b>Front-End Load %</b>	<b>NA</b>
<b>Deferred Load %</b>	<b>NA</b>

**Fund Expenses**

Management Fees %	0.53
12bt Expense %	NA

<b>Net Expense Ratio %</b>	<b>0.56</b>
<b>Gross Expense Ratio %</b>	<b>0.57</b>

**Risk and Return Profile**

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

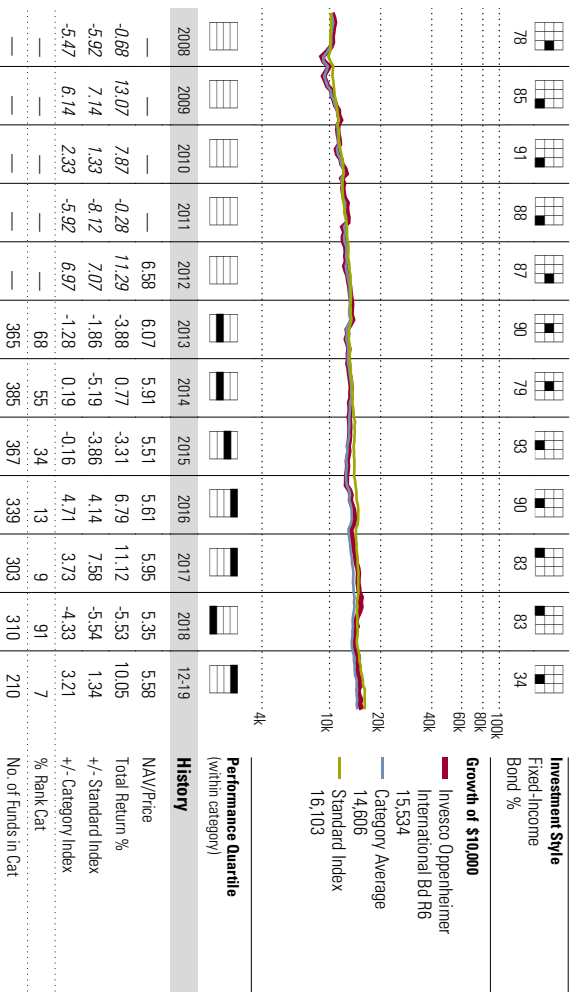
Standard Deviation	6.81	6.35	7.00	3.30
Mean	4.93	3.59	3.30	3.30
Shape Ratio	0.49	0.42	0.42	0.42

MPI Statistics	Standard Index	Best Fit Index
	JPM GBI-EM Global Diversified TR USD	JPM GBI-EM Global Diversified TR USD

Alpha	3.61	-0.49
Beta	-0.11	0.69
R-Squared	0.23	90.05
12-Month Yield	5.30%	5.30%
Potential Cap Gains Exp	-10.71%	-10.71%

**Operations**

Family:	Invesco
Manager:	Multiple
Tenure:	7.0 Years
Objective:	Worldwide Bond



**Portfolio Analysis 09-30-2019**

<b>Asset Allocation %</b>	Cash	20.61	Long %	160.66	Short %	140.05
	US Stocks	0.04	0.07	0.03	0.03	0.00
	Non-US Stocks	0.00	0.00	0.00	0.00	0.00
	Bonds	78.75	84.45	5.69	84.45	5.69
	Other/Not Cstfd	0.60	1.21	0.61	1.21	0.61
	Total	100.00	246.38	146.38	246.38	146.38

<b>Equity Style</b>	Value	Small	Mid	Large	Share Growth
	■	■	■	■	■

<b>Portfolio Statistics</b>	P/E Ratio TTM	20.3	P/C Ratio TTM	13.4	P/B Ratio TTM	3.2
	Geo Avg Mkt Cap	111196 \$mil				

<b>Share Cng</b>	Share Amount	Holdings:	0 Total Stocks: 310 Total Fixed-Income, 7% Turnover Ratio	Net Assets %
	08-2019	21 mil	MEXICAN BONDS MBOND 8 12/07/23	2.97
		63 mil	United Kingdom Gilt Ukt 1 3/4 01/2	2.52
		367 mil	Ultra Long German Bond Future (Bux	-2.38
		62 mil	HELLENIC REPUBLIC GOVERNMENT BOND	2.30
		58 mil	ITALY BUONI POLIENNALI DEL TESORO	2.06

<b>Fixed-Income Style</b>	Lat	Med	Ext	High	Med	Low
	■	■	■	■	■	■

<b>Credit Quality Breakdown 09-30-2019</b>	AAA	11.83	AA	11.83	BBB	26.88	BB	17.69	B	14.39	Below B	3.32	NR	1.04
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<b>Regional Exposure</b>	Americas	99.0	Greater Europe	0.9	Greater Asia	0.1
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<b>Sector Weightings</b>	Cyclical	33.1	Sensitive	41.7	Defensive	25.3
	Basic Materials	2.4	Communication Services	3.4	Consumer Defensive	8.1
	Consumer Cyclical	11.8	Energy	4.5	Healthcare	13.6
	Financial Services	15.7	Industrials	10.4	Utilities	3.6
	Real Estate	3.2	Technology	23.3		

<b>Base Currency:</b>	USD	<b>Purchase Constraints:</b>	A
<b>Ticker:</b>	OIBX	<b>Incept:</b>	01-27-2012
<b>ISIN:</b>	US00143K6Z49	<b>Type:</b>	MF
<b>Minimum Initial Purchase:</b>	\$1 mil	<b>Total Assets:</b>	\$3,647,05 mil

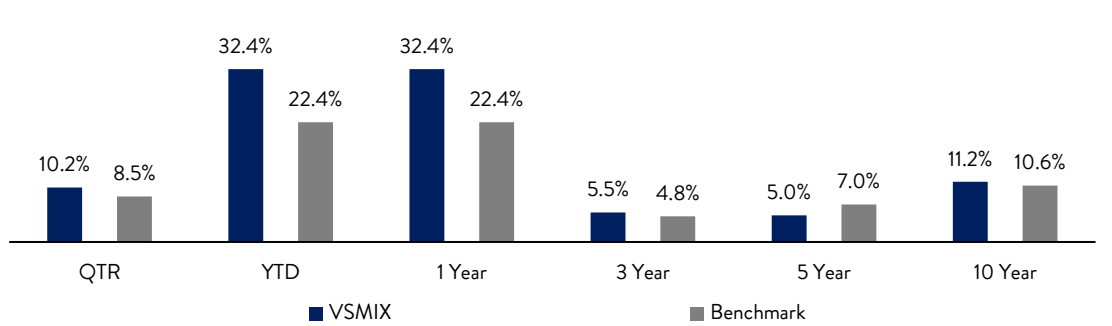
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**Product Details**

Name	Invesco Small CapValue Y
Ticker	VSMIX
Expense Ratio	0.870%
Morningstar Category	US Fund Small Value
Benchmark	Russell 2000 Value TR USD
Inception Date	8/12/2005
Longest Tenured Manager	Jonathan Edwards;Jonathan Mueller;
Longest Manager Tenure	9.58 Years
Fund Size	\$1,295,491,877

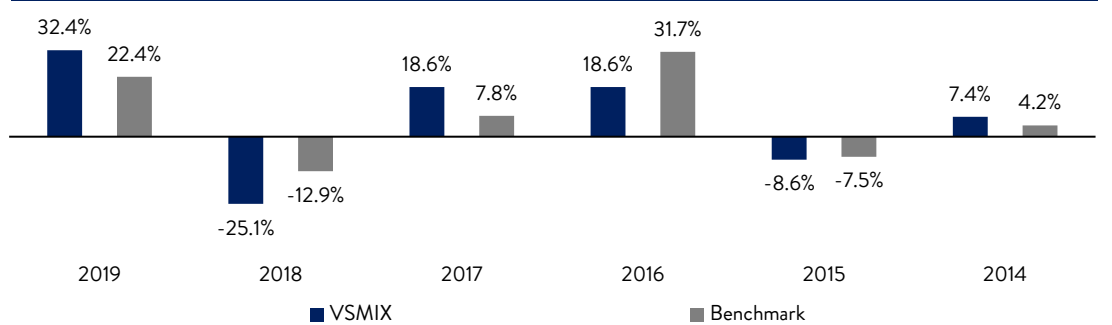
**Trailing Performance**



**Fund Characteristics**

	VSMIX	+/- Category
% Assets in Top 10 Holdings	31.01%	10.57%
Average Market Cap (mil)	\$3,182	\$216
P/E Ratio (TTM)	13.09	-3.34
P/B Ratio (TTM)	1.47	-0.07
Est. Dividend Yield	1.31%	-0.70%

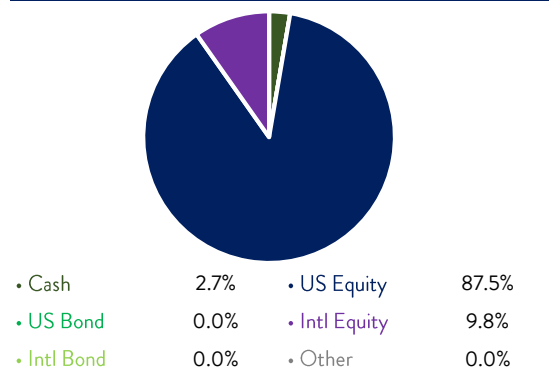
**Annual Performance**



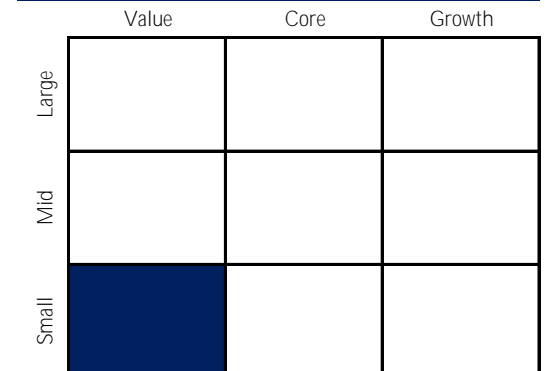
**Sector Allocations**

	VSMIX	Category	+/- Category
Materials	18.5%	5.5%	13.0%
Communication Services	0.0%	1.4%	-1.4%
Consumer Discretionary	16.4%	12.1%	4.3%
Consumer Staples	1.5%	4.0%	-2.6%
Healthcare	6.8%	4.4%	2.4%
Industrials	25.7%	18.5%	7.2%
Real Estate	0.0%	9.9%	-9.9%
Technology	9.1%	8.7%	0.5%
Energy	7.2%	5.0%	2.2%
Financial Services	14.8%	26.7%	-11.9%
Utilities	0.0%	3.8%	-3.8%
Other	0.0%	0.0%	0.0%

**Asset Allocation**



**Morningstar Style Box**



Invesco Small CapValue Y

VSMIX

Fund Fact Sheet

Data as of 12/31/2019

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• VSMIX	10.21%	32.35%	32.35%	5.53%	4.96%	11.24%
• Benchmark	8.49%	22.39%	22.39%	4.77%	6.99%	10.56%
+/- Benchmark	1.72%	9.96%	9.96%	0.76%	-2.03%	0.68%
Peer Group Rank	8	4	4	28	64	19

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• VSMIX	10.21%	-2.34%	2.83%	19.58%
• Benchmark	8.49%	-0.57%	1.38%	11.93%
+/- Benchmark	1.72%	-1.77%	1.46%	7.65%

Annual Performance	2019	2018	2017	2016	2015	2014
• VSMIX	32.35%	-25.11%	18.58%	18.61%	-8.64%	7.43%
• Benchmark	22.39%	-12.86%	7.84%	31.74%	-7.47%	4.22%
+/- Benchmark	9.96%	-12.25%	10.74%	-13.13%	-1.17%	3.21%
Peer Group Rank	4	99	2	87	77	8

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• VSMIX	-23.92%	-0.31%	1.40%	-2.62%
• Benchmark	-18.67%	1.60%	8.30%	-2.64%
+/- Benchmark	-5.26%	-1.91%	-6.90%	0.01%

Rolling 5-Year Performance	01/2015 - 12/2019	10/2014 - 09/2019	07/2014 - 06/2019	04/2014 - 03/2019	01/2014 - 12/2018	10/2013 - 09/2018
• VSMIX	4.96%	4.22%	3.21%	3.44%	0.67%	8.59%
• Benchmark	6.99%	7.17%	5.39%	5.59%	3.61%	9.91%
+/- Benchmark	-2.03%	-2.95%	-2.18%	-2.15%	-2.94%	-1.32%
Peer Group Rank	64	74	70	73	83	61

5-Year Quarterly Performance	4Q17	3Q17	2Q17	1Q17
• VSMIX	6.35%	6.29%	0.10%	4.80%
• Benchmark	2.05%	5.11%	0.67%	-0.13%
+/- Benchmark	4.31%	1.18%	-0.57%	4.93%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	0.53	0.00	-2.82	0.00	-0.40	0.00
Beta	1.31	1.00	1.28	1.00	1.16	1.00
Standard Deviation	21.86	15.90	21.51	15.88	20.76	16.78
Sharpe Ratio	0.28	0.27	0.28	0.44	0.59	0.65
Information Ratio	0.09	-	-0.24	-	0.09	-
Treynor Ratio	2.92	3.06	3.01	5.89	9.19	9.98
Upside Capture Ratio	119.28	100.00	111.69	100.00	111.76	100.00
Downside Capture Ratio	119.28	100.00	125.95	100.00	114.18	100.00

5-Year Quarterly Performance	4Q16	3Q16	2Q16	1Q16
• VSMIX	11.90%	12.25%	-5.12%	-0.48%
• Benchmark	14.07%	8.87%	4.31%	1.70%
+/- Benchmark	-2.17%	3.39%	-9.43%	-2.18%

5-Year Quarterly Performance	4Q15	3Q15	2Q15	1Q15
• VSMIX	1.54%	-13.98%	-0.42%	5.04%
• Benchmark	2.88%	-10.73%	-1.20%	1.98%
+/- Benchmark	-1.33%	-3.24%	0.77%	3.06%

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# Invesco Small Cap Value Y (USD)

**Morningstar Analyst Rating™** Overall Morningstar Rating™ Standard Index  
**Bronze** 09-05-2019  
**★★★** 387 US Fund Small Value

SP500 TR USD  
 Russell 2000 Value US Fund Small Value TR USD

Performance 12-31-2019					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2017	4.80	0.10	6.29	6.35	18.58
2018	-2.62	1.40	-0.31	-23.92	-25.11
2019	19.58	2.83	-2.34	10.21	32.35
Trailing Returns					
	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	32.35	5.53	4.96	11.24	9.11
Std 12-31-2019	32.35	—	4.96	11.24	9.11
Total Return	32.35	5.53	4.96	11.24	9.11
+/- Std Index	0.87	-9.74	-6.74	-2.32	—
+/- Cat Index	9.96	0.76	-2.03	0.68	—
% Rank Cat	2	25	58	20	—
No. in Cat	419	387	346	237	—

7-day Yield 01-24-20 0.00  
 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 800-959-4246 or visit www.invesco.com

## Fees and Expenses

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

**Fund Expenses**  
 Management Fees % 0.64  
 12b1 Expense % NA  
**Net Expense Ratio %** 0.87  
**Gross Expense Ratio %** 0.87

## Risk and Return Profile

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

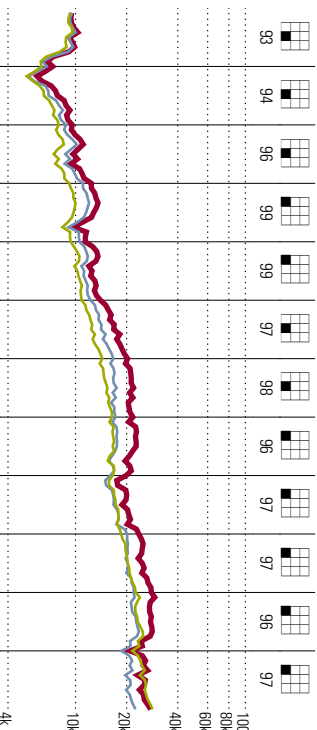
	3 Yr	5 Yr	10 Yr
Standard Deviation	21.86	21.51	20.76
Mean	5.53	4.96	11.24
Shapero Ratio	0.28	0.28	0.59

MPT Statistics

	Standard Index	Best Fit Index Morningstar US
Alpha	-15.54	3.02
Beta	1.62	1.26
R-Squared	80.65	93.74
12-Month Yield	—	—
Potential Cap Gains Exp	—	21.75%

## Operations

Family: Invesco  
 Manager: Multiple  
 Tenure: 9.6 Years  
 Objective: Small Company  
 Base Currency: USD



Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
NAV/Price	11.17	14.51	18.21	15.64	16.68	22.17	20.25	16.68	19.39	19.81	11.80	15.25
Total Return %	-25.64	30.14	29.77	-8.00	22.91	44.55	7.43	-8.64	18.61	18.58	-25.11	32.35
+/- Standard Index	10.36	3.68	14.70	-10.12	6.91	12.16	-6.26	-10.02	6.65	-3.25	-20.73	0.87
+/- Category Index	2.29	9.57	5.26	-2.50	4.86	10.03	3.21	-1.17	-13.13	10.74	-12.25	9.96
% Rank Cat	12	45	19	84	6	5	7	76	87	1	98	2
No. of Funds in Cat	438	370	342	352	357	369	396	433	405	397	417	419

**Investment Style**  
 Equity Stocks %  
**Growth of \$10,000**  
 Invesco Small Cap Value Y 27,709  
 Category Average 22,542  
 Standard Index 28,417

## Portfolio Analysis 09-30-2019

Asset Allocation %	Net %	Long %	Short %	Share Clng since 06-2019	Share Holdings: Amount	Holdings: 43% Turnover Ratio	Net Assets %
Cash	2.70	2.70	0.01	1 mil	AECONI	3.85	
US Stocks	87.53	87.53	0.00	1 mil	Energizer Holdings Inc	3.71	
Non-US Stocks	9.77	9.77	0.00	679,900	Owens-Corning Inc	3.24	
Bonds	0.00	0.00	0.00	799,404	Carpenter Technology Corp	3.12	
Other/Not Clsfd	0.00	0.00	0.00	953,200	Sealed Air Corp	2.99	
Total	100.00	100.01	0.01	4 mil	Flex Ltd	2.95	
				1 mil	LKQ Corp	2.85	
				570,300	Crown Holdings Inc	2.84	
				3 mil	MGIC Investment Corp	2.79	
				2 mil	CNO Financial Group Inc	2.68	
				1 mil	Huntsman Corp	2.57	
				4 mil	Brookdale Senior Living Inc	2.53	
				437,594	AGCO Corp	2.50	
				2 mil	First Horizon National Corp	2.44	
				2 mil	Parsley Energy Inc A	2.32	

Equity Style	Value	Brand	Geom	Port	Rel	Rel
				Avg	Index	Cat
P/E Ratio TTM	13.1	0.58	0.80			
P/C Ratio TTM	7.4	0.51	0.80			
P/B Ratio TTM	1.5	0.43	0.95			
Geo Avg Mkt Cap \$mil	3182	0.03	1.07			

## Fixed-Income Style

LT	Med	Ext	Ang Eff Maturity
High	Med	Low	Avg Eff Duration
			Avg Wtd Coupon
			Ang Wtd Price
			—
			—
			—

## Credit Quality Breakdown

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

Regional Exposure	Stocks %	Rel Std Index
Americas	90.0	0.91
Greater Europe	4.7	5.22
Greater Asia	5.3	104.39

Sector Weightings	Stocks %	Rel Std Index
<b>Cyclical</b>	<b>49.7</b>	<b>1.62</b>
Basic Materials	18.5	8.04
Consumer Cyclical	16.4	1.72
Financial Services	14.8	0.93
Real Estate	0.0	0.00
<b>Sensitive</b>	<b>42.0</b>	<b>0.95</b>
Communication Services	0.0	0.00
Energy	7.2	1.65
Industrials	25.7	2.69
Technology	9.1	0.46
<b>Defensive</b>	<b>8.3</b>	<b>0.33</b>
Consumer Defensive	1.5	0.20
Healthcare	6.8	0.48
Utilities	0.0	0.00

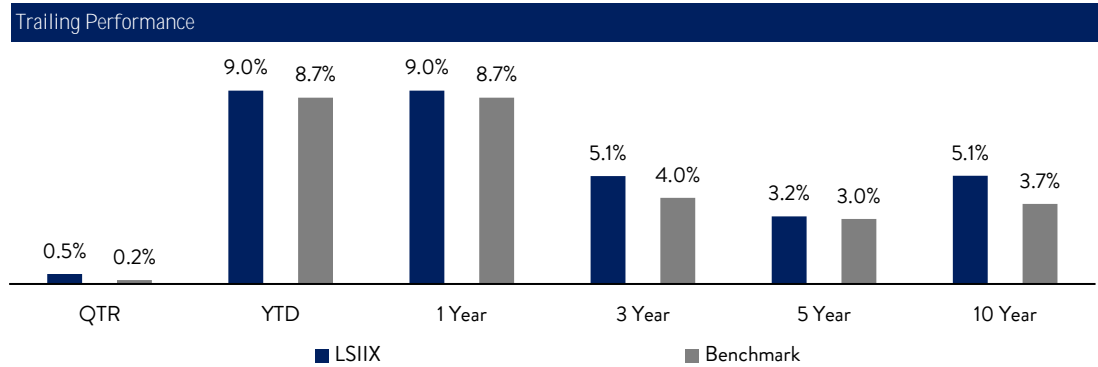
Minimum Initial Purchase: \$1,000  
 Min Auto Investment Plan: \$50  
 Minimum IRA Purchase: \$250

Purchase Constraints: A  
 Incept: 08-12-2005  
 Type: MIF  
 Total Assets: \$1,295,491 mil

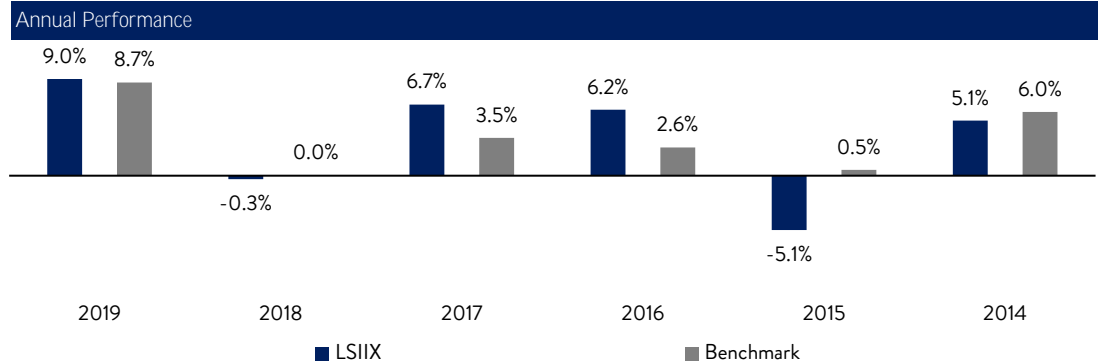
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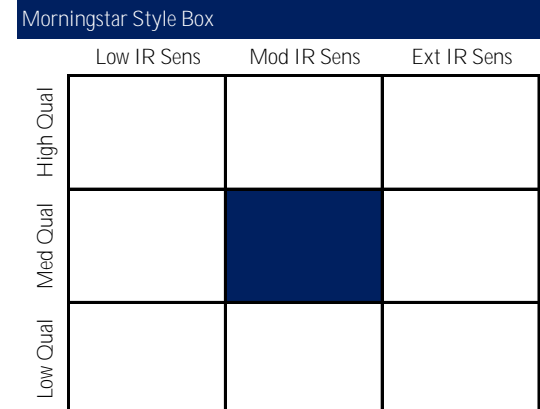
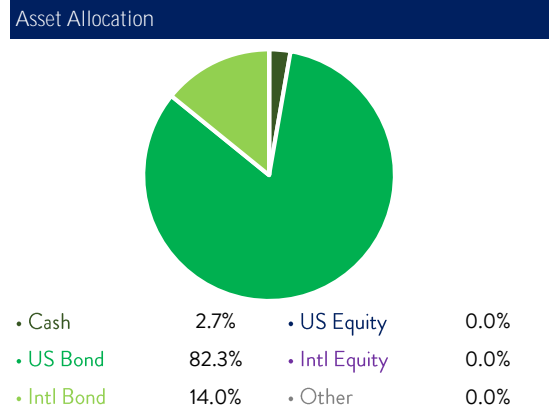
Product Details	
Name	Loomis Sayles Investment Grade Bond Y
Ticker	LSIIX
Expense Ratio	0.510%
Morningstar Category	US Fund Intermediate Core-Plus Bond
Benchmark	BBgBarc US Agg Bond TR USD
Inception Date	12/31/1996
Longest Tenured Manager	Matthew J. Eagan; Elaine M. Stokes;
Longest Manager Tenure	13.33 Years
Fund Size	\$5,643,980,126



Fund Characteristics	LSIIX	+/- Category
% Assets in Top 10 Holdings	22.78%	-24.15%
Average Eff Duration	5.87	0.44
Average Eff Maturity	8.17	0.66
Average Credit Quality	BBB	BBB (Cat Avg.)
Average Coupon	3.91%	0.44%



Sector Allocations	LSIIX	Category	+/- Category
Government	19.6%	27.9%	-8.3%
Municipal	0.2%	0.5%	-0.3%
Bank Loan	0.0%	0.4%	-0.4%
Convertible	0.7%	0.8%	-0.1%
Corporate Bond	50.3%	26.5%	23.8%
Preferred Stock	0.3%	0.1%	0.2%
Agency MBS	0.0%	24.5%	-24.5%
Non-Agency RMBS	1.5%	3.1%	-1.6%
Commercial MBS	0.5%	0.8%	-0.4%
Asset-Backed	24.3%	10.8%	13.4%
Cash & Equivalents	2.7%	4.4%	-1.7%
Other	0.0%	0.3%	-0.3%



Loomis Sayles Investment Grade Bond Y

LSIIX

Fund Fact Sheet

Data as of 12/31/2019

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• LSIIX	0.46%	9.04%	9.04%	5.05%	3.16%	5.06%
• Benchmark	0.18%	8.72%	8.72%	4.03%	3.05%	3.75%
+/- Benchmark	0.28%	0.33%	0.33%	1.02%	0.11%	1.31%
Peer Group Rank	36	55	55	8	52	13

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• LSIIX	0.46%	2.10%	2.86%	3.35%
• Benchmark	0.18%	2.27%	3.08%	2.94%
+/- Benchmark	0.28%	-0.17%	-0.22%	0.41%

Annual Performance	2019	2018	2017	2016	2015	2014
• LSIIX	9.04%	-0.32%	6.66%	6.16%	-5.08%	5.14%
• Benchmark	8.72%	0.01%	3.54%	2.65%	0.55%	5.97%
+/- Benchmark	0.33%	-0.33%	3.12%	3.51%	-5.63%	-0.82%
Peer Group Rank	55	29	3	6	98	64

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• LSIIX	-0.59%	0.96%	-0.74%	0.07%
• Benchmark	1.64%	0.02%	-0.16%	-1.46%
+/- Benchmark	-2.22%	0.94%	-0.58%	1.53%

Rolling 5-Year Performance	01/2015 - 12/2019	10/2014 - 09/2019	07/2014 - 06/2019	04/2014 - 03/2019	01/2014 - 12/2018	10/2013 - 09/2018
• LSIIX	3.16%	3.16%	2.30%	2.39%	2.41%	2.85%
• Benchmark	3.05%	3.38%	2.95%	2.74%	2.52%	2.16%
+/- Benchmark	0.11%	-0.22%	-0.65%	-0.35%	-0.11%	0.69%
Peer Group Rank	52	61	82	69	53	28

5-Year Quarterly Performance	4Q17	3Q17	2Q17	1Q17
• LSIIX	0.16%	1.69%	2.14%	2.52%
• Benchmark	0.39%	0.85%	1.45%	0.82%
+/- Benchmark	-0.23%	0.85%	0.70%	1.70%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	2.00	0.00	0.97	0.00	2.18	0.00
Beta	0.55	1.00	0.56	1.00	0.73	1.00
Standard Deviation	2.52	2.91	3.57	3.06	4.38	2.87
Sharpe Ratio	1.29	0.80	0.59	0.64	1.01	1.09
Information Ratio	0.43	-	0.03	-	0.33	-
Treynor Ratio	6.06	2.31	3.64	1.94	6.16	3.16
Upside Capture Ratio	82.34	100.00	77.98	100.00	110.61	100.00
Downside Capture Ratio	-2.87	100.00	47.73	100.00	71.38	100.00

5-Year Quarterly Performance	4Q16	3Q16	2Q16	1Q16
• LSIIX	-2.12%	2.25%	2.43%	3.56%
• Benchmark	-2.98%	0.46%	2.21%	3.03%
+/- Benchmark	0.86%	1.79%	0.21%	0.53%

5-Year Quarterly Performance	4Q15	3Q15	2Q15	1Q15
• LSIIX	-0.19%	-2.71%	-1.69%	-0.57%
• Benchmark	-0.57%	1.23%	-1.68%	1.61%
+/- Benchmark	0.38%	-3.94%	-0.01%	-2.18%

All data and information on this fact sheet is taken from sources believed to be accurate but is not guaranteed to be accurate, complete, or correct.

# Loomis Sayles Investment Grade Bond Y (USD)

**Morningstar Analyst Rating™ Overall Morningstar Rating™ Standard Index Category Index Morningstar Cat**  
**Gold** **★★★★** **530 US Fund Intermediate** **BBB+ US Agg** **BBB+ US** **US Fund Intermediate**  
 03-21-2019 **Core-Plus Bond** **Bond TR USD** **Universal TR USD** **Core-Plus Bond**

Performance 12-31-2019					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2017	2.52	2.14	1.69	0.16	6.66
2018	0.07	-0.74	0.96	-0.59	-0.32
2019	3.35	2.86	2.10	0.46	9.04
Trailing Returns					
	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	9.04	5.05	3.16	5.06	6.99
Std 12-31-2019	9.04	—	3.16	5.06	6.99
Total Return	9.04	5.05	3.16	5.06	6.99
+/- Std Index	0.33	1.02	0.11	1.31	—
+/- Cat Index	-0.25	0.75	-0.28	0.93	—
% Rank Cat	57	10	54	13	—
No. in Cat	613	530	444	332	—

7-day Yield Subsidized Unsubsidized  
 30-day SEC Yield 01-24-20 2.47 2.42  
 1. Contractual yielder. Expires 04-30-2020

**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 800-225-5478 or visit [www.NAM.com](http://www.NAM.com).

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

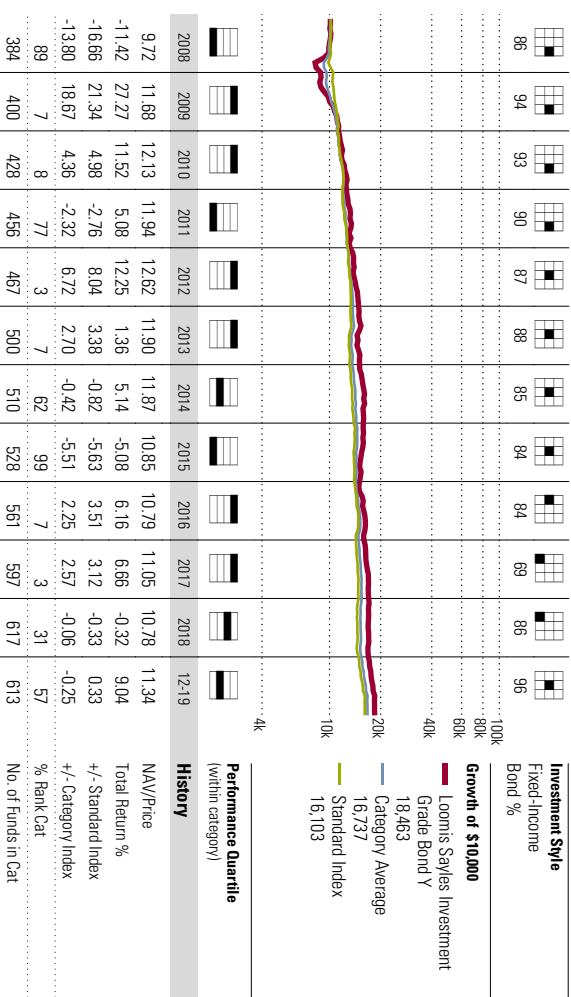
**Fund Expenses**  
 Management Fees % 0.40  
 12bt Expense % 0.00

**Net Expense Ratio %** **0.51**  
**Gross Expense Ratio %** **0.57**  
**Risk and Return Profile**

Morningstar Rating™	3 Yr	5 Yr	10 Yr
Morningstar Rating™	5★	3★	4★
Morningstar Risk	Avg	High	High
Morningstar Return	High	Avg	+Avg
Standard Deviation	2.52	3.57	4.38
Mean	5.05	3.16	5.06
Shape Ratio	1.29	0.59	1.01

MPI Statistics	Standard Index	Best Fit Index
Alpha	2.00	1.05
Beta	0.55	0.56
R-Squared	39.24	59.85
12-Month Yield	—	3.45%
Potential Cap Gains Exp	—	0.93%

**Operations**  
 Family: Natixis Funds  
 Manager: Multiple  
 Tenure: 13.3 Years  
 Objective: Corporate Bond - General  
 Base Currency: USD



**Portfolio Analysis 11-30-2019**

Asset Allocation %	Net %	Long %	Short %
Cash	2.33	2.73	0.40
US Stocks	0.00	0.00	0.00
Non-US Stocks	0.00	0.00	0.00
Bonds	96.71	96.71	0.00
Other/Not Clsfd	0.96	0.96	0.00
Total	100.00	100.40	0.40

**Equity Style**

Value	Brand	Grwth	Port	Rel
Large	—	—	Avg	Index
Mid	—	—	—	—
Small	—	—	—	—

**Fixed-Income Style**

Value	Brand	Grwth	Avg Eff	Maturity
High	—	—	Avg Eff Duration	5.87
Med	—	—	Avg Wtd Coupon	3.91
Low	—	—	Avg Wtd Price	106.20

**Credit Quality Breakdown 11-30-2019**

AAA	AA	A	BBB	BB	Below B	NR
31.48	4.67	17.37	38.47	4.10	0.16	0.06
3.16	0.00	0.00	0.00	0.00	0.00	3.68

**Share Clng** **Share** **Holdings:** **NAV/Price** **History**

since 10-2019	Amount	1 Total Stocks	39% Turnover Ratio	2016	2017	2018	12-19	NAV/Price	Total Return %	+/- Standard Index	+/- Category Index	% Rank Cat	No. of Funds in Cat
284 mil	United States Treasury Notes 2.38%	294	2.38%	11.05	10.78	11.34	9.04	9.04	9.04	—	—	—	—
211 mil	United States Treasury Bonds 3%	211	3%	6.66	-0.32	0.33	0.33	0.33	0.33	—	—	—	—
166 mil	United States Treasury Notes 1.5%	166	1.5%	3.51	3.12	-0.33	0.33	0.33	0.33	—	—	—	—
112 mil	United States Treasury Bonds 3%	112	3%	2.25	2.57	-0.06	-0.25	-0.25	-0.25	—	—	—	—
89 mil	United States Treasury Notes 1.62%	89	1.62%	3	31	57	57	57	57	—	—	—	—
79 mil	Textron Inc. 5.95%	79	5.95%	7	7	7	7	7	7	—	—	—	—
70 mil	JPMorgan Chase & Co. 4.12%	70	4.12%	561	597	617	613	613	613	—	—	—	—
61 mil	AT&T Inc 4.3%	61	4.3%	528	561	597	613	613	613	—	—	—	—
48 mil	Arceion/Mithal S.A. 6.75%	48	6.75%	561	597	617	613	613	613	—	—	—	—
55 mil	Chevron Corporation 2.1%	55	2.1%	561	597	617	613	613	613	—	—	—	—
55 mil	United States Treasury Notes 1.5%	55	1.5%	561	597	617	613	613	613	—	—	—	—
55 mil	Kredtranslat Fur Wiederaufbau 1.5%	55	1.5%	561	597	617	613	613	613	—	—	—	—
50 mil	Jefferies Group LLC 5.12%	50	5.12%	561	597	617	613	613	613	—	—	—	—
52 mil	Shell International Finance B.V. 1	52	1%	561	597	617	613	613	613	—	—	—	—
49 mil	Bank of America Corporation 3.42%	49	3.42%	561	597	617	613	613	613	—	—	—	—

**Sector Weightings**

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

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Asset Class: **Asset Allocation**  
Category: **Lifestyle**

## FUND FACTS

Inception Date: **October 1, 2004**

Investment advisory fee for period ended  
September 30, 2019: **0.13%**

12b-1 fee: **0.00%**

Other expenses: **0.12%**

Total fund annual expenses without  
waivers or reductions for period ended  
September 30, 2019: **0.25%**

Total waivers, recoupments, and  
reductions: **0.00%**

Net fund annual expenses after waivers  
or reductions for period ended  
September 30, 2019: **0.25%**

Turnover rate: **15%**

If offered through a retirement program,  
additional fees and expenses may be  
charged under that program.

### Important Information

Category is interpreted by Voya® using  
Fund Company and/or Morningstar  
category information.

Investment advisory fee reflects a  
weighted blend of fees charged by the  
underlying investment options within the  
Lifestyle Portfolio, based upon the  
percentage allocations designated by  
San Bernardino and detailed within the  
Strategy section.

This Portfolio is not a registered  
investment company, and interests in the  
Portfolio have not been registered with  
the Securities and Exchange  
Commission. It is only available to  
participants in the San Bernardino  
qualified retirement program. Only  
eligible participants in the plan may  
invest in the Portfolio.

**You can obtain copies of free  
prospectuses for the underlying  
funds which contain additional  
information on the charges and  
expenses for the funds at any time by  
calling your local Voya  
representative. Other fees and  
expenses may be charged under your  
retirement program. More**

**Information is included in the  
enrollment material.**

### Investment Objective

The investment objective of the  
Moderate Allocation Portfolio is to  
provide long-term total return through a  
combination of capital growth and  
income. Sixty percent (60%) of the total  
fund assets are allocated to equities and  
forty percent (40%) are allocated to fixed  
income securities. It falls in the middle  
of the three Lifestyle Funds in terms of  
its potential for investment return as well  
as the potential risk it assumes. It is  
most suitable for participants who are  
able to remain invested for more than  
five, but less than ten years, or who are  
comfortable with the higher short-term  
fluctuations that are characteristic of  
investing at least half of their portfolio in  
equity markets.

### Strategy

The strategy for the Moderate Allocation  
Portfolio is to invest in a combination of  
active and passive investments in the  
following proportions:

---20% in the San Bernardino Stable  
Value Option where stability of principal  
is the primary objective. Stabilizer<sup>SM</sup>  
guarantees a minimum rate of interest  
for the life of the contract, and may credit  
a higher interest rate from time to time.  
The current rate is subject to change, but  
will never fall below the guaranteed  
minimum.

---7% in the Loomis Sayles Investment  
Grade Bond – Class Y, which seeks high  
total investment return through a  
combination of current income and  
capital appreciation.

---24% in the Vanguard® Total  
International Stock Market Index Fund –  
Institutional Shares, which seeks to track  
the performance of a benchmark index  
that measures the investment return of  
stocks issued by companies located in  
developed and emerging markets,  
excluding the United States.

---36% in the Vanguard® Total Stock  
Market Index Fund - Institutional Shares,  
which seeks to track the performance of  
a benchmark index that measures the  
investment return of the overall stock  
market.

---6% in Pioneer Global High Yield Fund  
- Class Y Shares, which seeks to  
maximize total return through a  
combination of income and capital  
appreciation.

---7% in Oppenheimer International  
Bond Fund - Class I, which seeks total  
return.

Each sub-fund description contains more  
detailed information regarding the sub-  
funds' Investment Advisers, Portfolio  
Managers, Investment Objectives,  
Strategies and Principal Risks, and must  
accompany this Lifestyle Portfolio  
description.

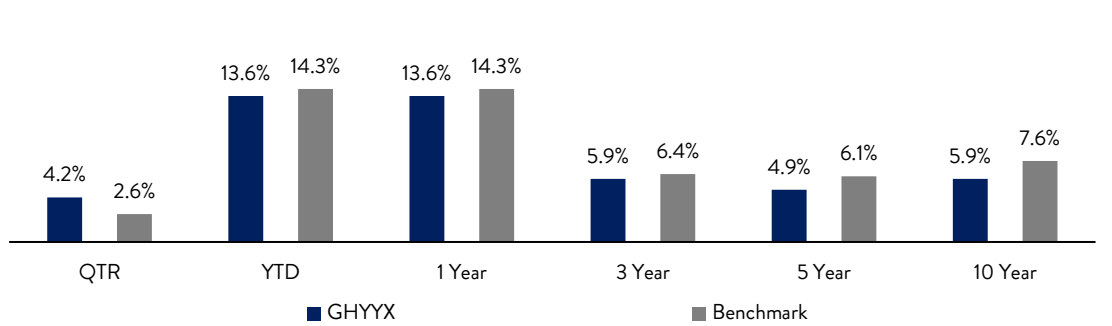
### Principal Risks

All equity (both U.S. and International)  
and fixed income investments exhibit  
certain risk characteristics that include  
the potential for loss of principal value.  
Generally, the probability of loss of  
principal is greater with investment funds  
that also provide the greatest potential  
for investment return. International  
stocks do carry additional risks that  
relate to currency and political  
uncertainty. The risks of Lifestyle  
Portfolios are based on the proportionate  
risk characteristics of the underlying sub-  
funds described above.

**Product Details**

Name	Pioneer Global High Yield Y
Ticker	GHYYX
Expense Ratio	0.920%
Morningstar Category	US Fund High Yield Bond
Benchmark	BBgBarc US Corporate High Yield TR USD
Inception Date	12/28/2005
Longest Tenured Manager	Andrew Feltus
Longest Manager Tenure	18.42 Years
Fund Size	\$300,251,187

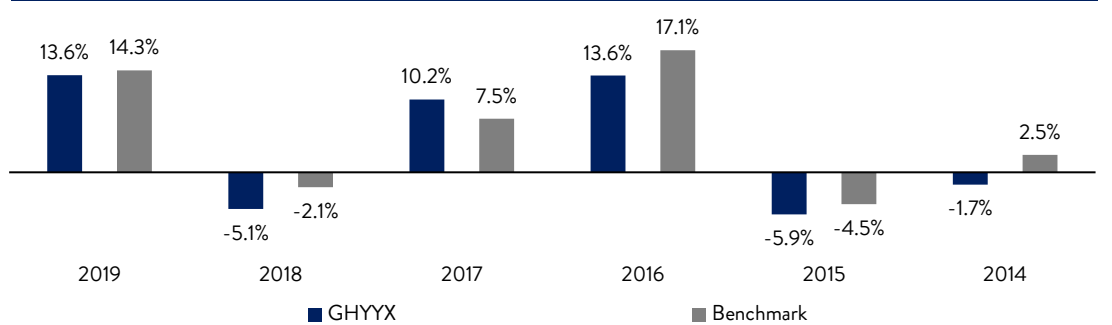
**Trailing Performance**



**Fund Characteristics**

	GHYYX	+/- Category
% Assets in Top 10 Holdings	8.02%	-56.51%
Average Eff Duration	3.27	0.65
Average Eff Maturity	4.53	-0.02
Average Credit Quality	B	B (Cat Avg.)
Average Coupon	6.53%	-0.19%

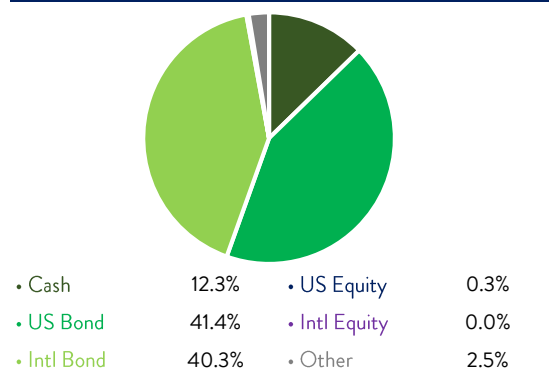
**Annual Performance**



**Sector Allocations**

	GHYYX	Category	+/- Category
Government	7.5%	1.5%	6.1%
Municipal	0.0%	0.0%	0.0%
Bank Loan	3.3%	2.9%	0.4%
Convertible	2.9%	1.1%	1.8%
Corporate Bond	72.9%	82.9%	-10.1%
Preferred Stock	0.3%	0.2%	0.1%
Agency MBS	0.0%	0.2%	-0.2%
Non-Agency RMBS	0.0%	0.1%	-0.1%
Commercial MBS	0.3%	0.1%	0.2%
Asset-Backed	0.1%	0.7%	-0.6%
Cash & Equivalents	12.7%	6.7%	6.0%
Other	0.0%	3.6%	-3.6%

**Asset Allocation**



**Morningstar Style Box**

	Low IR Sens	Mod IR Sens	Ext IR Sens
High Qual			
Med Qual			
Low Qual			

Pioneer Global High Yield Y  
GHYYX

Fund Fact Sheet  
Data as of 12/31/2019

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• GHYYX	4.16%	13.64%	13.64%	5.92%	4.89%	5.90%
• Benchmark	2.61%	14.32%	14.32%	6.37%	6.13%	7.57%
+/- Benchmark	1.54%	-0.67%	-0.67%	-0.45%	-1.24%	-1.67%
Peer Group Rank	1	46	46	27	55	81

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• GHYYX	4.16%	-0.28%	3.13%	6.10%
• Benchmark	2.61%	1.33%	2.50%	7.26%
+/- Benchmark	1.54%	-1.62%	0.63%	-1.16%

Annual Performance	2019	2018	2017	2016	2015	2014
• GHYYX	13.64%	-5.13%	10.21%	13.57%	-5.92%	-1.72%
• Benchmark	14.32%	-2.08%	7.50%	17.13%	-4.47%	2.45%
+/- Benchmark	-0.67%	-3.05%	2.71%	-3.56%	-1.45%	-4.17%
Peer Group Rank	46	92	3	51	82	96

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• GHYYX	-4.61%	1.98%	-2.33%	-0.15%
• Benchmark	-4.53%	2.40%	1.03%	-0.86%
+/- Benchmark	-0.08%	-0.43%	-3.36%	0.71%

Rolling 5-Year Performance	01/2015 - 12/2019	10/2014 - 09/2019	07/2014 - 06/2019	04/2014 - 03/2019	01/2014 - 12/2018	10/2013 - 09/2018
• GHYYX	4.89%	3.01%	2.55%	2.56%	1.88%	3.38%
• Benchmark	6.13%	5.37%	4.70%	4.68%	3.83%	5.54%
+/- Benchmark	-1.24%	-2.37%	-2.14%	-2.12%	-1.95%	-2.16%
Peer Group Rank	55	91	89	88	86	86

5-Year Quarterly Performance	4Q17	3Q17	2Q17	1Q17
• GHYYX	1.11%	2.83%	2.86%	3.06%
• Benchmark	0.47%	1.98%	2.17%	2.70%
+/- Benchmark	0.64%	0.85%	0.69%	0.36%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	-0.20	0.00	-0.98	0.00	-1.95	0.00
Beta	0.95	1.00	0.96	1.00	1.06	1.00
Standard Deviation	4.54	4.07	5.51	5.28	6.60	5.80
Sharpe Ratio	0.91	1.12	0.69	0.95	0.81	1.19
Information Ratio	-0.19	-	-0.58	-	-0.71	-
Treynor Ratio	4.40	4.65	3.94	5.03	5.01	6.98
Upside Capture Ratio	91.85	100.00	89.22	100.00	94.86	100.00
Downside Capture Ratio	88.96	100.00	101.69	100.00	119.44	100.00

5-Year Quarterly Performance	4Q16	3Q16	2Q16	1Q16
• GHYYX	1.29%	5.24%	4.00%	2.44%
• Benchmark	1.75%	5.55%	5.52%	3.35%
+/- Benchmark	-0.46%	-0.31%	-1.52%	-0.92%

5-Year Quarterly Performance	4Q15	3Q15	2Q15	1Q15
• GHYYX	-2.41%	-6.61%	1.60%	1.60%
• Benchmark	-2.07%	-4.86%	0.00%	2.52%
+/- Benchmark	-0.34%	-1.75%	1.60%	-0.93%

All data and information on this fact sheet is taken from sources believed to be accurate but is not guaranteed to be accurate, complete, or correct.

# Pioneer Global High Yield Y (USD)

**Morningstar Quantitative Rating™**  
**Neutral** <sup>a</sup>  
 12-31-2019

**Overall Morningstar Rating™** **Standard Index** **Category Index** **Morningstar Cat**  
**★★★★** **BBBarc US Agg** **ICE BofA US High** **US Fund High Yield**  
 616 US Fund High Yield Bond Bond TR USD Yield TR USD Bond

Performance 12-31-2019					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2017	3.06	2.86	2.83	1.11	10.21
2018	-0.15	-2.33	1.98	-4.61	-5.13
2019	6.10	3.13	-0.28	4.16	13.64
Trailing Returns					
	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	13.64	5.92	4.89	5.90	5.62
Std 12-31-2019	13.64	—	4.89	5.90	5.62
Total Return	13.64	5.92	4.89	5.90	5.62
+/- Std Index	4.93	1.89	1.84	2.16	—
+/- Cat Index	-0.77	-0.40	-1.24	-1.59	—
% Rank Cat	46	30	53	80	—
No. in Cat	711	616	539	339	—

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.

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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 800-225-6292 or visit [www.pioneerinvestments.com](http://www.pioneerinvestments.com).

Fees and Expenses	
<b>Sales Charges</b>	<b>NA</b>
<b>Front-End Load %</b>	<b>NA</b>
<b>Deferred Load %</b>	<b>NA</b>
<b>Fund Expenses</b>	0.70
Management Fees %	0.00
12bt Expense %	0.00
<b>Net Expense Ratio %</b>	<b>0.92</b>
<b>Gross Expense Ratio %</b>	<b>0.92</b>
<b>Risk and Return Profile</b>	

	3 Yr	5 Yr	10 Yr
Morningstar Rating™	616 funds <b>4★</b>	539 funds <b>3★</b>	339 funds <b>2★</b>
Morningstar Risk	+Avg	+Avg	+Avg
Morningstar Return	+Avg	+Avg	-Avg

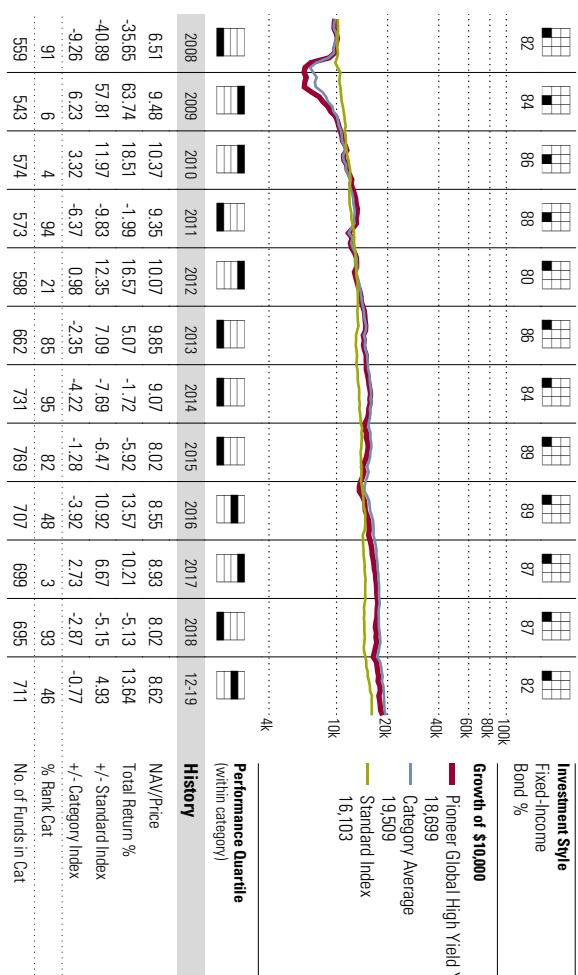
	3 Yr	5 Yr	10 Yr
Standard Deviation	4.54	5.51	6.60
Mean	5.92	4.89	5.90
Sharpe Ratio	0.91	0.70	0.82

MPI Statistics	Standard Index	Best Fit Index
Alpha	4.60	2.30
Beta	-0.19	0.33
R-Squared	1.47	73.42
12-Month Yield	—	—
Potential Cap Gains Exp	—	-47.23%

**Operations**  
 Family: Pioneer Investments  
 Manager: Multiple  
 Tenure: 18.4 Years  
 Objective: Corporate Bond - High Yield

Base Currency: USD  
 Ticker: GHYXX  
 ISIN: US72369G4055  
 Minimum Initial Purchase: \$5 mil

Purchase Constraints: —  
 Incept: 12-28-2005  
 Type: MF  
 Total Assets: \$300.25 mil



**Portfolio Analysis** 11-30-2019

Asset Allocation %	Net %	Long %	Short %
Cash	11.43	12.61	1.18
US Stocks	0.27	0.27	0.00
Non-US Stocks	0.02	0.02	0.00
Bonds	82.54	83.65	1.11
Other/Not Cstfd	5.73	5.73	0.00
Total	100.00	102.28	2.28

Share Cng	Share	Holdings:	Net Assets %
since 10-2019	Amount	8 Total Stocks, 261 Total Fixed-Income, 54% Turnover Ratio	%
	3 mil	Nationstar Mortgage LLC 6.5%	0.97
	3 mil	Platin 1426 GmbH 5.38%	0.89
	3 mil	Wolverine Escrow LLC 8.5%	0.83
	2 mil	Hidrovas International Finance S	0.80
	3 mil	Financiera Independencia, S.A. de	0.78
	3 mil	Turkey (Republic of) 3.25%	0.77
	2 mil	Taylor Morrison Communities Inc 5.	0.76
	2 mil	JBS USA Lux S A & JBS USA Finance	0.75
	2 mil	International Game Technology PLC	0.74
	2 mil	Minerva Luxembourg S.A. 5.88%	0.74
	2 mil	Sprint Corporation 7.25%	0.72
	2 mil	Nufarm Australia Limited / Nufarm	0.72
	2 mil	Michael's Stores, Inc. 8%	0.70
	2 mil	Freedom Mortgage Corporation 8.12%	0.70
	2 mil	Viking Cruises, Ltd. 5.88%	0.70

**Equity Style**

Value	Brand	Growth	Port	Rel	Rel
Large	Mid	Ext	Avg	Index	Cat
High	Med	Low			
High	Med	Low			

**Fixed-Income Style**

Ltd	Med	Ext	Avg Eff Maturity	4.53
High	Med	Low	Avg Eff Duration	3.27
High	Med	Low	Avg Wtd Coupon	—
High	Med	Low	Avg Wtd Price	101.67

**Credit Quality Breakdown** 11-30-2019

Credit Quality	Bond %
AAA	3.12
AA	0.00
A	0.00
BBB	0.90
BB	27.52
B	48.48
Below B	12.66
NR	7.33

**Sector Weightings**

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

**Regional Exposure**

Region	Stocks %	Rel Std Index
Americas	92.8	—
Greater Europe	6.5	—
Greater Asia	0.7	—

**Regional Exposure**

Region	Stocks %	Rel Std Index
Americas	92.8	—
Greater Europe	6.5	—
Greater Asia	0.7	—

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# San Bernardino Stable Value Option

Stabilizer<sup>SM</sup> 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 ("VRIAC"), a member of the Voya<sup>®</sup> 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 VRIAC. 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 VRIAC and are supported by its full faith and credit. VRIAC is a leading provider of stable value products and services and a member of the Voya<sup>®</sup> 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 VRIAC 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, Stabilizer<sup>SM</sup> 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 0.44%.

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 09/30/2019)

JPMorgan Chase & Co	0.70
Bank of America Corp	0.60
Wells Fargo & Co	0.57
Energy Transfer LP	0.44
Comcast Corp	0.43
AT&T Inc	0.39
Marathon Petroleum Corp	0.39
Citigroup Inc	0.39
CVS Health Corp	0.36
Goldman Sachs Group Inc/The	0.36

### Sector Holdings (as of 09/30/2019)

Agency Mortgages	42.9
Asset Backed Securities	5.8
Commercial Mortgage Backed Securities	4.0
Emerging Markets	1.4
Government Related	0.1
HY Corporates	1.0
IG Corporates	24.6
Non-Agency RMBS and SF CRT	6.0
Other	0.0
US Treasury & Cash	14.2

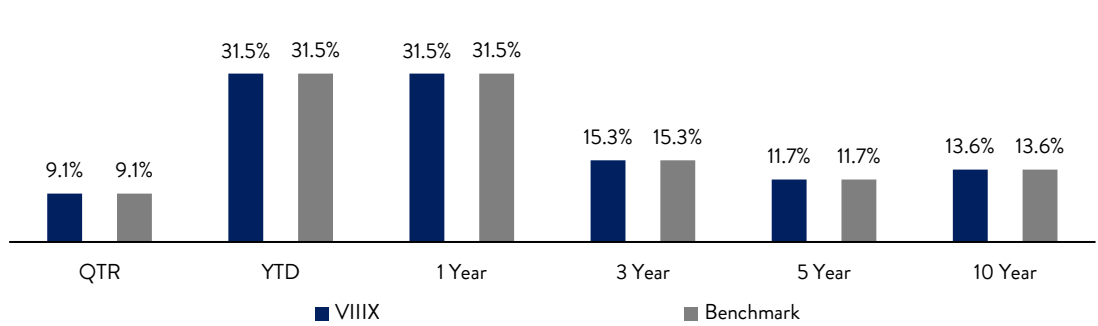
### Statistical Data (as of 09/30/2019)

Portfolio Duration (years)	3.71
Yield to Maturity	2.50%
Average Life (years)	4.951

**Product Details**

Name	Vanguard Institutional Index Instl PI
Ticker	VIII X
Expense Ratio	0.020%
Morningstar Category	US Fund Large Blend
Benchmark	S&P 500 TR USD
Inception Date	7/7/1997
Longest Tenured Manager	Donald M. Butler
Longest Manager Tenure	19.08 Years
Fund Size	\$242,172,895,490

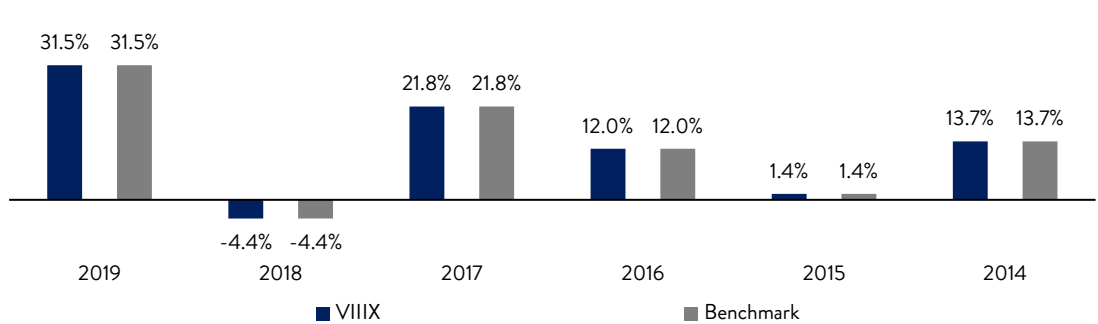
**Trailing Performance**



**Fund Characteristics**

	VIII X	+/- Category
% Assets in Top 10 Holdings	22.63%	-27.47%
Average Market Cap (mil)	\$123,886	-\$69,802
P/E Ratio (TTM)	22.61	0.53
P/B Ratio (TTM)	3.40	-0.51
Est. Dividend Yield	1.86%	-0.08%

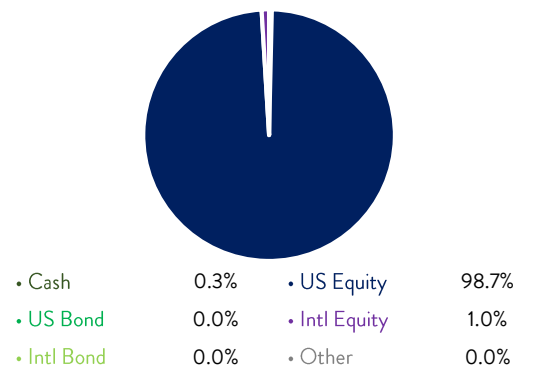
**Annual Performance**



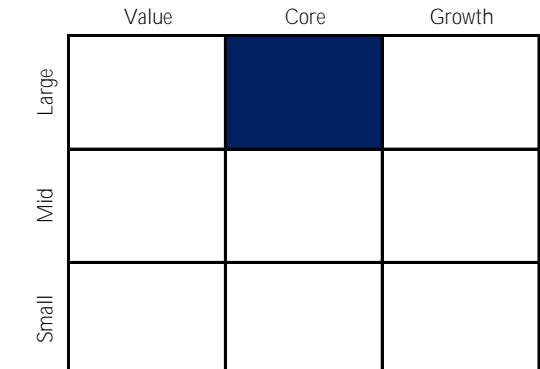
**Sector Allocations**

	VIII X	Category	+/- Category
Materials	2.3%	2.7%	-0.4%
Communication Services	10.4%	5.0%	5.4%
Consumer Discretionary	9.6%	9.8%	-0.2%
Consumer Staples	7.5%	8.0%	-0.5%
Healthcare	14.4%	14.1%	0.3%
Industrials	9.5%	11.7%	-2.2%
Real Estate	2.9%	3.0%	0.0%
Technology	19.8%	22.2%	-2.4%
Energy	4.3%	4.1%	0.2%
Financial Services	15.9%	16.6%	-0.7%
Utilities	3.3%	2.9%	0.5%
Other	0.0%	0.0%	0.0%

**Asset Allocation**



**Morningstar Style Box**



Vanguard Institutional Index Instl PI  
VIIIIX

Fund Fact Sheet  
Data as of 12/31/2019

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• VIIIIX	9.07%	31.48%	31.48%	15.26%	11.69%	13.55%
• Benchmark	9.07%	31.49%	31.49%	15.27%	11.70%	13.56%
+/- Benchmark	0.00%	0.00%	0.00%	-0.02%	-0.01%	-0.01%
Peer Group Rank	29	22	22	15	8	6

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• VIIIIX	9.07%	1.70%	4.30%	13.65%
• Benchmark	9.07%	1.70%	4.30%	13.65%
+/- Benchmark	0.00%	0.00%	0.00%	0.01%

Annual Performance	2019	2018	2017	2016	2015	2014
• VIIIIX	31.48%	-4.41%	21.82%	11.95%	1.39%	13.68%
• Benchmark	31.49%	-4.38%	21.83%	11.96%	1.38%	13.69%
+/- Benchmark	0.00%	-0.02%	-0.02%	-0.01%	0.01%	-0.01%
Peer Group Rank	22	23	30	29	24	19

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• VIIIIX	-13.53%	7.71%	3.43%	-0.77%
• Benchmark	-13.52%	7.71%	3.43%	-0.76%
+/- Benchmark	-0.01%	-0.01%	0.00%	-0.01%

Rolling 5-Year Performance	01/2015 - 12/2019	10/2014 - 09/2019	07/2014 - 06/2019	04/2014 - 03/2019	01/2014 - 12/2018	10/2013 - 09/2018
• VIIIIX	11.69%	10.83%	10.70%	10.90%	8.48%	13.94%
• Benchmark	11.70%	10.84%	10.71%	10.91%	8.49%	13.95%
+/- Benchmark	-0.01%	-0.01%	-0.01%	-0.01%	-0.01%	-0.01%
Peer Group Rank	8	11	9	8	8	8

5-Year Quarterly Performance	4Q17	3Q17	2Q17	1Q17
• VIIIIX	6.64%	4.48%	3.08%	6.06%
• Benchmark	6.64%	4.48%	3.09%	6.07%
+/- Benchmark	0.00%	0.00%	-0.01%	0.00%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	-0.01	0.00	-0.01	0.00	-0.01	0.00
Beta	1.00	1.00	1.00	1.00	1.00	1.00
Standard Deviation	12.10	12.10	11.98	11.98	12.46	12.46
Sharpe Ratio	1.10	1.10	0.89	0.90	1.04	1.04
Information Ratio	-1.62	-	-0.87	-	-0.44	-
Treynor Ratio	13.54	13.56	10.58	10.59	12.97	12.97
Upside Capture Ratio	99.96	100.00	99.97	100.00	99.98	100.00
Downside Capture Ratio	100.04	100.00	100.02	100.00	100.01	100.00

5-Year Quarterly Performance	4Q16	3Q16	2Q16	1Q16
• VIIIIX	3.82%	3.85%	2.45%	1.34%
• Benchmark	3.82%	3.85%	2.46%	1.35%
+/- Benchmark	0.00%	0.00%	0.00%	0.00%

5-Year Quarterly Performance	4Q15	3Q15	2Q15	1Q15
• VIIIIX	7.05%	-6.44%	0.28%	0.95%
• Benchmark	7.04%	-6.44%	0.28%	0.95%
+/- Benchmark	0.01%	0.00%	0.00%	0.00%

All data and information on this fact sheet is taken from sources believed to be accurate but is not guaranteed to be accurate, complete, or correct.

# Vanguard Institutional Index Instl PI (USD)

Morningstar Analyst Rating™ Overall Morningstar Rating™ Standard Index Category Index Morningstar Cat  
 Gold 1,203 US Fund Large Blend S&P 500 TR USD Russell 1000 TR US Fund Large Blend  
 03-08-2019 \*\*\*\*\*

Performance 12-31-2019					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2017	6.06	3.08	4.48	6.64	21.82
2018	-0.77	3.43	7.71	-13.53	-4.41
2019	13.65	4.30	1.70	9.07	31.48
Trailing Returns					
	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	31.48	15.26	11.69	13.55	7.84
Std 12-31-2019	31.48	—	11.69	13.55	7.84
Total Return	31.48	15.26	11.69	13.55	7.84
+/- Std Index	0.00	-0.02	-0.01	-0.01	—
+/- Cat Index	0.06	0.21	0.21	0.01	—
% Rank Cat	23	17	10	7	—
No. in Cat	1387	1203	1058	808	—

7-day Yield		
30-day SEC Yield 01-24-20	Subsidized	Unsubsidized
1.86	—	1.86

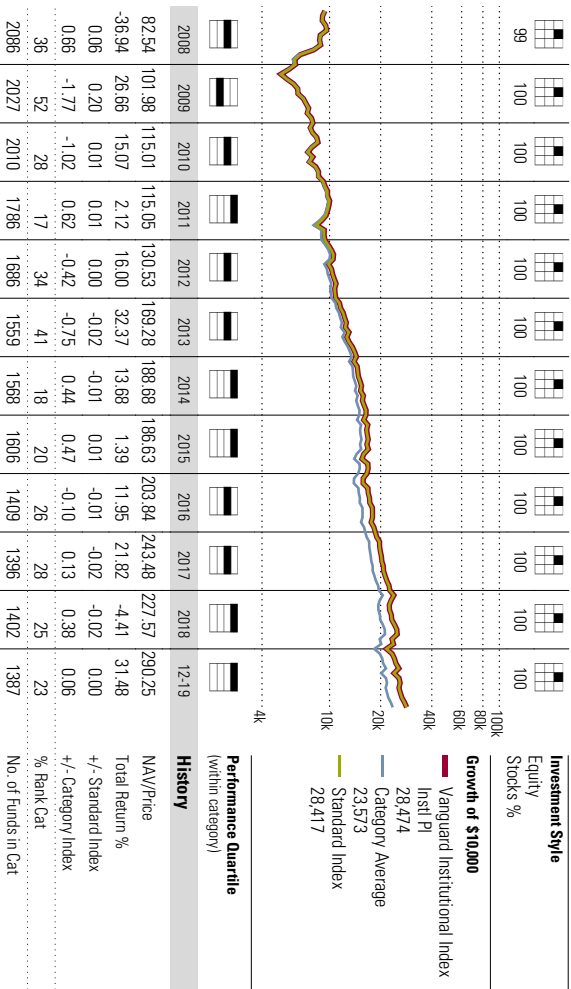
**Performance Disclosure**  
 The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.  
 The performance data quoted represents past performance and does not guarantee future results. The 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	
Front-End Load %	NA
Deferred Load %	NA
Fund Expenses	0.02
Management Fees %	0.02
12b1 Expense %	NA
<b>Net Expense Ratio %</b>	<b>0.02</b>
<b>Gross Expense Ratio %</b>	<b>0.02</b>
Risk and Return Profile	
Morningstar Rating™	3 Yr 4★ 5 Yr 5★ 10 Yr 5★
Morningstar Risk	Avg Avg Avg
Morningstar Return	+Avg High High

Standard Deviation					
	3 Yr	5 Yr	10 Yr	Best Fit Index	Rel Std Index
Mean	12.10	11.98	12.46	S&P 500 TR USD	1.00
Sharpe Ratio	15.26	11.69	13.55	—	1.00
	1.10	0.90	1.04	—	1.00

MPT Statistics					
	Standard Index	Best Fit Index	Rel Std Index	Rel Std Index	Rel Std Index
Alpha	-0.02	-0.02	-0.02	—	—
Beta	1.00	1.00	1.00	—	—
R-Squared	100.00	100.00	100.00	—	—
12-Month Yield	—	—	1.91%	—	—
Potential Cap Gains Exp	—	—	43.75%	—	—

Operations	
Family:	Vanguard
Manager:	Multiple
Tenure:	19.1 Years
Objective:	Growth and Income



Portfolio Analysis 12-31-2019			
Asset Allocation %	Net %	Long %	Short %
Cash	0.35	0.35	0.00
US Stocks	98.70	98.70	0.00
Non-US Stocks	0.95	0.95	0.00
Bonds	0.00	0.00	0.00
Other/Not Cstfd	0.00	0.00	0.00
Total	100.00	100.00	0.00

Equity Style		
Value	Brand	Growth
Large	Med	Small
High	Med	Low

Fixed-Income Style		
Value	Brand	Growth
Large	Med	Small
High	Med	Low

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

Regional Exposure		
Stocks %	Rel Std Index	Rel Std Index
Americas	99.0	1.00
Greater Europe	0.9	1.00
Greater Asia	0.1	1.00

Sector Weightings	
🔄 Cyclical	30.7
🏠 Basic Materials	2.3
🏪 Consumer Cyclical	9.6
🏢 Financial Services	15.9
🏠 Real Estate	2.9
🏠 Sensitive	44.1
📡 Communication Services	10.4
⚡ Energy	4.3
🏭 Industrials	9.5
🖥️ Technology	19.8
🛡️ Defensive	25.2
👤 Consumer Defensive	7.5
🏥 Healthcare	14.4
🏠 Utilities	3.3

Share Cng	Share	Holdings	Net Assets
since	Amount	506 Total Stocks - 1 Total Fixed-Income, 6% Turnover Ratio	%
11-2019	38 mil	Apple Inc	4.57
⊖	69 mil	Microsoft Corp	4.48
⊖	4 mil	Amazon.com Inc	2.87
⊖	22 mil	Facebook Inc A	1.84
⊖	18 mil	Berkshire Hathway Inc B	1.55
⊖	28 mil	JPMorgan Chase & Co	1.61
⊖	3 mil	Alphabet Inc A	1.49
⊖	3 mil	Alphabet Inc Class C	1.49
⊖	24 mil	Johnson & Johnson	1.43
⊖	15 mil	Visa Inc Class A	1.20
⊖	23 mil	Procter & Gamble Co	1.16
⊖	38 mil	Exxon Mobil Corp	1.10
⊖	66 mil	AT&T Inc	1.06
⊖	73 mil	Bank of America Corporation	1.06
⊖	9 mil	Unitedhealth Group Inc	1.04

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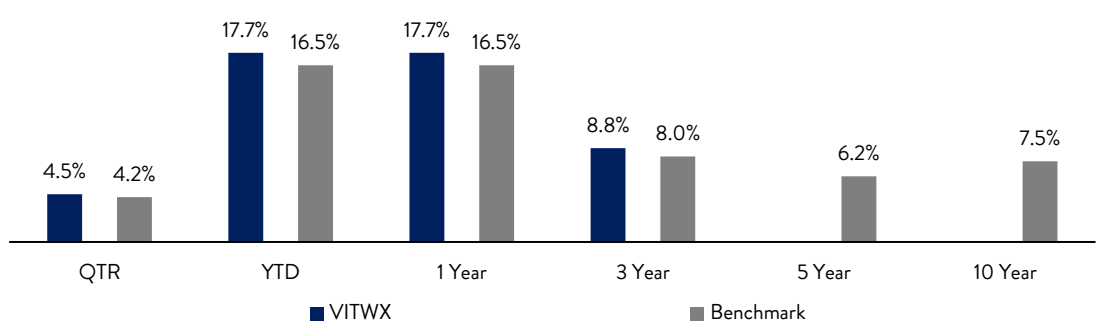




**Product Details**

Name	Vanguard Instl Trgt Retire 2020 Instl
Ticker	VITWX
Expense Ratio	0.090%
Morningstar Category	US Fund Target-Date 2020
Benchmark	S&P Target Date 2020 TR USD
Inception Date	6/26/2015
Longest Tenured Manager	William A. Coleman;Walter Nejman;
Longest Manager Tenure	4.58 Years
Fund Size	\$25,009,851,215

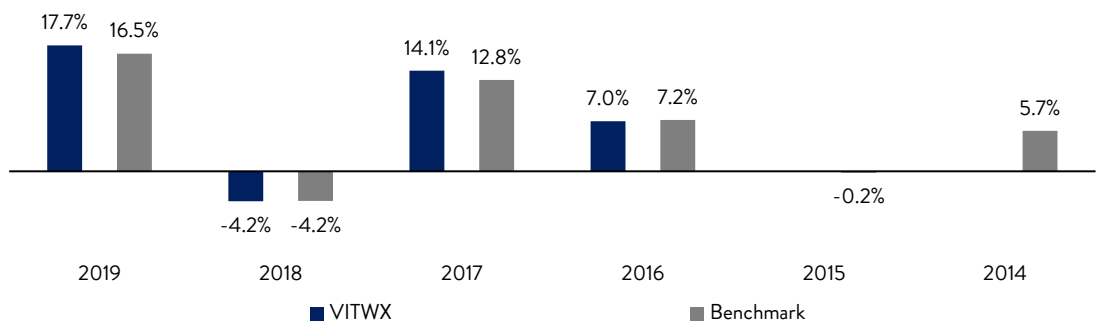
**Trailing Performance**



**Fund Characteristics**

	VITWX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$47,071	-\$20,282
P/E Ratio (TTM)	19.24	-1.10
P/B Ratio (TTM)	2.26	-0.36
Est. Dividend Yield	2.40%	0.21%

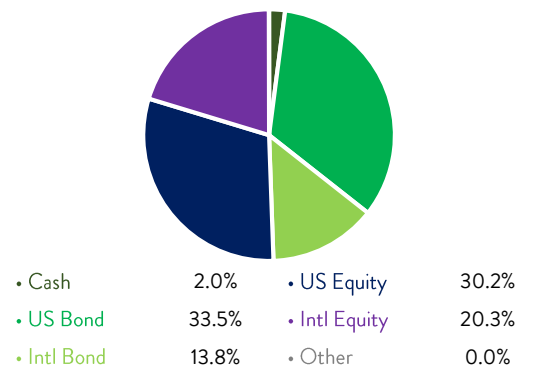
**Annual Performance**



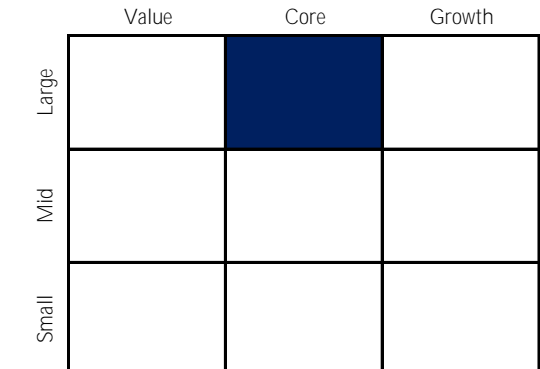
**Sector Allocations**

	VITWX	Category	+/- Category
Materials	4.5%	3.4%	1.1%
Communication Services	8.6%	8.1%	0.5%
Consumer Discretionary	10.3%	10.3%	-0.1%
Consumer Staples	7.8%	7.4%	0.4%
Healthcare	12.2%	13.3%	-1.1%
Industrials	11.7%	10.8%	0.8%
Real Estate	4.2%	4.4%	-0.2%
Technology	15.2%	17.1%	-1.9%
Energy	4.9%	4.7%	0.2%
Financial Services	17.5%	17.3%	0.2%
Utilities	3.2%	3.2%	0.0%
Other	0.0%	0.0%	0.0%

**Asset Allocation**



**Morningstar Style Box**



Vanguard Instl Trgt Retire 2020 Instl  
VITWX

Fund Fact Sheet  
Data as of 12/31/2019

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• VITWX	4.47%	17.69%	17.69%	8.76%	-	-
• Benchmark	4.19%	16.52%	16.52%	8.00%	6.16%	7.55%
+/- Benchmark	0.28%	1.17%	1.17%	0.76%	-	-
Peer Group Rank	28	22	22	10	-	-

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• VITWX	4.47%	1.20%	3.22%	7.85%
• Benchmark	4.19%	1.17%	2.88%	7.45%
+/- Benchmark	0.28%	0.03%	0.34%	0.40%

Annual Performance	2019	2018	2017	2016	2015	2014
• VITWX	17.69%	-4.21%	14.13%	7.04%	-	-
• Benchmark	16.52%	-4.16%	12.80%	7.22%	-0.19%	5.67%
+/- Benchmark	1.17%	-0.05%	1.33%	-0.18%	-	-
Peer Group Rank	22	42	14	29	-	-

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• VITWX	-6.49%	2.40%	0.63%	-0.58%
• Benchmark	-6.49%	2.33%	1.09%	-0.92%
+/- Benchmark	0.00%	0.06%	-0.47%	0.35%

Rolling 5-Year Performance	01/2015 - 12/2019	10/2014 - 09/2019	07/2014 - 06/2019	04/2014 - 03/2019	01/2014 - 12/2018	10/2013 - 09/2018
• VITWX	-	-	-	-	-	-
• Benchmark	6.16%	5.70%	5.15%	5.27%	4.10%	6.49%
+/- Benchmark	-	-	-	-	-	-
Peer Group Rank	-	-	-	-	-	-

5-Year Quarterly Performance	4Q17	3Q17	2Q17	1Q17
• VITWX	3.40%	3.16%	2.77%	4.12%
• Benchmark	3.20%	2.81%	2.55%	3.68%
+/- Benchmark	0.20%	0.35%	0.22%	0.45%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	0.54	0.00	-	0.00	-	0.00
Beta	1.03	1.00	-	1.00	-	1.00
Standard Deviation	6.01	5.82	-	6.20	-	7.79
Sharpe Ratio	1.14	1.06	-	0.82	-	0.90
Information Ratio	1.44	-	-	-	-	-
Treynor Ratio	6.85	6.29	-	5.05	-	6.96
Upside Capture Ratio	105.54	100.00	-	100.00	-	100.00
Downside Capture Ratio	99.33	100.00	-	100.00	-	100.00

5-Year Quarterly Performance	4Q16	3Q16	2Q16	1Q16
• VITWX	-0.19%	3.31%	2.00%	1.77%
• Benchmark	0.51%	2.79%	1.98%	1.77%
+/- Benchmark	-0.70%	0.53%	0.01%	0.01%

5-Year Quarterly Performance	4Q15	3Q15	2Q15	1Q15
• VITWX	2.72%	-4.85%	-	-
• Benchmark	2.65%	-4.47%	-0.54%	2.34%
+/- Benchmark	0.07%	-0.38%	-	-

All data and information on this fact sheet is taken from sources believed to be accurate but is not guaranteed to be accurate, complete, or correct.

# Vanguard Instl Trgt Retire 2020 Instl (USD)

**Morningstar Analyst Rating™** Overall Morningstar Rating™  
★★★★ Gold  
 04-25-2019

198 US Fund Target-Date  
 2020

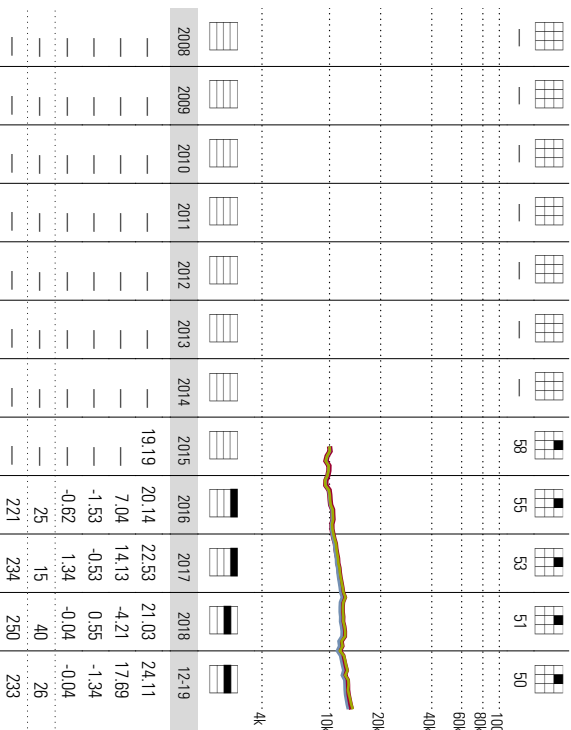
**Morningstar Mod** Morningstar  
 Tgt Risk TR USD Lifetime Mod 2020  
**Standard Index** Category Index  
 TR USD US Fund Target-Date  
 2020

Performance 12-31-2019					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2017	4.12	2.77	3.16	3.40	14.13
2018	-0.58	0.63	2.40	-6.49	-4.21
2019	7.85	3.22	1.20	4.47	17.69
Trailing Returns					
	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	17.69	8.76	—	—	6.57
Std 12-31-2019	17.69	—	—	—	6.57
Total Return	17.69	8.76	—	—	6.57
+/- Std Index	-1.34	-0.37	—	—	—
+/- Cat Index	-0.04	0.40	—	—	—
% Rank Cat	26	15	—	—	—
No. in Cat	233	198	—	—	—
7-day Yield	Subsidized		Unsubsidized		
30-day SEC Yield 12-31-19	—		2.52		

**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.



Investment Style	
Equity	Stocks %
Vanguard Instl Trgt Retire	13.461
Category Average	12.832
Standard Index	13.701

Performance Quartile (within category)	
History	NAV/Price
2008	19.19
2009	20.14
2010	22.53
2011	21.03
2012	24.11
2013	7.04
2014	14.13
2015	-1.53
2016	0.55
2017	-1.34
2018	-0.04
12-19	0.40

Portfolio Analysis 12-31-2019				
Asset Allocation %	Net %	Long %	Short %	Share Clng
Cash	2.05	2.05	0.00	11-2019
US Stocks	30.18	30.18	0.00	Amount
Non-US Stocks	20.25	20.25	0.00	96 mil
Bonds	47.28	47.29	0.01	663 mil
Other/Not Clsfd	0.24	0.24	0.00	288 mil
Total	100.00	100.01	0.01	136 mil
Equity Style	Sector Weightings			
Value	Small	Mid	Mid	Large
Stnd Growth	Small	Mid	Mid	Large
Portfo Statistics	P/E Ratio TTM	19.2	1.05	0.95
	P/C Ratio TTM	11.8	1.04	0.92
	P/B Ratio TTM	2.3	1.08	0.86
	Geo Avg Mkt Cap	47071	1.26	0.70
	Rel Index	100.01	0.01	0.01

Front-End Load %	NA
Deferred Load %	NA
Fund Expenses	0.00
Management Fees %	0.00
12b1 Expense %	NA
<b>Net Expense Ratio %</b>	<b>0.09</b>
<b>Gross Expense Ratio %</b>	<b>0.09</b>
Risk and Return Profile	
Morningstar Rating™	4★
Morningstar Risk	Avg
Morningstar Return	+Avg

Fixed-Income Style	Low	Med	Ext
High			
Mid			
Low			

Credit Quality Breakdown 11-30-2019	
AAA	Bond %
AAA	59.57
AA	8.80
A	13.23
BBB	18.39
BB	0.00
B	0.00
Below B	0.00
NR	0.00

Sector Weightings	
Basic Materials	36.5
Consumer Cyclical	4.5
Consumer Services	10.3
Financial Services	17.5
Real Estate	4.2
Sensitive	40.3
Communication Services	8.6
Energy	4.9
Industrials	11.7
Technology	15.2
Defensive	23.2
Consumer Defensive	7.8
Healthcare	12.2
Utilities	3.2

MPT Statistics	
Standard Deviation	3 Yr
Mean	6.01
Shapae Ratio	8.76
	1.14
Best Fit Index	
Standard Index	Morningstar
Alpha	0.46
Beta	0.88
R-Squared	98.68
12-Month Yield	2.47%
Potential Cap Gains Exp	10.25%

Operations	
Family:	Vanguard
Manager:	Multiple
Tenure:	4.6 Years
Objective:	Asset Allocation

Regional Exposure	
Americas	Stocks %
Greater Europe	63.8
Greater Asia	18.4
	17.9
	0.91

Purchase Constraints:	
Base Currency:	USD
Manager:	WITWX
Ticker:	US92202E7976
ISIN:	
Minimum Initial Purchase:	\$100 mil
Total Assets:	\$25,009.85 mil

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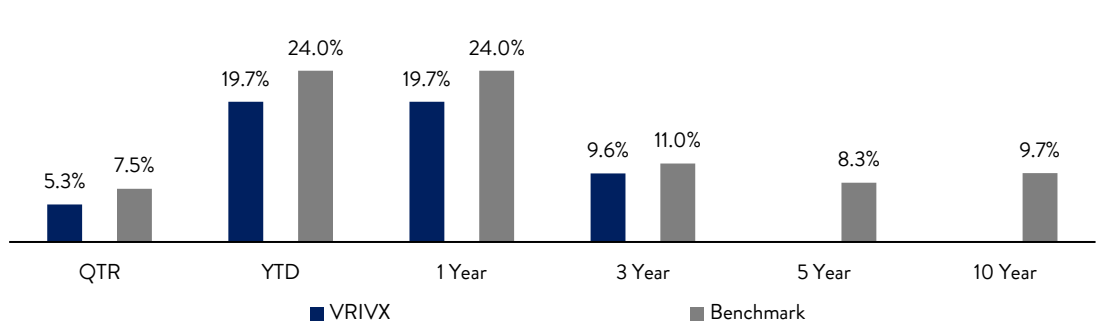
Vanguard Instl Trgt Retire 2025 Instl  
VRIVX

Fund Fact Sheet  
Data as of 12/31/2019

**Product Details**

Name	Vanguard Instl Trgt Retire 2025 Instl
Ticker	VRIVX
Expense Ratio	0.090%
Morningstar Category	US Fund Target-Date 2025
Benchmark	S&P Target Date 2045 TR USD
Inception Date	6/26/2015
Longest Tenured Manager	William A. Coleman;Walter Nejman;
Longest Manager Tenure	4.58 Years
Fund Size	\$35,315,885,842

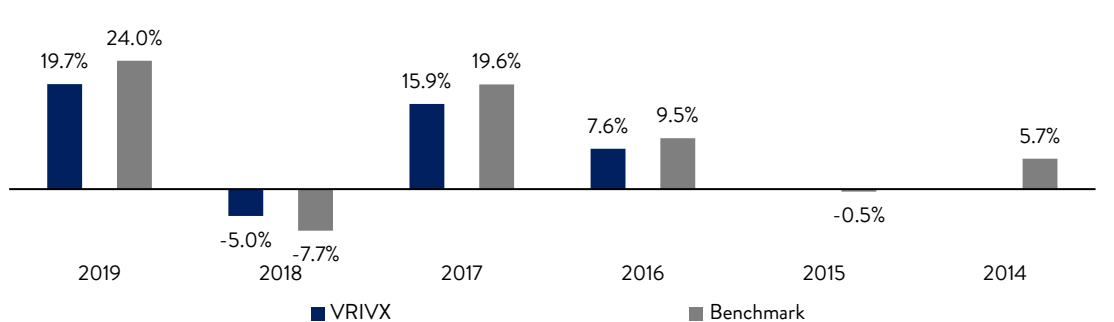
**Trailing Performance**



**Fund Characteristics**

	VRIVX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$47,222	-\$18,044
P/E Ratio (TTM)	19.26	-0.86
P/B Ratio (TTM)	2.26	-0.26
Est. Dividend Yield	2.39%	0.14%

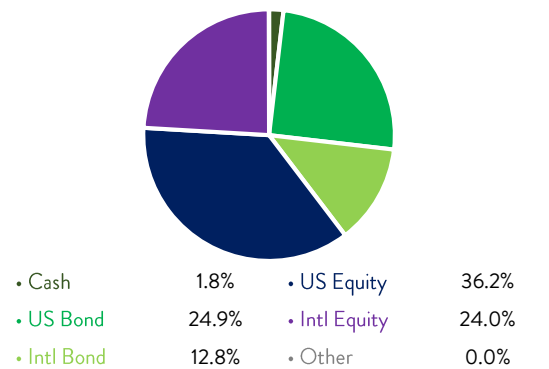
**Annual Performance**



**Sector Allocations**

	VRIVX	Category	+/- Category
Materials	4.5%	3.7%	0.7%
Communication Services	8.6%	8.9%	-0.3%
Consumer Discretionary	10.3%	10.2%	0.1%
Consumer Staples	7.8%	7.8%	0.0%
Healthcare	12.2%	12.8%	-0.6%
Industrials	11.7%	10.8%	0.8%
Real Estate	4.2%	3.8%	0.4%
Technology	15.2%	16.5%	-1.2%
Energy	4.9%	4.8%	0.1%
Financial Services	17.5%	17.5%	0.0%
Utilities	3.2%	3.2%	0.0%
Other	0.0%	0.0%	0.0%

**Asset Allocation**



**Morningstar Style Box**

	Value	Core	Growth
Large			
Mid			
Small			

Vanguard Instl Trgt Retire 2025 Instl  
VRIVX

Fund Fact Sheet  
Data as of 12/31/2019

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• VRIVX	5.25%	19.67%	19.67%	9.63%	-	-
• Benchmark	7.48%	24.02%	24.02%	11.01%	8.32%	9.67%
+/- Benchmark	-2.23%	-4.35%	-4.35%	-1.38%	-	-
Peer Group Rank	30	16	16	9	-	-

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• VRIVX	5.25%	1.09%	3.39%	8.79%
• Benchmark	7.48%	0.53%	3.32%	11.10%
+/- Benchmark	-2.23%	0.56%	0.07%	-2.31%

Annual Performance	2019	2018	2017	2016	2015	2014
• VRIVX	19.67%	-5.02%	15.94%	7.56%	-	-
• Benchmark	24.02%	-7.74%	19.56%	9.54%	-0.46%	5.67%
+/- Benchmark	-4.35%	2.72%	-3.62%	-1.98%	-	-
Peer Group Rank	16	39	21	20	-	-

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• VRIVX	-7.73%	2.80%	0.70%	-0.57%
• Benchmark	-11.75%	3.81%	1.66%	-0.94%
+/- Benchmark	4.03%	-1.02%	-0.95%	0.37%

Rolling 5-Year Performance	01/2015 - 12/2019	10/2014 - 09/2019	07/2014 - 06/2019	04/2014 - 03/2019	01/2014 - 12/2018	10/2013 - 09/2018
• VRIVX	-	-	-	-	-	-
• Benchmark	8.32%	7.21%	6.61%	6.81%	4.91%	9.05%
+/- Benchmark	-	-	-	-	-	-
Peer Group Rank	-	-	-	-	-	-

5-Year Quarterly Performance	4Q17	3Q17	2Q17	1Q17
• VRIVX	3.81%	3.55%	3.09%	4.62%
• Benchmark	5.20%	4.35%	3.45%	5.28%
+/- Benchmark	-1.39%	-0.80%	-0.36%	-0.66%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	1.35	0.00	-	0.00	-	0.00
Beta	0.69	1.00	-	1.00	-	1.00
Standard Deviation	7.05	10.08	-	10.03	-	11.49
Sharpe Ratio	1.10	0.92	-	0.74	-	0.81
Information Ratio	-0.42	-	-	-	-	-
Treynor Ratio	11.45	9.30	-	7.22	-	9.08
Upside Capture Ratio	76.16	100.00	-	100.00	-	100.00
Downside Capture Ratio	62.98	100.00	-	100.00	-	100.00

5-Year Quarterly Performance	4Q16	3Q16	2Q16	1Q16
• VRIVX	0.15%	3.70%	1.96%	1.57%
• Benchmark	1.95%	4.04%	2.00%	1.25%
+/- Benchmark	-1.80%	-0.34%	-0.04%	0.32%

5-Year Quarterly Performance	4Q15	3Q15	2Q15	1Q15
• VRIVX	3.13%	-5.62%	-	-
• Benchmark	4.10%	-6.93%	-0.12%	2.85%
+/- Benchmark	-0.97%	1.31%	-	-

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# Vanguard Instl Trgt Retire 2025 Instl (USD)

**Morningstar Analyst Rating™** Overall Morningstar Rating™ Standard Index  
**Gold** 04-25-2019

★★★★★  
 196 US Fund Target-Date 2025  
 Morningstar Mod Morningstar Category Index  
 Tgt Risk TR USD Lifetime Mod 2025 2025 US Fund Target-Date  
 TR USD

Performance 12-31-2019					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2017	4.62	3.09	3.55	3.81	15.94
2018	-0.57	0.70	2.80	-7.73	-5.02
2019	8.79	3.39	1.09	5.25	19.67
Trailing Returns					
	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	19.67	9.63	—	—	7.10
Std 12-31-2019	19.67	—	—	—	7.10
Total Return	19.67	9.63	—	—	7.10
+/- Std Index	0.64	0.50	—	—	—
+/- Cat Index	0.31	0.49	—	—	—
% Rank Cat	20	11	—	—	—
No. in Cat	232	196	—	—	—

7-day Yield — Subsidized  
 30-day SEC Yield 12-31-19 2.52 Unsubsidized

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

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

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

**Fund Expenses**  
 Management Fees % 0.00  
 12b1 Expense % NA  
**Net Expense Ratio %** 0.09  
**Gross Expense Ratio %** 0.09

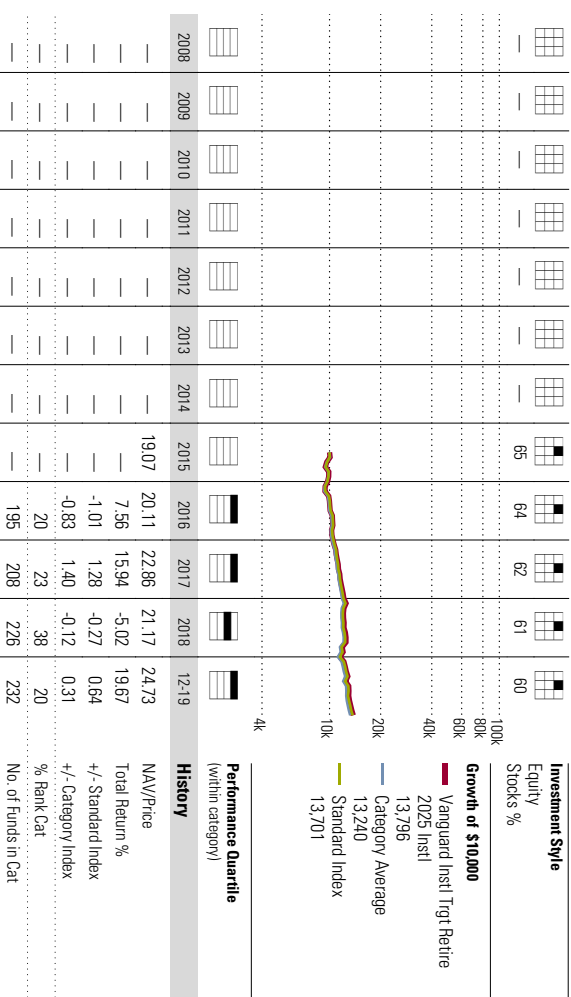
**Risk and Return Profile**

Morningstar Rating™	3 Yr	5 Yr	10 Yr
	196 funds	157 funds	83 funds
Morningstar Risk	4★	+Avg	—
Morningstar Return	+Avg	—	—

Standard Deviation 3 Yr 7.05 5 Yr — 10 Yr —  
 Mean 9.63 — —  
 Sharpe Ratio 1.10 — —

MPT Statistics Standard Index Best Fit Index  
 Alpha 0.20 0.28 TR USD Morningstar  
 Beta 1.04 0.92 TR USD Lifetime Mod 2020  
 R-Squared 99.17 99.29  
 12-Month Yield 2.42%  
 Potential Cap Gains Exp 11.40%

**Operations**  
 Family: Vanguard  
 Manager: Multiple  
 Tenure: 4.6 Years  
 Objective: Asset Allocation



**Portfolio Analysis 12-31-2019**

Asset Allocation %	Net %	Long %	Short %
Cash	1.84	1.84	0.00
US Stocks	36.21	36.21	0.00
Non-US Stocks	24.00	24.00	0.00
Bonds	37.72	37.73	0.01
Other/Not Cstfd	0.23	0.23	0.00
Total	100.00	100.01	0.01

**Equity Style**

Value	Brand	Growth	Port Avg Index	Rel Index	Rel Cat
Large	High	High	19.3	1.05	0.96
Mid	Med	Med	11.8	1.04	0.94
Small	Low	Low	2.3	1.08	0.90
			Geo Avg Mkt Cap	47222	1.27

**Fixed-Income Style**

Value	Brand	Growth	Port Avg Index	Rel Index	Rel Cat
High	High	High	8.77	8.77	0.00
Med	Med	Med	6.85	6.85	0.00
Low	Low	Low	2.89	2.89	0.00

**Credit Quality Breakdown 11-30-2019**

AAA	AA	A	BBB	BB	B	Below B	NR
52.65	10.23	15.49	21.63	0.00	0.00	0.00	0.00

**Regional Exposure**

Stocks %	Rel Std Index
Americas 64.0	1.08
Greater Europe 18.2	1.00
Greater Asia 17.7	0.91

**Base Currency:** USD  
**Manager:** VRI/VX  
**Ticker:** US92202E7893  
**ISIN:** US92202E7893  
**Minimum Initial Purchase:** \$100 mil  
**Purchase Constraints:** —  
**Incept:** 06-26-2015  
**Type:** MF  
**Total Assets:** \$35,315.89 mil

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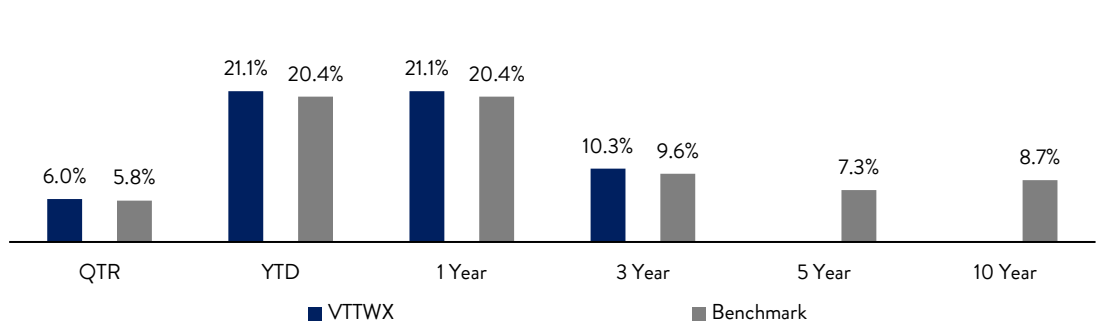
Vanguard Instl Trgt Retire 2030 Instl  
VTTWX

Fund Fact Sheet  
Data as of 12/31/2019

**Product Details**

Name	Vanguard Instl Trgt Retire 2030 Instl
Ticker	VTTWX
Expense Ratio	0.090%
Morningstar Category	US Fund Target-Date 2030
Benchmark	S&P Target Date 2030 TR USD
Inception Date	6/26/2015
Longest Tenured Manager	William A. Coleman;Walter Nejman;
Longest Manager Tenure	4.58 Years
Fund Size	\$33,602,007,119

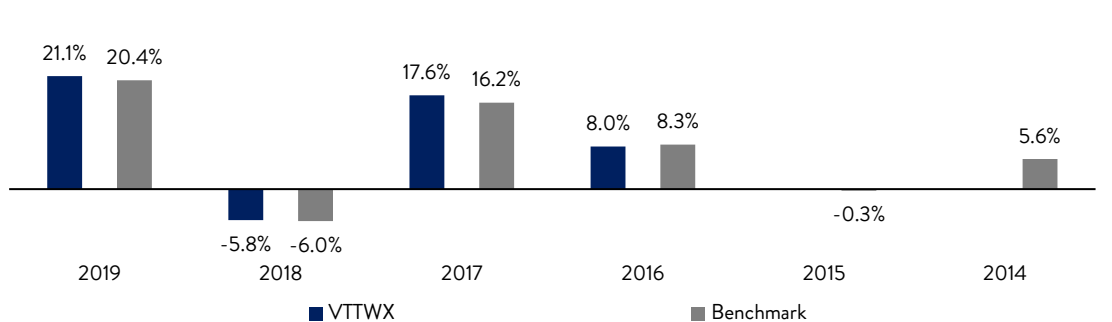
**Trailing Performance**



**Fund Characteristics**

	VTTWX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$47,233	-\$19,291
P/E Ratio (TTM)	19.26	-1.19
P/B Ratio (TTM)	2.26	-0.30
Est. Dividend Yield	2.39%	0.20%

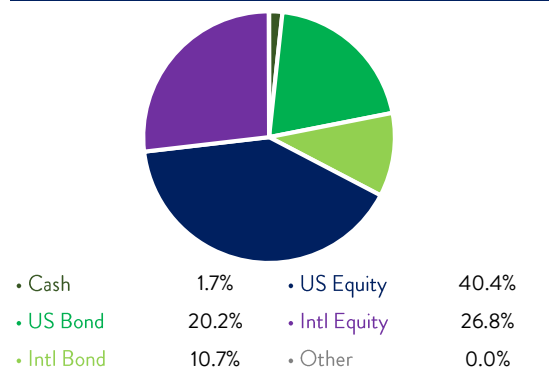
**Annual Performance**



**Sector Allocations**

	VTTWX	Category	+/- Category
Materials	4.5%	3.6%	0.8%
Communication Services	8.6%	8.9%	-0.4%
Consumer Discretionary	10.3%	10.4%	-0.1%
Consumer Staples	7.8%	7.8%	0.0%
Healthcare	12.2%	12.9%	-0.7%
Industrials	11.7%	11.0%	0.7%
Real Estate	4.2%	3.5%	0.7%
Technology	15.2%	16.3%	-1.1%
Energy	4.9%	4.5%	0.4%
Financial Services	17.5%	17.7%	-0.2%
Utilities	3.2%	3.3%	-0.1%
Other	0.0%	0.0%	0.0%

**Asset Allocation**



**Morningstar Style Box**

	Value	Core	Growth
Large			
Mid			
Small			

Vanguard Instl Trgt Retire 2030 Instl  
VTTWX

Fund Fact Sheet  
Data as of 12/31/2019

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• VTTWX	6.02%	21.14%	21.14%	10.28%	-	-
• Benchmark	5.81%	20.38%	20.38%	9.55%	7.27%	8.66%
+/- Benchmark	0.21%	0.76%	0.76%	0.73%	-	-
Peer Group Rank	28	29	29	19	-	-

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• VTTWX	6.02%	0.87%	3.39%	9.56%
• Benchmark	5.81%	0.88%	3.09%	9.39%
+/- Benchmark	0.21%	-0.01%	0.30%	0.17%

Annual Performance	2019	2018	2017	2016	2015	2014
• VTTWX	21.14%	-5.82%	17.57%	7.97%	-	-
• Benchmark	20.38%	-5.99%	16.19%	8.35%	-0.30%	5.64%
+/- Benchmark	0.76%	0.18%	1.38%	-0.37%	-	-
Peer Group Rank	29	35	33	29	-	-

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• VTTWX	-8.85%	3.11%	0.78%	-0.56%
• Benchmark	-9.26%	3.15%	1.40%	-0.95%
+/- Benchmark	0.41%	-0.04%	-0.62%	0.38%

Rolling 5-Year Performance	01/2015 - 12/2019	10/2014 - 09/2019	07/2014 - 06/2019	04/2014 - 03/2019	01/2014 - 12/2018	10/2013 - 09/2018
• VTTWX	-	-	-	-	-	-
• Benchmark	7.27%	6.48%	5.89%	6.05%	4.50%	7.78%
+/- Benchmark	-	-	-	-	-	-
Peer Group Rank	-	-	-	-	-	-

5-Year Quarterly Performance	4Q17	3Q17	2Q17	1Q17
• VTTWX	4.25%	3.86%	3.32%	5.09%
• Benchmark	4.24%	3.60%	3.01%	4.45%
+/- Benchmark	0.02%	0.26%	0.32%	0.64%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	0.77	0.00	-	0.00	-	0.00
Beta	0.99	1.00	-	1.00	-	1.00
Standard Deviation	7.93	8.01	-	8.14	-	9.79
Sharpe Ratio	1.06	0.97	-	0.77	-	0.84
Information Ratio	1.10	-	-	-	-	-
Treynor Ratio	8.69	7.84	-	6.17	-	8.07
Upside Capture Ratio	101.95	100.00	-	100.00	-	100.00
Downside Capture Ratio	94.77	100.00	-	100.00	-	100.00

5-Year Quarterly Performance	4Q16	3Q16	2Q16	1Q16
• VTTWX	0.44%	4.09%	1.88%	1.37%
• Benchmark	1.19%	3.39%	2.02%	1.52%
+/- Benchmark	-0.75%	0.70%	-0.14%	-0.15%

5-Year Quarterly Performance	4Q15	3Q15	2Q15	1Q15
• VTTWX	3.53%	-6.44%	-	-
• Benchmark	3.38%	-5.68%	-0.32%	2.58%
+/- Benchmark	0.15%	-0.76%	-	-

All data and information on this fact sheet is taken from sources believed to be accurate but is not guaranteed to be accurate, complete, or correct.



# Vanguard Instl Trgt Retire 2030 Instl (USD)

**Morningstar Analyst Rating™** Overall Morningstar Rating™ Standard Index  
**Gold** 04-25-2019

★★★★★  
 206 US Fund Target-Date 2030

Morningstar Mod Morningstar Category Index Morningstar Cat  
 Tgt Risk TR USD US Fund Target-Date US Fund Target-Date  
 TR USD 2030 2030

Performance 12-31-2019					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2017	5.09	3.32	3.86	4.25	17.57
2018	-0.56	0.78	3.11	-8.85	-5.82
2019	9.56	3.39	0.87	6.02	21.14
Trailing Returns					
1 Yr	3 Yr	5 Yr	10 Yr	Incept	
Load-adj Mthly	21.14	10.28	—	7.45	
Std 12-31-2019	21.14	—	—	7.45	
Total Return	21.14	10.28	—	7.45	
+/- Std Index	2.11	1.15	—	—	
+/- Cat Index	-0.10	0.28	—	—	
% Rank Cat	29	20	—	—	
No. in Cat	241	206	—	—	
7-day Yield	Subsidized		Unsubsidized		
30-day SEC Yield 12-31-19	2.48		2.48		

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

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

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

### Fees and Expenses

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

**Fund Expenses**  
 Management Fees % 0.00  
 12b1 Expense % NA

**Net Expense Ratio %** 0.09  
**Gross Expense Ratio %** 0.09

### Risk and Return Profile

	3 Yr	5 Yr	10 Yr
Morningstar Rating™	206 funds	164 funds	95 funds
Morningstar Risk	4★	Avg	—
Morningstar Return	+Avg	—	—

	3 Yr	5 Yr	10 Yr
Standard Deviation	7.93	—	—
Mean	10.28	—	—
Sharpe Ratio	1.06	—	—

MPT Statistics	Standard Index	Best Fit Index	Morningstar
			TR USD
			Lifetime Mod 2030

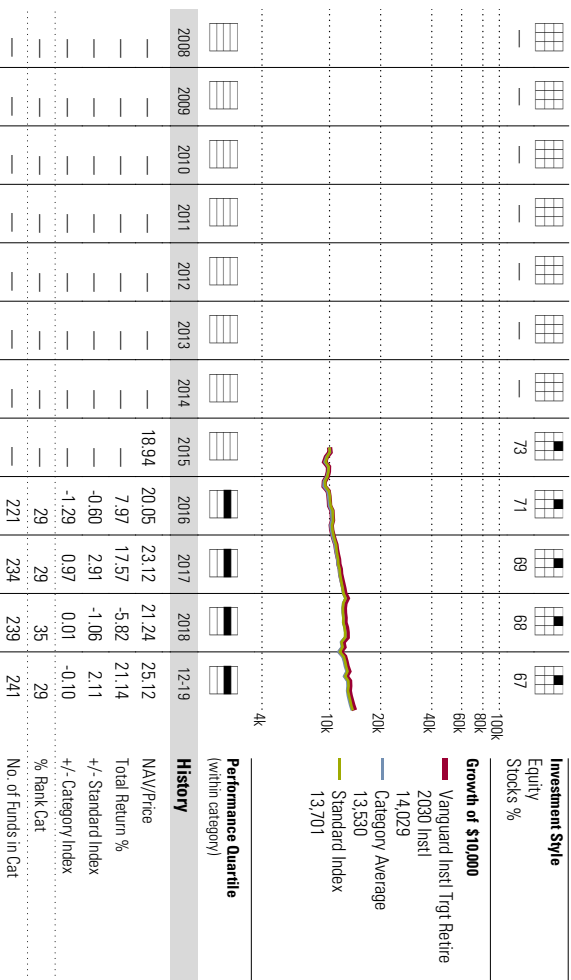
Alpha	-0.08	0.45	0.45
Beta	1.17	0.89	0.89
R-Squared	99.16	99.34	99.34
12-Month Yield	2.41%	2.41%	2.41%
Potential Cap Gains Exp	12.34%	12.34%	12.34%

### Operations

**Family:** Vanguard  
**Manager:** Multiple  
**Tenure:** 4.6 Years  
**Objective:** Asset Allocation

**Base Currency:** USD  
**Ticker:** VTTWVX  
**SIN:** USS92202E7711  
**Minimum Initial Purchase:** \$100 mil

**Purchase Constraints:** —  
**Incept:** 06-26-2015  
**Type:** MF  
**Total Assets:** \$33,602.01 mil



### Portfolio Analysis 12-31-2019

Asset Allocation %	Net %	Long %	Short %	Share Clng since 11-2019	Share Amount	Holdings: 10,121 Total Stocks, 16,065 Total Fixed-Income, 8% Turnover Ratio	Net Assets %
Cash	1.71	1.71	0.00	⊕	172 mil	Vanguard Total Stock Market Idx I	40.86
US Stocks	40.43	40.43	0.00	⊕	512 mil	Vanguard Total Intl Stock Index Inv	27.17
Non-US Stocks	26.78	26.78	0.00	⊕	684 mil	Vanguard Total Bond Market II Idx	22.38
Bonds	30.89	30.90	0.00	⊕	142 mil	Vanguard Total Intl Bd Idx Admiral™	9.55
Other/Not Clsfd	0.19	0.19	0.00	⊕			
Total	100.00	100.00	0.00				

### Sales Charges

Equity Style	Value	Share	Growth	Portfolio Statistics	Port Avg	Rel Index	Rel Cat
	Large	Med	Small	P/E Ratio TTM	19.3	1.05	0.94
				P/C Ratio TTM	11.8	1.04	0.92
				P/B Ratio TTM	2.3	1.08	0.88
				Geo Avg Mkt Cap	47233	1.27	0.71

### Fixed-Income Style

Value	Share	Growth	Portfolio Statistics	Avg Eff Maturity	Avg Eff Duration	Avg Wtd Coupon	Avg Wtd Price
	High <td>Med <td>Low <td>8.78</td> <td>6.87</td> <td>2.88</td> <td>106.62</td> </td></td>	Med <td>Low <td>8.78</td> <td>6.87</td> <td>2.88</td> <td>106.62</td> </td>	Low <td>8.78</td> <td>6.87</td> <td>2.88</td> <td>106.62</td>	8.78	6.87	2.88	106.62

### Credit Quality Breakdown 11-30-2019

	AAA	AA	A	BBB	BB	B	Below B	NR
Bond %	52.22	10.45	15.63	21.70	0.00	0.00	0.00	0.00

### Regional Exposure

	Stocks %	Rel Std Index
Americas	64.1	1.03
Greater Europe	18.2	1.00
Greater Asia	17.7	0.90

### Sector Weightings

	Stocks %	Rel Std Index
<b>Cyclical</b>	<b>36.5</b>	<b>0.91</b>
Basic Materials	4.5	0.97
Consumer Cyclical	10.3	1.06
Financial Services	17.5	0.99
Real Estate	4.2	0.52
<b>Sensitive</b>	<b>40.3</b>	<b>1.09</b>
Communication Services	8.6	1.23
Energy	4.9	0.93
Industrials	11.7	1.03
Technology	15.2	1.15
<b>Defensive</b>	<b>23.2</b>	<b>1.01</b>
Consumer Defensive	7.8	0.98
Healthcare	12.2	1.09
Utilities	3.2	0.84

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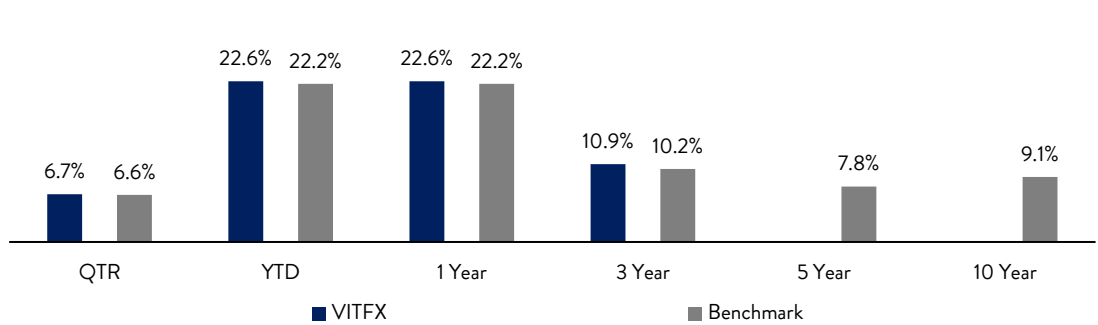
Vanguard Instl Trgt Retire 2035 Instl  
VITFX

Fund Fact Sheet  
Data as of 12/31/2019

**Product Details**

Name	Vanguard Instl Trgt Retire 2035 Instl
Ticker	VITFX
Expense Ratio	0.090%
Morningstar Category	US Fund Target-Date 2035
Benchmark	S&P Target Date 2035 TR USD
Inception Date	6/26/2015
Longest Tenured Manager	William A. Coleman;Walter Nejman;
Longest Manager Tenure	4.58 Years
Fund Size	\$30,674,049,738

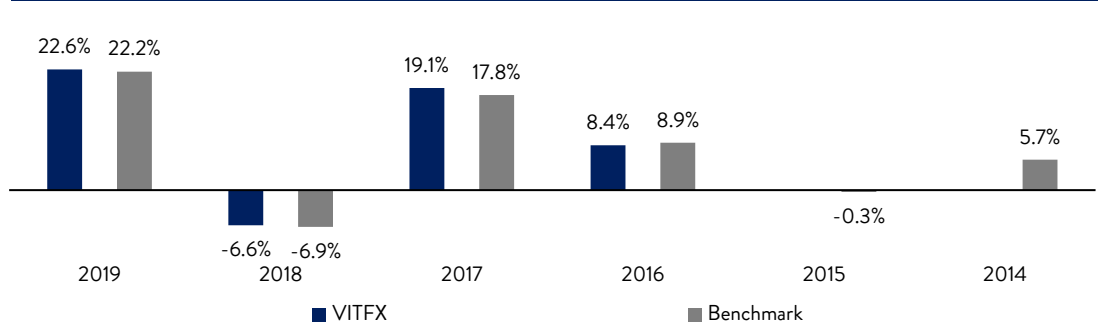
**Trailing Performance**



**Fund Characteristics**

	VITFX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$47,252	-\$2,952
P/E Ratio (TTM)	19.26	-0.62
P/B Ratio (TTM)	2.26	-0.14
Est. Dividend Yield	2.39%	0.11%

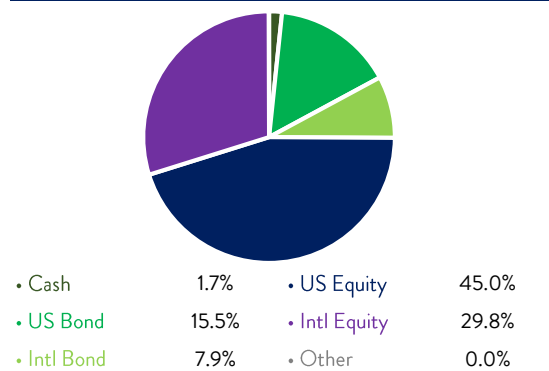
**Annual Performance**



**Sector Allocations**

	VITFX	Category	+/- Category
Materials	4.5%	4.0%	0.5%
Communication Services	8.6%	8.4%	0.2%
Consumer Discretionary	10.3%	10.2%	0.0%
Consumer Staples	7.8%	7.3%	0.4%
Healthcare	12.2%	12.3%	-0.1%
Industrials	11.7%	11.2%	0.5%
Real Estate	4.2%	5.6%	-1.4%
Technology	15.2%	15.7%	-0.5%
Energy	4.9%	4.5%	0.3%
Financial Services	17.5%	17.5%	0.0%
Utilities	3.2%	3.3%	-0.1%
Other	0.0%	0.0%	0.0%

**Asset Allocation**



**Morningstar Style Box**

	Value	Core	Growth
Large			
Mid			
Small			

Vanguard Instl Trgt Retire 2035 Instl  
VITFX

Fund Fact Sheet  
Data as of 12/31/2019

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• VITFX	6.68%	22.56%	22.56%	10.91%	-	-
• Benchmark	6.61%	22.18%	22.18%	10.25%	7.77%	9.13%
+/- Benchmark	0.08%	0.39%	0.39%	0.66%	-	-
Peer Group Rank	39	40	40	27	-	-

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• VITFX	6.68%	0.70%	3.45%	10.28%
• Benchmark	6.61%	0.73%	3.18%	10.27%
+/- Benchmark	0.08%	-0.03%	0.27%	0.01%

Annual Performance	2019	2018	2017	2016	2015	2014
• VITFX	22.56%	-6.56%	19.14%	8.39%	-	-
• Benchmark	22.18%	-6.88%	17.78%	8.85%	-0.35%	5.69%
+/- Benchmark	0.39%	0.32%	1.36%	-0.46%	-	-
Peer Group Rank	40	29	38	26	-	-

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• VITFX	-9.95%	3.46%	0.86%	-0.56%
• Benchmark	-10.55%	3.52%	1.52%	-0.94%
+/- Benchmark	0.59%	-0.06%	-0.66%	0.39%

Rolling 5-Year Performance	01/2015 - 12/2019	10/2014 - 09/2019	07/2014 - 06/2019	04/2014 - 03/2019	01/2014 - 12/2018	10/2013 - 09/2018
• VITFX	-	-	-	-	-	-
• Benchmark	7.77%	6.82%	6.23%	6.41%	4.69%	8.39%
+/- Benchmark	-	-	-	-	-	-
Peer Group Rank	-	-	-	-	-	-

5-Year Quarterly Performance	4Q17	3Q17	2Q17	1Q17
• VITFX	4.60%	4.21%	3.55%	5.55%
• Benchmark	4.71%	3.97%	3.22%	4.81%
+/- Benchmark	-0.11%	0.23%	0.33%	0.74%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	0.83	0.00	-	0.00	-	0.00
Beta	0.97	1.00	-	1.00	-	1.00
Standard Deviation	8.82	9.05	-	9.04	-	10.58
Sharpe Ratio	1.03	0.93	-	0.75	-	0.82
Information Ratio	0.87	-	-	-	-	-
Treynor Ratio	9.47	8.53	-	6.66	-	8.54
Upside Capture Ratio	100.70	100.00	-	100.00	-	100.00
Downside Capture Ratio	93.96	100.00	-	100.00	-	100.00

5-Year Quarterly Performance	4Q16	3Q16	2Q16	1Q16
• VITFX	0.83%	4.39%	1.84%	1.12%
• Benchmark	1.52%	3.66%	2.02%	1.39%
+/- Benchmark	-0.68%	0.72%	-0.18%	-0.28%

5-Year Quarterly Performance	4Q15	3Q15	2Q15	1Q15
• VITFX	3.90%	-7.16%	-	-
• Benchmark	3.70%	-6.20%	-0.23%	2.69%
+/- Benchmark	0.20%	-0.96%	-	-

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# Vanguard Instl Trgt Retire 2035 Instl (USD)

**Morningstar Analyst Rating™** Overall Morningstar Rating™ Standard Index  
**Gold** 04-25-2019

★★★★★  
 193 US Fund Target-Date Tgt Risk TR USD  
 Morningstar Mod Morningstar US Fund Target-Date  
 Lifetime Mod 2035 2035  
 TR USD

Performance 12-31-2019					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2017	5.55	3.55	4.21	4.60	19.14
2018	-0.56	0.86	3.46	-9.95	-6.56
2019	10.28	3.45	0.70	6.68	22.56
Trailing Returns					
	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	22.56	10.91	—	—	7.80
Std 12-31-2019	22.56	—	—	—	7.80
Total Return	22.56	10.91	—	—	7.80
+/- Std Index	3.54	1.78	—	—	—
+/- Cat Index	-0.48	0.15	—	—	—
% Rank Cat	38	26	—	—	—
No. in Cat	229	193	—	—	—

7-day Yield — Subsidized  
 30-day SEC Yield 12-31-19 2.44 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 % 0.00  
 12b1 Expense % NA

**Net Expense Ratio %** 0.09  
**Gross Expense Ratio %** 0.09  
**Risk and Return Profile**

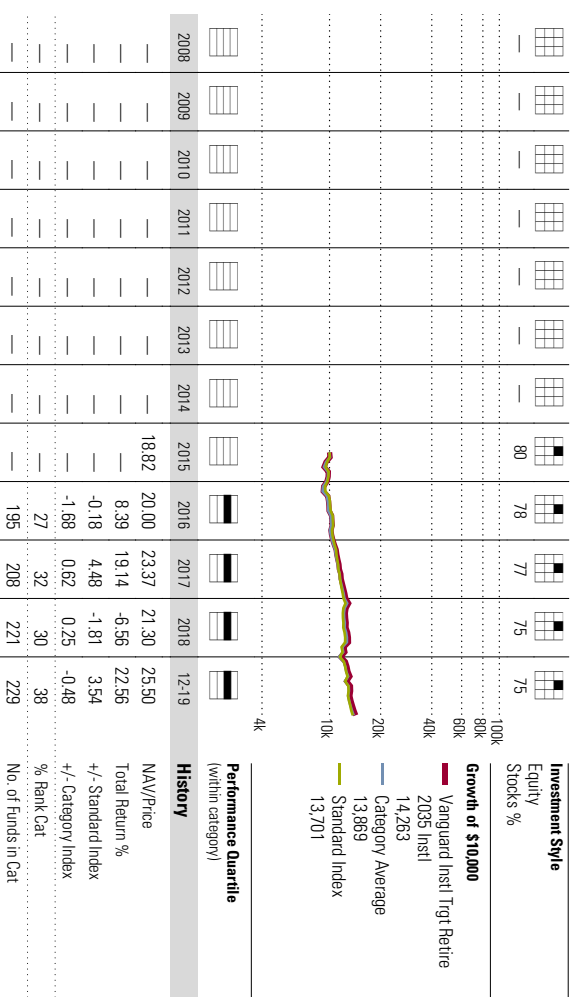
	3 Yr	5 Yr	10 Yr
Morningstar Rating™	193 funds	154 funds	80 funds
Morningstar Risk	4★	Avg	—
Morningstar Return	+Avg	—	—
Standard Deviation	3 Yr 8.82	5 Yr —	10 Yr —
Mean	10.91	—	—
Sharpe Ratio	1.03	—	—
MPT Statistics	Standard Index	Best Fit Index	Morningstar Mod
	USD	Agg Tgt Risk TR	USD

Alpha	-0.39	0.26
Beta	1.30	0.97
R-Squared	98.93	99.43
12-Month Yield	2.38%	13.81%
Potential Cap Gains Exp		

**Operations**  
 Family: Vanguard  
 Manager: Multiple  
 Tenure: 4.6 Years  
 Objective: Asset Allocation

Base Currency: USD  
 Ticker: VITFX  
 SIN: USS92202E7638  
 Minimum Initial Purchase: \$100 mil

Purchase Constraints: —  
 Incept: 06-26-2015  
 Type: MF  
 Total Assets: \$30,674,05 mil



**Portfolio Analysis 12-31-2019**

Asset Allocation %	Net %	Long %	Short %
Cash	1.66	1.66	0.00
US Stocks	45.02	45.02	0.00
Non-US Stocks	29.77	29.77	0.00
Bonds	23.40	23.40	0.00
Other/Not Cstfd	0.16	0.16	0.00
Total	100.00	100.00	0.00

Share Cng since 11-2019	Share Amount	Holdings: 10,240 Total Stocks, 7% Turnover Ratio	15,665 Total Fixed-Income, 175 mil Vanguard Total Stock Market Idx I	518 mil Vanguard Total Int Stock Index Inv	477 mil Vanguard Total Bond Market II Idx	95 mil Vanguard Total Intl Bd Idx Admratpm	Net Assets %
⊕	1882	20.00	23.37	21.30	25.50	18.82	45.49
⊕	8.39	19.14	-6.56	22.56	-1.81	3.54	30.21
⊕	-0.18	4.48	0.25	-0.48	0.25	0.25	17.16
⊕	-1.88	0.62	0.25	-0.48	0.25	0.25	7.03
⊕	27	32	30	38	29	229	
⊕	195	208	221	229			

**Equity Style**

Value	Brand	Growth	Port Avg Index	Rel Index	Rel Cat
Large	Med	Small	19.3	1.05	0.97
			11.8	1.04	0.95
			2.3	1.08	0.94
			4.7252	1.27	0.94

**Sector Weightings**

Stocks %	Rel Std Index
<b>36.4</b>	<b>0.91</b>
4.5	0.97
10.3	1.06
17.5	0.99
4.2	0.52
<b>40.3</b>	<b>1.09</b>
8.6	1.23
4.9	0.93
11.7	1.03
15.2	1.15
<b>23.2</b>	<b>1.01</b>
7.8	0.98
12.2	1.09
3.2	0.84

**Fixed-Income Style**

Value	Brand	Growth	Port Avg Index	Rel Index	Rel Cat
High	Med	Low	8.77	6.85	2.88
			106.62		

**Defensive**

Consumer Defensive	23.2
Healthcare	7.8
Utilities	12.2
	3.2

**Credit Quality Breakdown 11-30-2019**

	Bond %
AAA	52.61
AA	10.25
A	15.50
BBB	21.63
BB	0.00
B	0.00
Below B	0.00
NR	0.00

**Regional Exposure**

Stocks %	Rel Std Index
Americas	64.1
Greater Europe	18.2
Greater Asia	17.7
	0.90

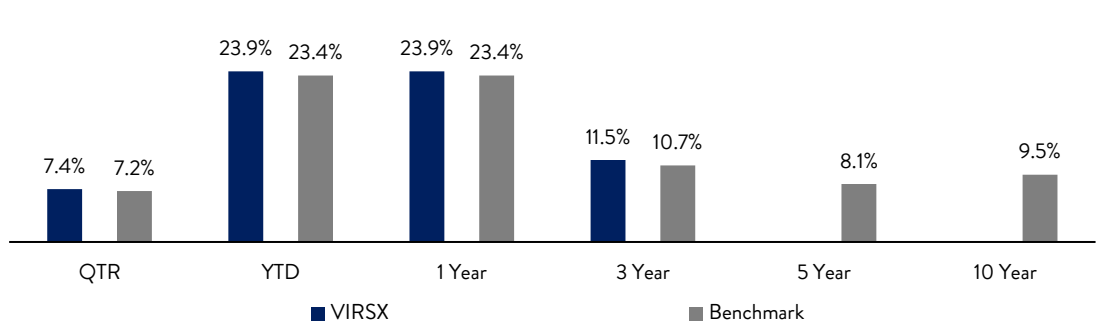
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**Product Details**

Name	Vanguard Instl Trgt Retire 2040 Instl
Ticker	VIRSX
Expense Ratio	0.090%
Morningstar Category	US Fund Target-Date 2040
Benchmark	S&P Target Date 2040 TR USD
Inception Date	6/26/2015
Longest Tenured Manager	William A. Coleman;Walter Nejman;
Longest Manager Tenure	4.58 Years
Fund Size	\$27,131,276,823

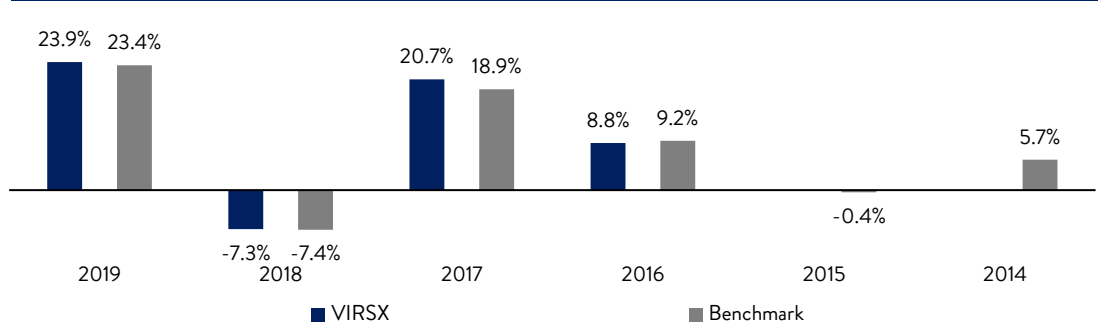
**Trailing Performance**



**Fund Characteristics**

	VIRSX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$47,215	-\$11,778
P/E Ratio (TTM)	19.26	-0.71
P/B Ratio (TTM)	2.26	-0.17
Est. Dividend Yield	2.39%	0.12%

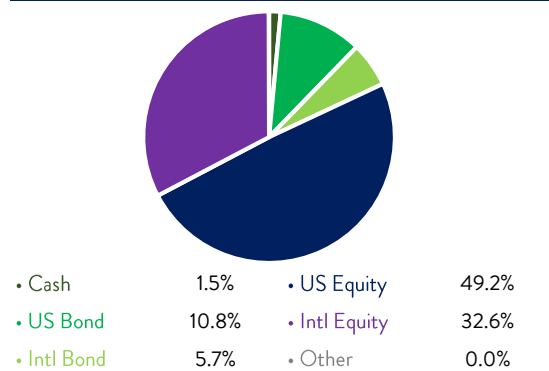
**Annual Performance**



**Sector Allocations**

	VIRSX	Category	+/- Category
Materials	4.5%	4.0%	0.5%
Communication Services	8.6%	8.7%	-0.2%
Consumer Discretionary	10.3%	10.3%	0.0%
Consumer Staples	7.8%	7.6%	0.2%
Healthcare	12.2%	12.5%	-0.3%
Industrials	11.7%	11.1%	0.6%
Real Estate	4.2%	4.6%	-0.3%
Technology	15.2%	16.1%	-0.8%
Energy	4.9%	4.6%	0.3%
Financial Services	17.5%	17.5%	0.0%
Utilities	3.2%	3.2%	0.0%
Other	0.0%	0.0%	0.0%

**Asset Allocation**



**Morningstar Style Box**

	Value	Core	Growth
Large			
Mid			
Small			

Vanguard Instl Trgt Retire 2040 Instl  
VIRSX

Fund Fact Sheet  
Data as of 12/31/2019

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• VIRSX	7.40%	23.93%	23.93%	11.52%	-	-
• Benchmark	7.15%	23.37%	23.37%	10.73%	8.11%	9.45%
+/- Benchmark	0.24%	0.57%	0.57%	0.78%	-	-
Peer Group Rank	31	41	41	24	-	-

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• VIRSX	7.40%	0.49%	3.46%	11.00%
• Benchmark	7.15%	0.60%	3.27%	10.82%
+/- Benchmark	0.24%	-0.11%	0.19%	0.17%

Annual Performance	2019	2018	2017	2016	2015	2014
• VIRSX	23.93%	-7.31%	20.73%	8.81%	-	-
• Benchmark	23.37%	-7.41%	18.87%	9.23%	-0.40%	5.69%
+/- Benchmark	0.57%	0.09%	1.87%	-0.42%	-	-
Peer Group Rank	41	30	29	20	-	-

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• VIRSX	-11.04%	3.80%	0.94%	-0.55%
• Benchmark	-11.33%	3.72%	1.64%	-0.94%
+/- Benchmark	0.29%	0.08%	-0.70%	0.39%

Rolling 5-Year Performance	01/2015 - 12/2019	10/2014 - 09/2019	07/2014 - 06/2019	04/2014 - 03/2019	01/2014 - 12/2018	10/2013 - 09/2018
• VIRSX	-	-	-	-	-	-
• Benchmark	8.11%	7.06%	6.47%	6.66%	4.82%	8.79%
+/- Benchmark	-	-	-	-	-	-
Peer Group Rank	-	-	-	-	-	-

5-Year Quarterly Performance	4Q17	3Q17	2Q17	1Q17
• VIRSX	4.99%	4.51%	3.78%	6.02%
• Benchmark	5.03%	4.21%	3.36%	5.07%
+/- Benchmark	-0.04%	0.30%	0.42%	0.95%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	0.74	0.00	-	0.00	-	0.00
Beta	1.00	1.00	-	1.00	-	1.00
Standard Deviation	9.72	9.72	-	9.65	-	11.13
Sharpe Ratio	1.00	0.92	-	0.75	-	0.82
Information Ratio	1.01	-	-	-	-	-
Treynor Ratio	9.83	9.02	-	7.01	-	8.87
Upside Capture Ratio	102.81	100.00	-	100.00	-	100.00
Downside Capture Ratio	97.85	100.00	-	100.00	-	100.00

5-Year Quarterly Performance	4Q16	3Q16	2Q16	1Q16
• VIRSX	1.17%	4.74%	1.80%	0.86%
• Benchmark	1.75%	3.87%	2.01%	1.32%
+/- Benchmark	-0.57%	0.88%	-0.21%	-0.46%

5-Year Quarterly Performance	4Q15	3Q15	2Q15	1Q15
• VIRSX	4.25%	-7.94%	-	-
• Benchmark	3.92%	-6.60%	-0.17%	2.78%
+/- Benchmark	0.33%	-1.35%	-	-

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# Vanguard Instl Trgt Retire 2040 Instl (USD)

**Morningstar Analyst Rating™** Overall Morningstar Rating™ Standard Index  
**Gold** 04-25-2019

**Morningstar Mod** Morningstar Category Index  
**206 US Fund Target-Date** Tgt Risk TR USD US Fund Target-Date  
**2040** Lifetime Mod 2040 2040 TR USD

Performance 12-31-2019					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2017	6.02	3.78	4.51	4.99	20.73
2018	-0.55	0.94	3.80	-11.04	-7.31
2019	11.00	3.46	0.49	7.40	23.93
Trailing Returns					
	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	23.93	11.52	—	—	8.11
Std 12-31-2019	23.93	—	—	—	8.11
Total Return	23.93	11.52	—	—	8.11
+/- Std Index	4.91	2.38	—	—	—
+/- Cat Index	-0.42	0.28	—	—	—
% Rank Cat	40	27	—	—	—
No. in Cat	241	206	—	—	—

7-day Yield — Subsidized  
 30-day SEC Yield 12-31-19 2.40 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.

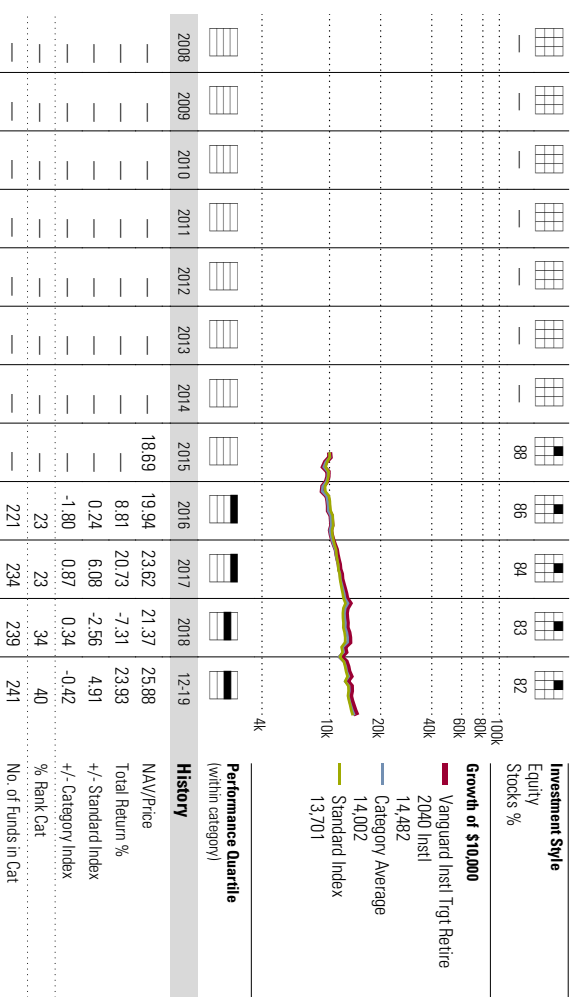
**Sales Charges**  
**Front-End Load %** NA  
**Deferred Load %** NA

**Fund Expenses**  
 Management Fees % 0.00  
 12b1 Expense % NA  
**Net Expense Ratio %** 0.09  
**Gross Expense Ratio %** 0.09

Risk and Return Profile			
	3 Yr	5 Yr	10 Yr
Morningstar Rating™	206 funds	164 funds	95 funds
Morningstar Risk	4★	Avg	—
Morningstar Return	+Avg	—	—
Standard Deviation	3 Yr	5 Yr	10 Yr
Mean	9.72	—	—
Sharpe Ratio	11.52	—	—
	1.00	—	—

MPT Statistics	Standard Index	Best Fit Index
Alpha	-0.69	0.00
Beta	1.43	1.07
R-Squared	98.59	99.48
12-Month Yield	2.33%	2.33%
Potential Cap Gains Exp	14.70%	14.70%

**Operations**  
 Family: Vanguard  
 Manager: Multiple  
 Tenure: 4.6 Years  
 Objective: Asset Allocation



Portfolio Analysis 12-31-2019				
Asset Allocation %	Net %	Long %	Short %	Net Assets %
Cash	1.49	1.49	0.00	49.74
US Stocks	49.22	49.22	0.00	33.13
Non-US Stocks	32.64	32.64	0.00	11.96
Bonds	16.53	16.53	0.00	5.12
Other/Not Cstfd	0.12	0.12	0.00	—
Total	100.00	100.00	0.00	—

Equity Style				
Value	Brand	Growth	Port Avg Index	Rel Cat
Large	Med	Small	19.3	1.05
High	Med	Low	11.8	1.04
High	Med	Low	2.3	1.08
High	Med	Low	4.7215	1.27

Fixed-Income Style				
Value	Brand	Growth	Port Avg Index	Rel Cat
Large	Med	Small	8.79	6.87
High	Med	Low	6.87	2.88
High	Med	Low	—	—
High	Med	Low	—	—

Credit Quality Breakdown 11-30-2019				
AAA	AA	A	BBB	BB
52.20	10.46	15.64	21.70	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00

Regional Exposure				
Stocks %	Rel Std Index	Stocks %	Rel Std Index	Stocks %
64.0	1.03	18.2	1.00	0.91
17.7	0.91	—	—	—

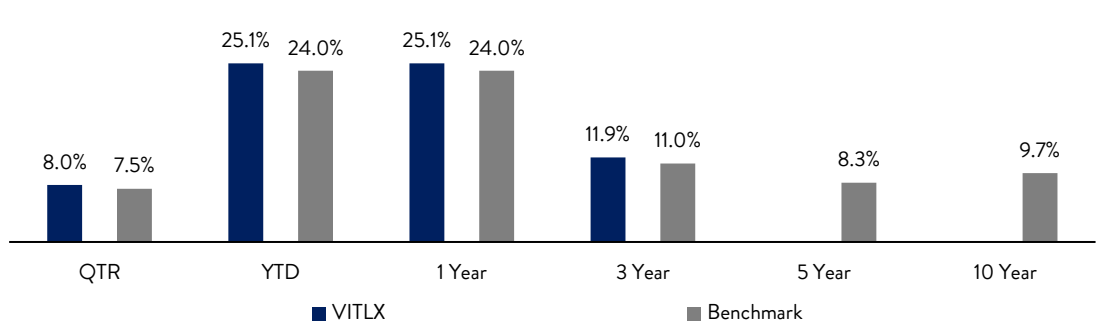
**Base Currency:** USD  
**Tickers:** VBRSX  
**ISIN:** US92202E7554  
**Minimum Initial Purchase:** \$100 mil  
**Purchase Constraints:** —  
**Incept:** 06-26-2015  
**Type:** MF  
**Total Assets:** \$27,131.28 mil



**Product Details**

Name	Vanguard Instl Trgt Retire 2045 Instl
Ticker	VITLX
Expense Ratio	0.090%
Morningstar Category	US Fund Target-Date 2045
Benchmark	S&P Target Date 2045 TR USD
Inception Date	6/26/2015
Longest Tenured Manager	William A. Coleman;Walter Nejman;
Longest Manager Tenure	4.58 Years
Fund Size	\$23,161,093,021

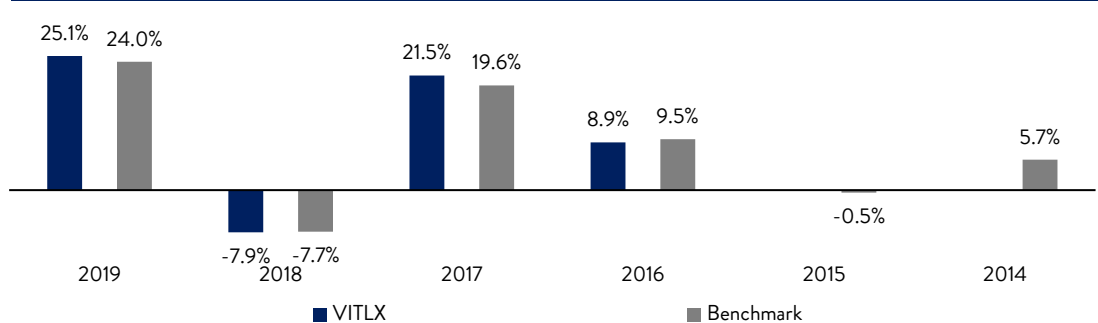
**Trailing Performance**



**Fund Characteristics**

	VITLX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$47,278	-\$13,590
P/E Ratio (TTM)	19.26	-0.84
P/B Ratio (TTM)	2.26	-0.15
Est. Dividend Yield	2.39%	0.10%

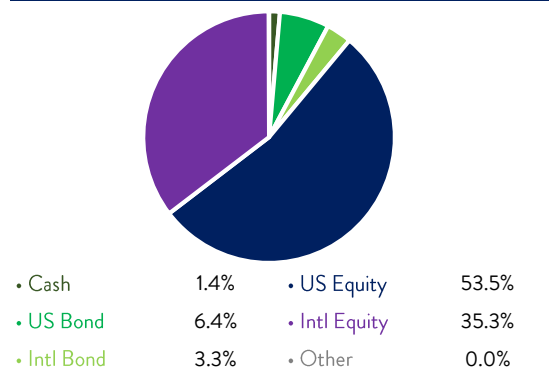
**Annual Performance**



**Sector Allocations**

	VITLX	Category	+/- Category
Materials	4.5%	3.9%	0.6%
Communication Services	8.6%	8.7%	-0.1%
Consumer Discretionary	10.3%	10.1%	0.1%
Consumer Staples	7.8%	7.3%	0.4%
Healthcare	12.2%	12.5%	-0.3%
Industrials	11.6%	10.8%	0.8%
Real Estate	4.2%	5.4%	-1.1%
Technology	15.2%	16.0%	-0.7%
Energy	4.9%	4.5%	0.4%
Financial Services	17.5%	17.5%	0.0%
Utilities	3.2%	3.4%	-0.2%
Other	0.0%	0.0%	0.0%

**Asset Allocation**



**Morningstar Style Box**

	Value	Core	Growth
Large			
Mid			
Small			



Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• VITLX	8.02%	25.07%	25.07%	11.86%	-	-
• Benchmark	7.48%	24.02%	24.02%	11.01%	8.32%	9.67%
+/- Benchmark	0.54%	1.05%	1.05%	0.85%	-	-
Peer Group Rank	28	32	32	23	-	-

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• VITLX	8.02%	0.32%	3.48%	11.54%
• Benchmark	7.48%	0.53%	3.32%	11.10%
+/- Benchmark	0.54%	-0.21%	0.16%	0.44%

Annual Performance	2019	2018	2017	2016	2015	2014
• VITLX	25.07%	-7.87%	21.47%	8.94%	-	-
• Benchmark	24.02%	-7.74%	19.56%	9.54%	-0.46%	5.67%
+/- Benchmark	1.05%	-0.12%	1.90%	-0.59%	-	-
Peer Group Rank	32	37	24	24	-	-

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• VITLX	-11.80%	4.02%	0.97%	-0.55%
• Benchmark	-11.75%	3.81%	1.66%	-0.94%
+/- Benchmark	-0.04%	0.21%	-0.69%	0.39%

Rolling 5-Year Performance	01/2015 - 12/2019	10/2014 - 09/2019	07/2014 - 06/2019	04/2014 - 03/2019	01/2014 - 12/2018	10/2013 - 09/2018
• VITLX	-	-	-	-	-	-
• Benchmark	8.32%	7.21%	6.61%	6.81%	4.91%	9.05%
+/- Benchmark	-	-	-	-	-	-
Peer Group Rank	-	-	-	-	-	-

5-Year Quarterly Performance	4Q17	3Q17	2Q17	1Q17
• VITLX	5.24%	4.68%	3.82%	6.21%
• Benchmark	5.20%	4.35%	3.45%	5.28%
+/- Benchmark	0.03%	0.33%	0.37%	0.92%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	0.59	0.00	-	0.00	-	0.00
Beta	1.02	1.00	-	1.00	-	1.00
Standard Deviation	10.33	10.08	-	10.03	-	11.49
Sharpe Ratio	0.97	0.92	-	0.74	-	0.81
Information Ratio	1.11	-	-	-	-	-
Treynor Ratio	9.93	9.30	-	7.22	-	9.08
Upside Capture Ratio	104.36	100.00	-	100.00	-	100.00
Downside Capture Ratio	100.77	100.00	-	100.00	-	100.00

5-Year Quarterly Performance	4Q16	3Q16	2Q16	1Q16
• VITLX	1.25%	4.85%	1.80%	0.80%
• Benchmark	1.95%	4.04%	2.00%	1.25%
+/- Benchmark	-0.70%	0.81%	-0.19%	-0.45%

5-Year Quarterly Performance	4Q15	3Q15	2Q15	1Q15
• VITLX	4.31%	-7.99%	-	-
• Benchmark	4.10%	-6.93%	-0.12%	2.85%
+/- Benchmark	0.21%	-1.07%	-	-

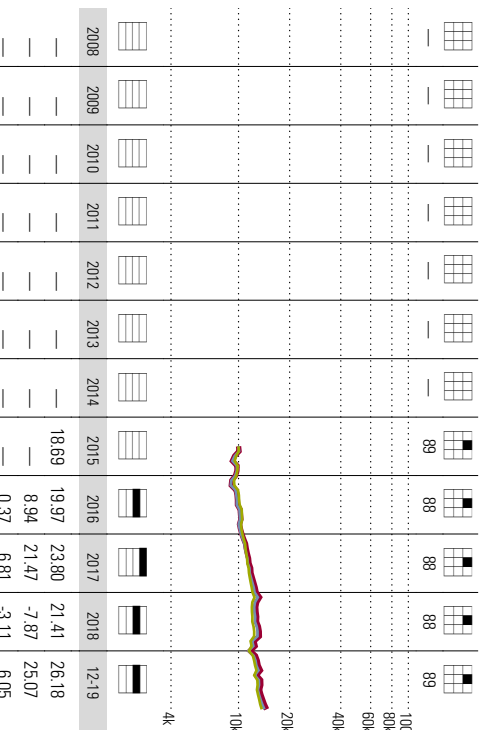
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# Vanguard Instl Trgt Retire 2045 Instl (USD)

**Morningstar Analyst Rating™** Overall Morningstar Rating™ Standard Index  
**Gold** 04-25-2019  
 \*\*\*\*  
 193 US Fund Target-Date 2045

Morningstar Mod Morningstar Category Index Morningstar Cat  
 Tgt Risk TR USD Lifetime Mod 2045 2045 US Fund Target-Date  
 TR USD

Performance 12-31-2019					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2017	6.21	3.82	4.68	5.24	21.47
2018	-0.55	0.97	4.02	-11.80	-7.87
2019	11.54	3.48	0.32	8.02	25.07
Trailing Returns					
	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	25.07	11.86	—	—	8.37
Std 12-31-2019	25.07	—	—	—	8.37
Total Return	25.07	11.86	—	—	8.37
+/- Std Index	6.05	2.73	—	—	—
+/- Cat Index	0.10	0.44	—	—	—
% Rank Cat	38	24	—	—	—
No. in Cat	229	193	—	—	—



Investment Style	
Equity	Stocks %
Vanguard Instl Trgt Retire 2045 Instl	14.635
Category Average	14.199
Standard Index	13.701

Performance Quartile (within category)	
History	NAV/Price
2008	18.69
2009	19.97
2010	8.94
2011	21.47
2012	0.37
2013	6.81
2014	-1.90
2015	0.94
2016	26
2017	23
2018	40
12-19	221
	29

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

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

Fund Expenses	
Management Fees %	0.00
12b1 Expense %	NA
Net Expense Ratio %	0.09
Gross Expense Ratio %	0.09

**Risk and Return Profile**  
 Morningstar Rating™ 4★  
 Morningstar Risk Avg  
 Morningstar Return +Avg  
 Standard Deviation 3 Yr 10.33 5 Yr 10.33 10 Yr 11.86  
 Mean 11.86  
 Sharpe Ratio 0.97  
 MPT Statistics Standard Index Best Fit Index Morningstar App For Risk TR USD 0.22  
 Alpha -0.97  
 Beta 1.52  
 R-Squared 98.44  
 12-Month Yield 2.29%  
 Potential Cap Gains Exp 14.91%

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

Fixed-Income Style	
Value	Small Growth
Large	Mid Small
High	Low
Med	Med
Low	High

Credit Quality Breakdown 11-30-2019	
AAA	Bond %
AA	52.72
AA	10.20
A	15.47
BBB	21.61
BB	0.00
B	0.00
Below B	0.00
NR	0.00

Regional Exposure	
Americas	Stocks %
Greater Europe	64.1
Greater Asia	18.2
	17.7

Sector Weightings	
Basic Materials	Stocks %
Consumer Cyclical	36.4
Financial Services	4.5
Real Estate	0.97
	10.3
	17.5
	4.2

Portfolio Statistics	
P/E Ratio TTM	19.3
P/C Ratio TTM	11.8
P/B Ratio TTM	2.3
Geo Avg Mkt Cap	47278
	1.27
	0.78

Sector Weightings	
Consumer Defensive	Stocks %
Healthcare	40.3
Utilities	8.6
	4.9
	11.6
	15.2
	7.8
	12.2
	3.2

Sector Weightings	
Consumer Defensive	Stocks %
Healthcare	40.3
Utilities	8.6
	4.9
	11.6
	15.2
	7.8
	12.2
	3.2

Sector Weightings	
Consumer Defensive	Stocks %
Healthcare	40.3
Utilities	8.6
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	3.2

Sector Weightings	
Consumer Defensive	Stocks %
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	3.2

Sector Weightings	
Consumer Defensive	Stocks %
Healthcare	40.3
Utilities	8.6
	4.9
	11.6
	15.2
	7.8
	12.2
	3.2

**Operations**  
 Family: Vanguard  
 Manager: Multiple  
 Tenure: 4.6 Years  
 Objective: Asset Allocation

Base Currency: USD  
 Ticker: VITLX  
 SIN: US92202E7489  
 Minimum Initial Purchase: \$100 mil

Purchase Constraints:  
 Incept: 06-26-2015  
 Type: MF  
 Total Assets: \$23,161.09 mil

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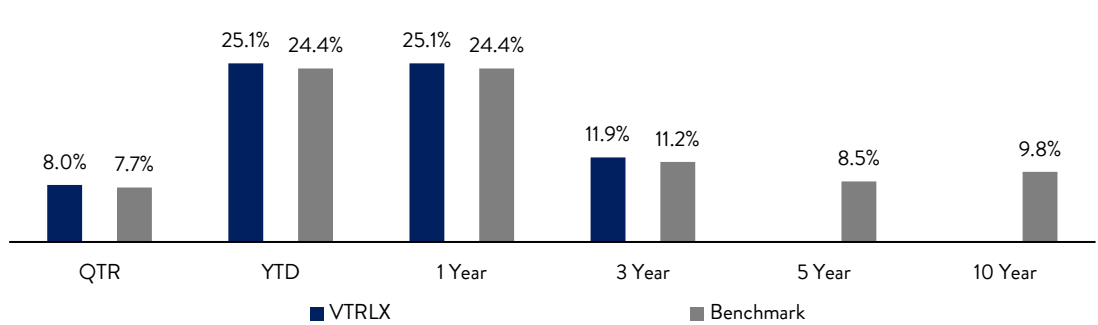
Vanguard Instl Trgt Retire 2050 Instl  
VTRLX

Fund Fact Sheet  
Data as of 12/31/2019

**Product Details**

Name	Vanguard Instl Trgt Retire 2050 Instl
Ticker	VTRLX
Expense Ratio	0.090%
Morningstar Category	US Fund Target-Date 2050
Benchmark	S&P Target Date 2050 TR USD
Inception Date	6/26/2015
Longest Tenured Manager	William A. Coleman;Walter Nejman;
Longest Manager Tenure	4.58 Years
Fund Size	\$17,484,821,972

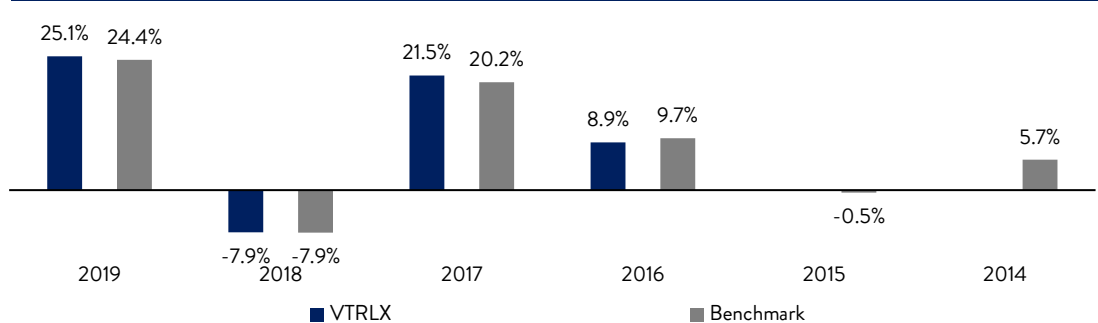
**Trailing Performance**



**Fund Characteristics**

	VTRLX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$47,217	-\$5,500
P/E Ratio (TTM)	19.26	-0.72
P/B Ratio (TTM)	2.26	-0.10
Est. Dividend Yield	2.39%	0.10%

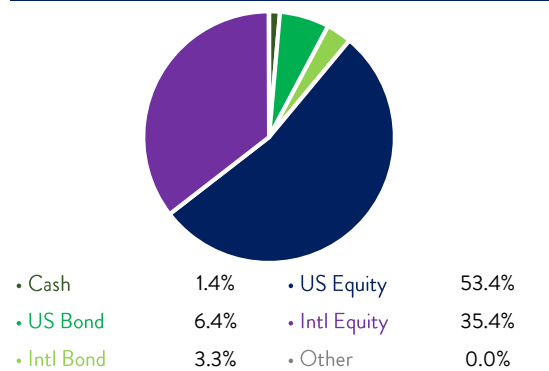
**Annual Performance**



**Sector Allocations**

	VTRLX	Category	+/- Category
Materials	4.5%	4.0%	0.5%
Communication Services	8.6%	8.6%	0.0%
Consumer Discretionary	10.3%	10.2%	0.1%
Consumer Staples	7.8%	7.3%	0.5%
Healthcare	12.2%	12.3%	-0.1%
Industrials	11.7%	11.1%	0.6%
Real Estate	4.2%	5.5%	-1.2%
Technology	15.2%	15.7%	-0.5%
Energy	4.9%	4.6%	0.3%
Financial Services	17.5%	17.4%	0.1%
Utilities	3.2%	3.4%	-0.2%
Other	0.0%	0.0%	0.0%

**Asset Allocation**



**Morningstar Style Box**

	Value	Core	Growth
Large			
Mid			
Small			

Vanguard Instl Trgt Retire 2050 Instl

VTRLX

Fund Fact Sheet

Data as of 12/31/2019

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• VTRLX	8.02%	25.05%	25.05%	11.85%	-	-
• Benchmark	7.65%	24.35%	24.35%	11.22%	8.49%	9.84%
+/- Benchmark	0.37%	0.70%	0.70%	0.64%	-	-
Peer Group Rank	31	37	37	27	-	-

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• VTRLX	8.02%	0.32%	3.47%	11.52%
• Benchmark	7.65%	0.47%	3.32%	11.28%
+/- Benchmark	0.37%	-0.15%	0.16%	0.24%

Annual Performance	2019	2018	2017	2016	2015	2014
• VTRLX	25.05%	-7.87%	21.47%	8.95%	-	-
• Benchmark	24.35%	-7.94%	20.18%	9.74%	-0.47%	5.69%
+/- Benchmark	0.70%	0.07%	1.29%	-0.79%	-	-
Peer Group Rank	37	31	29	29	-	-

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• VTRLX	-11.79%	4.01%	0.97%	-0.55%
• Benchmark	-12.05%	3.87%	1.72%	-0.94%
+/- Benchmark	0.26%	0.14%	-0.75%	0.39%

Rolling 5-Year Performance	01/2015 - 12/2019	10/2014 - 09/2019	07/2014 - 06/2019	04/2014 - 03/2019	01/2014 - 12/2018	10/2013 - 09/2018
• VTRLX	-	-	-	-	-	-
• Benchmark	8.49%	7.34%	6.73%	6.96%	5.01%	9.29%
+/- Benchmark	-	-	-	-	-	-
Peer Group Rank	-	-	-	-	-	-

5-Year Quarterly Performance	4Q17	3Q17	2Q17	1Q17
• VTRLX	5.20%	4.67%	3.86%	6.21%
• Benchmark	5.34%	4.43%	3.54%	5.51%
+/- Benchmark	-0.14%	0.24%	0.33%	0.69%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	0.60	0.00	-	0.00	-	0.00
Beta	1.00	1.00	-	1.00	-	1.00
Standard Deviation	10.34	10.34	-	10.35	-	11.73
Sharpe Ratio	0.97	0.92	-	0.73	-	0.81
Information Ratio	0.86	-	-	-	-	-
Treynor Ratio	10.16	9.50	-	7.38	-	9.25
Upside Capture Ratio	101.98	100.00	-	100.00	-	100.00
Downside Capture Ratio	98.04	100.00	-	100.00	-	100.00

5-Year Quarterly Performance	4Q16	3Q16	2Q16	1Q16
• VTRLX	1.26%	4.79%	1.80%	0.86%
• Benchmark	2.14%	4.17%	1.94%	1.18%
+/- Benchmark	-0.88%	0.62%	-0.13%	-0.32%

5-Year Quarterly Performance	4Q15	3Q15	2Q15	1Q15
• VTRLX	4.30%	-7.99%	-	-
• Benchmark	4.32%	-7.22%	-0.07%	2.91%
+/- Benchmark	-0.01%	-0.77%	-	-

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# Vanguard Instl Trgt Retire 2050 Instl (USD)

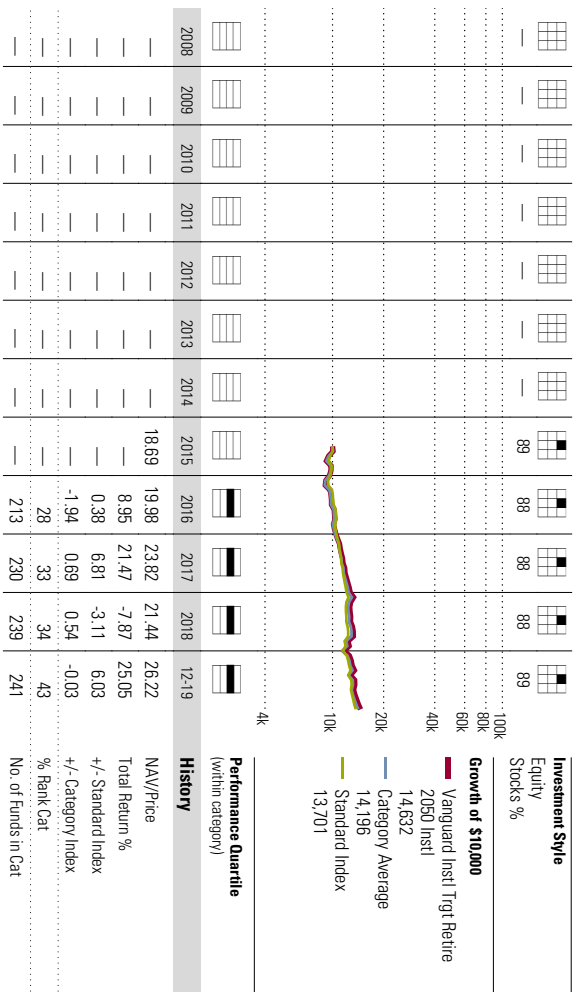
**Morningstar Analyst Rating™** Overall Morningstar Rating™ Standard Index  
**Gold** 04-25-2019  
 206 US Fund Target-Date 2050  
 206 US Fund Target-Date Tgt Risk TR USD TR USD

★★★★★  
 206 US Fund Target-Date 2050

Morningstar Mod Morningstar Category Index Morningstar Cat  
 Tgt Risk TR USD Lifetime Mod 2050 2050 US Fund Target-Date 2050

Performance 12-31-2019					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2017	6.21	3.86	4.67	5.20	21.47
2018	-0.55	0.97	4.01	-11.79	-7.87
2019	11.52	3.47	0.32	8.02	25.05
Trailing Returns					
	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	25.05	11.85	—	—	8.36
Std 12-31-2019	25.05	—	—	—	8.36
Total Return	25.05	11.85	—	—	8.36
+/- Std Index	6.03	2.72	—	—	—
+/- Cat Index	-0.03	0.42	—	—	—
% Rank Cat	43	29	—	—	—
No. in Cat	241	206	—	—	—
7-day Yield	Subsidized		Unsubsidized		
30-day SEC Yield 12-31-19	—		2.36		

**Performance Disclosure**  
 The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.  
 The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate, thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.  
 Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-662-7447 or visit www.vanguard.com.



**Portfolio Analysis 12-31-2019**

Asset Allocation %	Net %	Long %	Short %
Cash	1.39	1.39	0.00
US Stocks	53.44	53.44	0.00
Non-US Stocks	35.44	35.44	0.00
Bonds	9.64	9.64	0.00
Other/Not Cstfd	0.09	0.09	0.00
Total	100.00	100.00	0.00

Equity Style	Portfolio Statistics	Port	Rel	Rel	Share Clng	Share	Holdings :	Net Assets
		Val	Ind	Ind	since	Amount	10,259 Total Stocks , 13,956 Total Fixed-Income, 3% Turnover Ratio	%
Value Based Growth	P/E Ratio TTM	19.3	1.05	0.96	11-2019	119 mil	Vanguard Total Stock Market Idx I	54.00
Large	P/C Ratio TTM	11.8	1.04	0.95		353 mil	Vanguard Total Int Stock Index Inv	35.97
Med	P/B Ratio TTM	2.3	1.08	0.96		113 mil	Vanguard Total Bond Market II Idx	7.08
Small	Geo Avg Mkt Cap	47271	1.27	0.90		22 mil	Vanguard Total Intl Bd Idx Admrativ™	2.88

**Sales Charges**  
**Front-End Load %** NA  
**Deferred Load %** NA  
**Fund Expenses** 0.00  
**Management Fees %** 0.00  
**12b1 Expense %** NA  
**Net Expense Ratio %** 0.09  
**Gross Expense Ratio %** 0.09  
**Risk and Return Profile**

Fixed-Income Style	Ang Eff Maturity	Ang Eff Duration	Ang Wtd Coupon	Ang Wtd Price
High	8.77	6.85	2.89	—
Med	6.85	6.85	2.89	—
Low	6.85	6.85	2.89	—

Sector Weightings	Stocks %	Rel Std Index
<b>Cyclical</b>	<b>36.5</b>	<b>0.91</b>
Basic Materials	4.5	0.97
Consumer Cyclical	10.3	1.06
Financial Services	17.5	0.99
Real Estate	4.2	0.52
<b>Sensitive</b>	<b>40.3</b>	<b>1.09</b>
Communication Services	8.6	1.23
Energy	4.9	0.93
Industrials	11.7	1.03
Technology	15.2	1.15
<b>Defensive</b>	<b>23.2</b>	<b>1.01</b>
Consumer Defensive	7.8	0.98
Healthcare	12.2	1.09
Utilities	3.2	0.84

Morningstar Rating™	3 Yr	5 Yr	10 Yr
Morningstar Rating™	4★	—	—
Morningstar Risk	Avg	—	—
Morningstar Return	+Avg	—	—
Standard Deviation	3 Yr	5 Yr	10 Yr
Mean	10.34	—	—
Sharpe Ratio	11.85	—	—
	0.97	—	—
MPT Statistics			
	Standard Index	Best Fit Index	Morningstar App For
Alpha	-0.98	0.21	Risk TR USD
Beta	1.52	0.95	
R-Squared	98.38	99.59	
12-Month Yield	2.26%	2.26%	
Potential Cap Gains Exp	13.75%		

Credit Quality Breakdown 11-30-2019	Bond %
AAA	52.68
AA	10.22
A	15.48
BBB	21.62
BB	0.00
B	0.00
Below B	0.00
NR	0.00

Regional Exposure	Stocks %	Rel Std Index
Americas	64.0	1.03
Greater Europe	18.2	1.00
Greater Asia	17.7	0.91

**Operations**  
**Family:** Vanguard  
**Manager:** Multiple  
**Tenure:** 4.6 Years  
**Objective:** Asset Allocation

**Base Currency:** USD  
**Ticker:** VTRIX  
**SIN:** US92202E7307  
**Minimum Initial Purchase:** \$100 mil

**Purchase Constraints:** —  
**Incept:** 06-26-2015  
**Type:** MF  
**Total Assets:** \$17,484,82 mil

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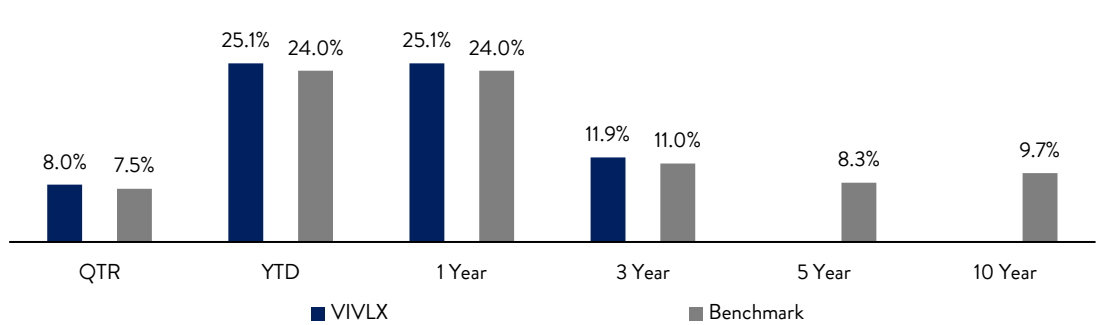
Vanguard Instl Trgt Retire 2055 Instl  
VIVLX

Fund Fact Sheet  
Data as of 12/31/2019

**Product Details**

Name	Vanguard Instl Trgt Retire 2055 Instl
Ticker	VIVLX
Expense Ratio	0.090%
Morningstar Category	US Fund Target-Date 2055
Benchmark	S&P Target Date 2045 TR USD
Inception Date	6/26/2015
Longest Tenured Manager	William A. Coleman;Walter Nejman;
Longest Manager Tenure	4.58 Years
Fund Size	\$9,036,316,426

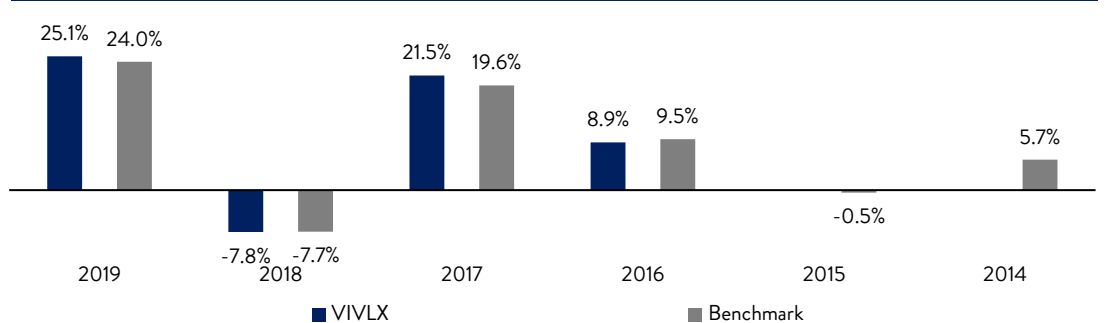
**Trailing Performance**



**Fund Characteristics**

	VIVLX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$47,280	-\$8,851
P/E Ratio (TTM)	19.26	-0.85
P/B Ratio (TTM)	2.26	-0.16
Est. Dividend Yield	2.39%	0.12%

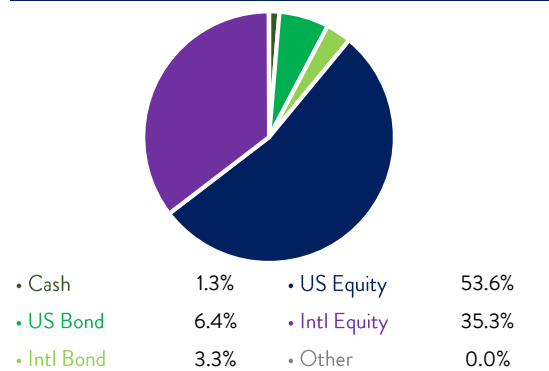
**Annual Performance**



**Sector Allocations**

Sector Allocations	VIVLX	Category	+/- Category
Materials	4.5%	4.0%	0.4%
Communication Services	8.6%	8.6%	0.0%
Consumer Discretionary	10.3%	10.0%	0.2%
Consumer Staples	7.8%	7.1%	0.6%
Healthcare	12.2%	12.8%	-0.6%
Industrials	11.6%	10.8%	0.8%
Real Estate	4.2%	5.3%	-1.0%
Technology	15.2%	15.9%	-0.7%
Energy	4.9%	4.9%	0.0%
Financial Services	17.5%	17.2%	0.3%
Utilities	3.2%	3.2%	0.0%
Other	0.0%	0.0%	0.0%

**Asset Allocation**



**Morningstar Style Box**

	Value	Core	Growth
Large			
Mid			
Small			

Vanguard Instl Trgt Retire 2055 Instl  
VIVLX

Fund Fact Sheet  
Data as of 12/31/2019

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• VIVLX	8.03%	25.06%	25.06%	11.87%	-	-
• Benchmark	7.48%	24.02%	24.02%	11.01%	8.32%	9.67%
+/- Benchmark	0.55%	1.04%	1.04%	0.86%	-	-
Peer Group Rank	35	41	41	30	-	-

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• VIVLX	8.03%	0.28%	3.50%	11.53%
• Benchmark	7.48%	0.53%	3.32%	11.10%
+/- Benchmark	0.55%	-0.25%	0.19%	0.44%

Annual Performance	2019	2018	2017	2016	2015	2014
• VIVLX	25.06%	-7.84%	21.47%	8.94%	-	-
• Benchmark	24.02%	-7.74%	19.56%	9.54%	-0.46%	5.67%
+/- Benchmark	1.04%	-0.09%	1.91%	-0.59%	-	-
Peer Group Rank	41	30	39	26	-	-

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• VIVLX	-11.76%	4.01%	0.97%	-0.54%
• Benchmark	-11.75%	3.81%	1.66%	-0.94%
+/- Benchmark	0.00%	0.20%	-0.69%	0.39%

Rolling 5-Year Performance	01/2015 - 12/2019	10/2014 - 09/2019	07/2014 - 06/2019	04/2014 - 03/2019	01/2014 - 12/2018	10/2013 - 09/2018
• VIVLX	-	-	-	-	-	-
• Benchmark	8.32%	7.21%	6.61%	6.81%	4.91%	9.05%
+/- Benchmark	-	-	-	-	-	-
Peer Group Rank	-	-	-	-	-	-

5-Year Quarterly Performance	4Q17	3Q17	2Q17	1Q17
• VIVLX	5.17%	4.71%	3.81%	6.25%
• Benchmark	5.20%	4.35%	3.45%	5.28%
+/- Benchmark	-0.03%	0.36%	0.36%	0.97%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	0.61	0.00	-	0.00	-	0.00
Beta	1.02	1.00	-	1.00	-	1.00
Standard Deviation	10.32	10.08	-	10.03	-	11.49
Sharpe Ratio	0.97	0.92	-	0.74	-	0.81
Information Ratio	1.11	-	-	-	-	-
Treynor Ratio	9.95	9.30	-	7.22	-	9.08
Upside Capture Ratio	104.39	100.00	-	100.00	-	100.00
Downside Capture Ratio	100.74	100.00	-	100.00	-	100.00

5-Year Quarterly Performance	4Q16	3Q16	2Q16	1Q16
• VIVLX	1.25%	4.79%	1.80%	0.86%
• Benchmark	1.95%	4.04%	2.00%	1.25%
+/- Benchmark	-0.70%	0.76%	-0.19%	-0.40%

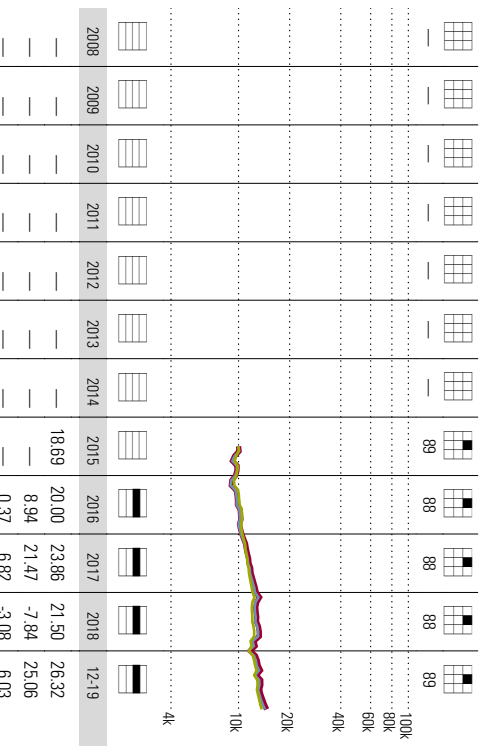
5-Year Quarterly Performance	4Q15	3Q15	2Q15	1Q15
• VIVLX	4.24%	-7.94%	-	-
• Benchmark	4.10%	-6.93%	-0.12%	2.85%
+/- Benchmark	0.14%	-1.02%	-	-

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# Vanguard Instl Trgt Retire 2055 Instl (USD)

**Morningstar Analyst Rating™** Overall **Morningstar Rating™** Standard Index **Category Index** **Morningstar Cat**  
**Gold** 04-25-2019 **★★★★** 191 US Fund Target-Date **Morningstar Mod** US Fund Target-Date  
 Tgt Risk TR USD **Lifetime Mod** 2055 2055

Performance 12-31-2019					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2017	6.25	3.81	4.71	5.17	21.47
2018	-0.54	0.97	4.01	-11.76	-7.84
2019	11.53	3.50	0.28	8.03	25.06
Trailing Returns					
	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	25.06	11.87	—	—	8.37
Std 12-31-2019	25.06	—	—	—	8.37
Total Return	25.06	11.87	—	—	8.37
+/- Std Index	6.03	2.74	—	—	—
+/- Cat Index	0.01	0.46	—	—	—
% Rank Cat	47	31	—	—	—
No. in Cat	229	191	—	—	—



Investment Style	
Equity	Stocks %
Vanguard Instl Trgt Retire	14.637
2055 Instl	14.301
Category Average	13.701
Standard Index	13.701

Performance Quartile (within category)	
History	No. of Funds in Cat
NAV/Price	26.32
Total Return %	25.06
+/- Standard Index	6.03
+/- Category Index	0.01
% Rank Cat	47

**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.

7-day Yield		Subsidized	Unsubsidized
30-day SEC Yield 12-31-19	2.36	—	2.36

**Portfolio Analysis 12-31-2019**

Asset Allocation %	Net %	Long %	Short %
Cash	1.32	1.32	0.00
US Stocks	53.58	53.58	0.00
Non-US Stocks	35.35	35.35	0.00
Bonds	9.66	9.66	0.00
Other/Not Cstfd	0.09	0.09	0.00
Total	100.00	100.00	0.00

Equity Style		Portfolio Statistics	
Value	Brand Growth	P/E Ratio TTM	P/C Ratio TTM
Large	High	11.8	1.04
Mid	Med	2.3	1.08
Small	Low	4.7280	1.27

Sector Weightings		Stocks %	Rel Std Index
<b>Cyclical</b>		<b>36.4</b>	<b>0.91</b>
Basic Materials		4.5	0.97
Consumer Cyclical		10.3	1.06
Financial Services		17.5	0.99
Real Estate		4.2	0.52
<b>Sensitive</b>		<b>40.3</b>	<b>1.09</b>
Communication Services		8.6	1.23
Energy		4.9	0.93
Industrials		11.6	1.03
Technology		15.2	1.15
<b>Defensive</b>		<b>23.2</b>	<b>1.01</b>
Consumer Defensive		7.8	0.98
Healthcare		12.2	1.09
Utilities		3.2	0.84

Sales Charges	
<b>Front-End Load %</b>	<b>NA</b>
<b>Deferred Load %</b>	<b>NA</b>

Fund Expenses	
Management Fees %	0.00
12b1 Expense %	NA
<b>Net Expense Ratio %</b>	<b>0.09</b>
<b>Gross Expense Ratio %</b>	<b>0.09</b>

Risk and Return Profile	
Morningstar Rating™	4★
Morningstar Risk	Avg
Morningstar Return	+Avg

Credit Quality Breakdown 11-30-2019	
AAA	52.74
AA	10.19
A	15.46
BBB	21.61
BB	0.00
B	0.00
Below B	0.00
NR	0.00

Regional Exposure	
Americas	64.1
Greater Europe	18.2
Greater Asia	17.7

MPT Statistics	
Alpha	-0.95
Beta	1.51
R-Squared	98.40
12-Month Yield	2.16%
Potential Cap Gains Exp	12.35%

Operations	
Family:	Vanguard
Manager:	Multiple
Tenure:	4.6 Years
Objective:	Asset Allocation

Purchase Constraints:	
Base Currency:	USD
Ticker:	VVIX
SIN:	US92202E7224
Minimum Initial Purchase:	\$100 mil
Total Assets:	\$9,036.32 mil

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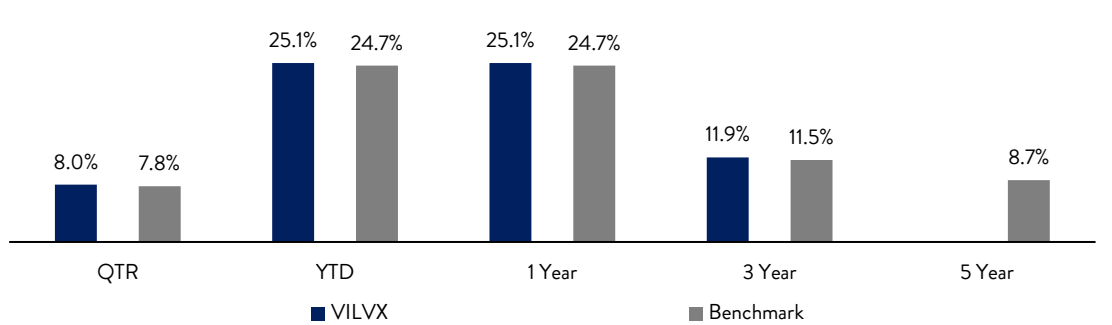
Vanguard Instl Trgt Retire 2060 Instl  
VILVX

Fund Fact Sheet  
Data as of 12/31/2019

**Product Details**

Name	Vanguard Instl Trgt Retire 2060 Instl
Ticker	VILVX
Expense Ratio	0.090%
Morningstar Category	US Fund Target-Date 2060+
Benchmark	S&P Target Date 2060+ TR USD
Inception Date	6/26/2015
Longest Tenured Manager	William A. Coleman;Walter Nejman;
Longest Manager Tenure	4.58 Years
Fund Size	\$3,008,012,990

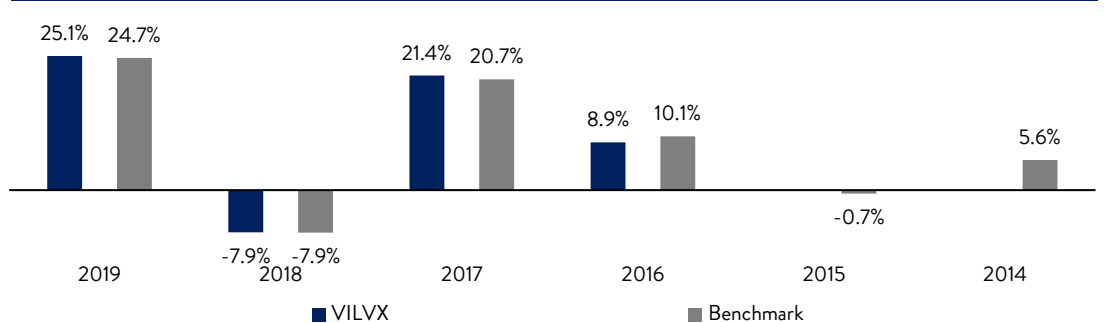
**Trailing Performance**



**Fund Characteristics**

	VILVX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$47,217	-\$4,427
P/E Ratio (TTM)	19.26	-0.49
P/B Ratio (TTM)	2.26	-0.09
Est. Dividend Yield	2.39%	0.07%

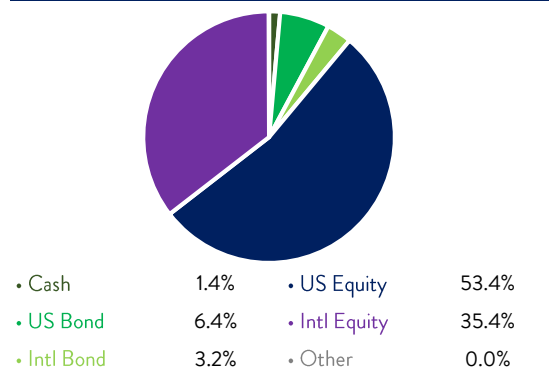
**Annual Performance**



**Sector Allocations**

	VILVX	Category	+/- Category
Materials	4.5%	4.3%	0.2%
Communication Services	8.6%	8.6%	-0.1%
Consumer Discretionary	10.3%	10.2%	0.1%
Consumer Staples	7.8%	7.5%	0.3%
Healthcare	12.2%	12.5%	-0.3%
Industrials	11.7%	11.2%	0.4%
Real Estate	4.2%	4.7%	-0.5%
Technology	15.2%	15.7%	-0.5%
Energy	4.9%	5.0%	-0.1%
Financial Services	17.5%	17.1%	0.4%
Utilities	3.2%	3.2%	0.1%
Other	0.0%	0.0%	0.0%

**Asset Allocation**



**Morningstar Style Box**

	Value	Core	Growth
Large			
Mid			
Small			

Vanguard Instl Trgt Retire 2060 Instl  
VILVX

Fund Fact Sheet  
Data as of 12/31/2019

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• VILVX	8.04%	25.13%	25.13%	11.86%	-	-
• Benchmark	7.81%	24.73%	24.73%	11.50%	8.68%	-
+/- Benchmark	0.23%	0.40%	0.40%	0.35%	-	-
Peer Group Rank	42	48	48	35	-	-

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• VILVX	8.04%	0.32%	3.50%	11.53%
• Benchmark	7.81%	0.45%	3.37%	11.42%
+/- Benchmark	0.23%	-0.13%	0.14%	0.12%

Annual Performance	2019	2018	2017	2016	2015	2014
• VILVX	25.13%	-7.88%	21.42%	8.94%	-	-
• Benchmark	24.73%	-7.95%	20.75%	10.08%	-0.66%	5.64%
+/- Benchmark	0.40%	0.07%	0.67%	-1.13%	-	-
Peer Group Rank	48	29	40	22	-	-

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• VILVX	-11.80%	4.05%	0.93%	-0.54%
• Benchmark	-12.22%	3.97%	1.77%	-0.90%
+/- Benchmark	0.42%	0.08%	-0.85%	0.36%

Rolling 5-Year Performance	01/2015 - 12/2019	10/2014 - 09/2019	07/2014 - 06/2019	04/2014 - 03/2019	01/2014 - 12/2018	10/2013 - 09/2018
• VILVX	-	-	-	-	-	-
• Benchmark	8.68%	7.49%	6.87%	7.10%	5.12%	9.50%
+/- Benchmark	-	-	-	-	-	-
Peer Group Rank	-	-	-	-	-	-

5-Year Quarterly Performance	4Q17	3Q17	2Q17	1Q17
• VILVX	5.16%	4.67%	3.86%	6.20%
• Benchmark	5.47%	4.51%	3.59%	5.75%
+/- Benchmark	-0.31%	0.16%	0.27%	0.46%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	0.45	0.00	-	0.00	-	-
Beta	0.99	1.00	-	1.00	-	-
Standard Deviation	10.37	10.50	-	10.60	-	-
Sharpe Ratio	0.97	0.93	-	0.74	-	-
Information Ratio	0.47	-	-	-	-	-
Treynor Ratio	10.30	9.79	-	7.57	-	-
Upside Capture Ratio	100.14	100.00	-	100.00	-	-
Downside Capture Ratio	96.96	100.00	-	100.00	-	-

5-Year Quarterly Performance	4Q16	3Q16	2Q16	1Q16
• VILVX	1.25%	4.85%	1.81%	0.80%
• Benchmark	2.40%	4.36%	1.89%	1.09%
+/- Benchmark	-1.16%	0.49%	-0.09%	-0.28%

5-Year Quarterly Performance	4Q15	3Q15	2Q15	1Q15
• VILVX	4.28%	-7.99%	-	-
• Benchmark	4.47%	-7.58%	-0.06%	2.94%
+/- Benchmark	-0.19%	-0.41%	-	-

All data and information on this fact sheet is taken from sources believed to be accurate but is not guaranteed to be accurate, complete, or correct.

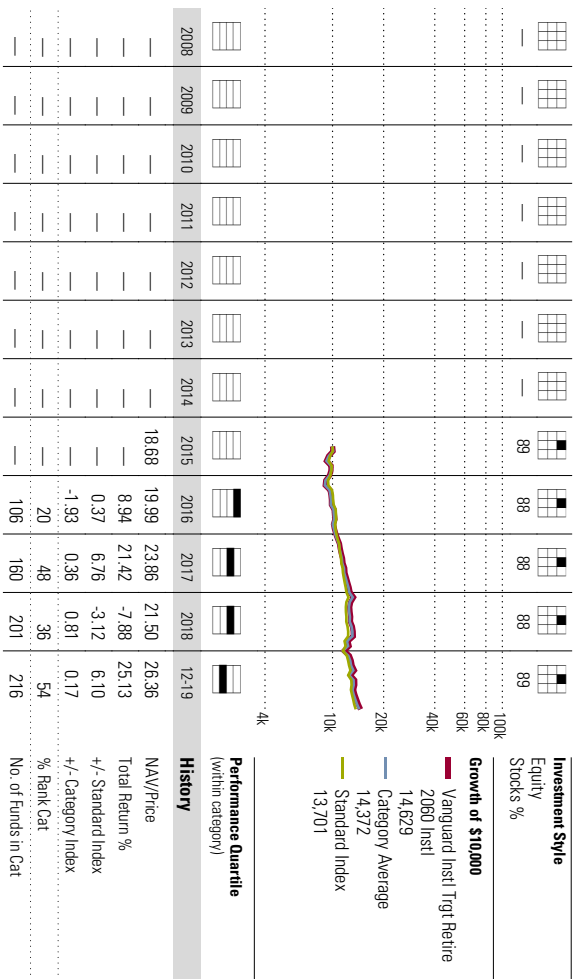
# Vanguard Instl Trgt Retire 2060 Instl (USD)

**Morningstar Analyst Rating™** Overall Morningstar Rating™ Standard Index  
**Gold** 04-25-2019  
 147 US Fund Target-Date  
 2060+

Morningstar Mod Morningstar Category Index  
 Tgt Risk TR USD Tgt Risk TR USD Lifetime Mod 2060 2060+  
 TR USD TR USD

Performance 12-31-2019					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2017	6.20	3.86	4.67	5.16	21.42
2018	-0.54	0.33	4.05	-11.80	-7.88
2019	11.53	3.50	0.32	8.04	25.13
Trailing Returns					
	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	25.13	11.86	—	—	8.35
Std 12-31-2019	25.13	—	—	—	8.35
Total Return	25.13	11.86	—	—	8.35
+/- Std Index	6.10	2.72	—	—	—
+/- Cat Index	0.17	0.49	—	—	—
% Rank Cat	54	39	—	—	—
No. in Cat	216	147	—	—	—
7-day Yield	Subsidized		Unsubsidized		
30-day SEC Yield 12-31-19	—		2.35		

**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.  
 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.



Portfolio Analysis 12-31-2019					
Asset Allocation %	Net %	Long %	Short %	Share Cng	Share Holdings
Cash	1.42	1.42	0.00	11-2019	10,259 Total Stocks, 13,940 Total Fixed-Income, 3% Turnover Ratio
US Stocks	53.43	53.43	0.00	⊕	20 mil Vanguard Total Stock Market Ix I
Non-US Stocks	35.43	35.43	0.00	⊕	61 mil Vanguard Total Int'l Stock Index Inv
Bonds	9.63	9.63	0.00	⊕	19 mil Vanguard Total Bond Market II Ix
Other/Not Cstfd	0.09	0.09	0.00	⊕	4 mil Vanguard Total Intl Bd Ix Adm'ratm
Total	100.00	100.00	0.00		

Equity Style		Portfolio Statistics		Sector Weightings	
Value	Brand Growth	P/E Ratio TTM	P/C Ratio TTM	Basic Materials	Stocks %
Large	Med	11.8	1.04	0.97	4.5
Med	Small	P/B Ratio TTM	2.3	1.08	10.3
Small	—	Geo Avg Mkt Cap	47217	1.27	17.5
—	—	—	—	—	4.2

Fixed-Income Style		Portfolio Statistics		Sector Weightings	
Ltd	Med	Ext	Avg Eff Maturity	Communication Services	Stocks %
High	Med	Low	Avg Eff Duration	Energy	8.6
Med	Low	—	Avg Wtd Coupon	Industrials	4.9
Low	—	—	Avg Wtd Price	Technology	11.7
—	—	—	—	Utilities	15.2

Risk and Return Profile					
	3 Yr	5 Yr	10 Yr		
Morningstar Rating™	147 funds	34 funds	10 Yr	3★	—
Morningstar Risk	Avg	—	—	—	—
Morningstar Return	Avg	—	—	—	—
Standard Deviation	3 Yr	5 Yr	10 Yr	10.37	—
Mean	11.86	—	—	11.86	—
Sharpe Ratio	0.97	—	—	0.97	—

MPT Statistics					
	Standard Index	Best Fit Index	Morningstar App For	Risk-TR USD	
Alpha	-1.01	0.18	0.18	0.95	—
Beta	1.52	0.95	0.95	98.36	—
R-Squared	98.36	99.57	99.57	2.06%	10.71%
12-Month Yield	—	—	—	—	—
Potential Cap Gains Exp	—	—	—	—	—

Regional Exposure					
	Stocks %	Rel Std Index			
Americas	64.0	1.03	—	—	—
Greater Europe	18.2	1.00	—	—	—
Greater Asia	17.7	0.91	—	—	—

Operations		Purchase Constraints:	
Family:	Vanguard	Base Currency:	USD
Manager:	Multiple	Ticker:	VILVX
Tenure:	4.6 Years	SIIN:	US92202E7141
Objective:	Asset Allocation	Minimum Initial Purchase:	\$100 mil
		Total Assets:	\$3,008.01 mil

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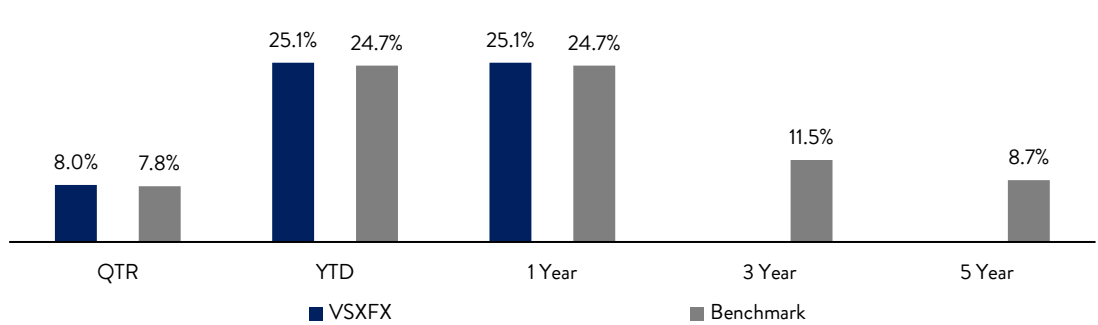
Vanguard Instl Trgt Retire 2065 Instl  
VSXFX

Fund Fact Sheet  
Data as of 12/31/2019

**Product Details**

Name	Vanguard Instl Trgt Retire 2065 Instl
Ticker	VSXFX
Expense Ratio	0.090%
Morningstar Category	US Fund Target-Date 2060+
Benchmark	S&P Target Date 2060+ TR USD
Inception Date	7/12/2017
Longest Tenured Manager	William A. Coleman;Walter Nejman;
Longest Manager Tenure	2.50 Years
Fund Size	\$307,883,675

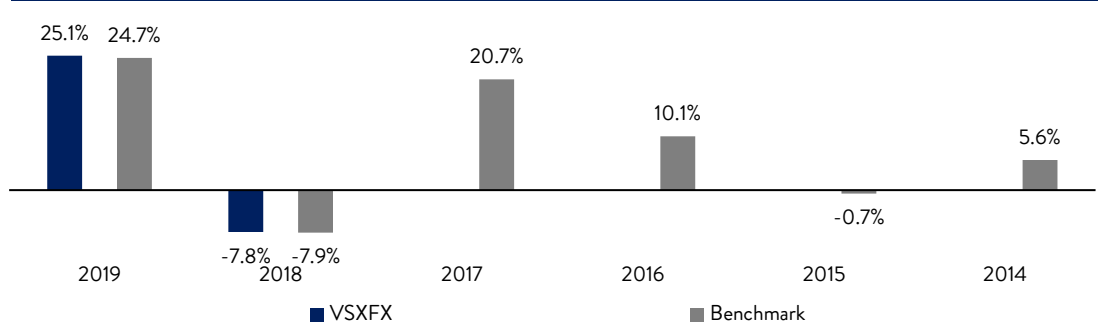
**Trailing Performance**



**Fund Characteristics**

	VSXFX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$47,643	-\$4,001
P/E Ratio (TTM)	19.23	-0.51
P/B Ratio (TTM)	2.28	-0.08
Est. Dividend Yield	2.38%	0.06%

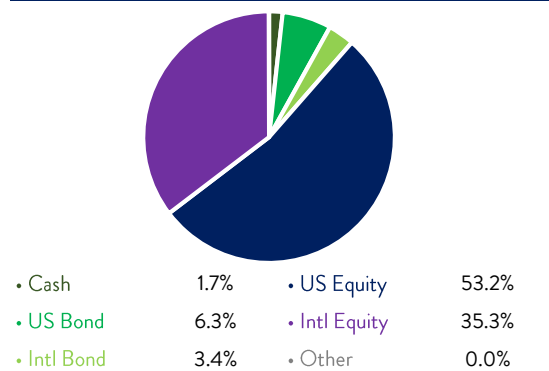
**Annual Performance**



**Sector Allocations**

	VSXFX	Category	+/- Category
Materials	4.5%	4.3%	0.3%
Communication Services	8.6%	8.6%	-0.1%
Consumer Discretionary	10.3%	10.2%	0.2%
Consumer Staples	7.7%	7.5%	0.2%
Healthcare	12.2%	12.5%	-0.4%
Industrials	11.4%	11.2%	0.2%
Real Estate	4.2%	4.7%	-0.6%
Technology	15.5%	15.7%	-0.2%
Energy	5.0%	5.0%	0.0%
Financial Services	17.4%	17.1%	0.3%
Utilities	3.2%	3.2%	0.1%
Other	0.0%	0.0%	0.0%

**Asset Allocation**



**Morningstar Style Box**

	Value	Core	Growth
Large			
Mid			
Small			

Vanguard Instl Trgt Retire 2065 Instl  
VSXFX

Fund Fact Sheet  
Data as of 12/31/2019

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• VSXFX	8.01%	25.15%	25.15%	-	-	-
• Benchmark	7.81%	24.73%	24.73%	11.50%	8.68%	-
+/- Benchmark	0.19%	0.42%	0.42%	-	-	-
Peer Group Rank	43	47	47	-	-	-

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• VSXFX	8.01%	0.31%	3.56%	11.55%
• Benchmark	7.81%	0.45%	3.37%	11.42%
+/- Benchmark	0.19%	-0.15%	0.19%	0.13%

Annual Performance	2019	2018	2017	2016	2015	2014
• VSXFX	25.15%	-7.84%	-	-	-	-
• Benchmark	24.73%	-7.95%	20.75%	10.08%	-0.66%	5.64%
+/- Benchmark	0.42%	0.11%	-	-	-	-
Peer Group Rank	47	27	-	-	-	-

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• VSXFX	-11.78%	3.94%	0.97%	-0.46%
• Benchmark	-12.22%	3.97%	1.77%	-0.90%
+/- Benchmark	0.44%	-0.04%	-0.80%	0.44%

Rolling 5-Year Performance	01/2015 - 12/2019	10/2014 - 09/2019	07/2014 - 06/2019	04/2014 - 03/2019	01/2014 - 12/2018	10/2013 - 09/2018
• VSXFX	-	-	-	-	-	-
• Benchmark	8.68%	7.49%	6.87%	7.10%	5.12%	9.50%
+/- Benchmark	-	-	-	-	-	-
Peer Group Rank	-	-	-	-	-	-

5-Year Quarterly Performance	4Q17	3Q17	2Q17	1Q17
• VSXFX	5.23%	-	-	-
• Benchmark	5.47%	4.51%	3.59%	5.75%
+/- Benchmark	-0.24%	-	-	-

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	-	0.00	-	0.00	-	-
Beta	-	1.00	-	1.00	-	-
Standard Deviation	-	10.50	-	10.60	-	-
Sharpe Ratio	-	0.93	-	0.74	-	-
Information Ratio	-	-	-	-	-	-
Treynor Ratio	-	9.79	-	7.57	-	-
Upside Capture Ratio	-	100.00	-	100.00	-	-
Downside Capture Ratio	-	100.00	-	100.00	-	-

5-Year Quarterly Performance	4Q16	3Q16	2Q16	1Q16
• VSXFX	-	-	-	-
• Benchmark	2.40%	4.36%	1.89%	1.09%
+/- Benchmark	-	-	-	-

5-Year Quarterly Performance	4Q15	3Q15	2Q15	1Q15
• VSXFX	-	-	-	-
• Benchmark	4.47%	-7.58%	-0.06%	2.94%
+/- Benchmark	-	-	-	-

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# Vanguard Instl Trgt Retire 2065 Instl (USD)

**Morningstar Analyst**  
**Rating™**  
**Gold**  
 04-25-2019

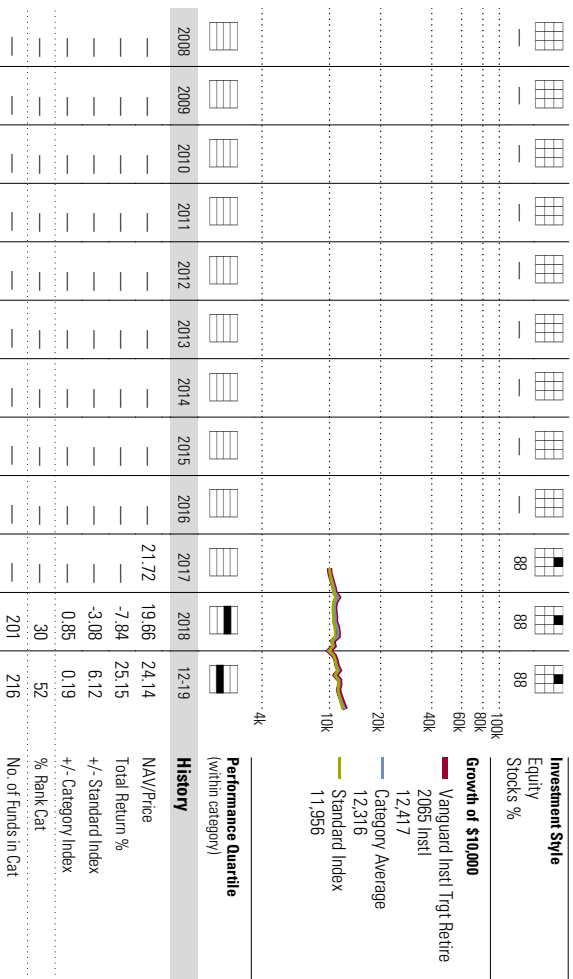
**Standard Index** Morningstar Mod  
 Tgt Risk TR USD  
**Category Index** Morningstar  
 Lifetime Mod 2060  
**Morningstar Cat** US Fund Target-Date  
 2060+  
 TR USD

Performance 12-31-2019					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2017	—	—	—	5.23	—
2018	-0.46	0.97	3.94	-11.78	-7.84
2019	11.55	3.56	0.31	8.01	25.15
Trailing Returns					
	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	25.15	—	—	—	9.89
Std 12-31-2019	25.15	—	—	—	9.89
Total Return	25.15	—	—	—	9.89
+/- Std Index	6.12	—	—	—	—
+/- Cat Index	0.19	—	—	—	—
% Rank Cat	52	—	—	—	—
No. in Cat	216	—	—	—	—
7-day Yield	Subsidized		Unsubsidized		
30-day SEC Yield 12-31-19	—		2.35		

**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.



Year	NAV/Price	Total Return %	+/- Standard Index	+/- Category Index	% Rank Cat	No. of Funds in Cat
2008	—	—	—	—	—	—
2009	—	—	—	—	—	—
2010	—	—	—	—	—	—
2011	—	—	—	—	—	—
2012	—	—	—	—	—	—
2013	—	—	—	—	—	—
2014	—	—	—	—	—	—
2015	—	—	—	—	—	—
2016	—	—	—	—	—	—
2017	21.72	19.66	24.14	7.84	3.08	30
2018	—	—	—	—	—	201
2019	—	—	—	—	—	216

Portfolio Analysis 12-31-2019			
Asset Allocation %	Net %	Long %	Short %
Cash	1.74	1.74	0.00
US Stocks	53.17	53.17	0.00
Non-US Stocks	35.31	35.31	0.00
Bonds	9.69	9.70	0.00
Other/Not Clsfd	0.08	0.08	0.00
Total	100.00	100.00	0.00

Share Cng since 11-2019	Share Amount	Holdings: 10,085 Total Stocks, 8% Turnover Ratio	13,040 Total Fixed-Income, 8% Turnover Ratio	Net Assets %
⊕	3 ml	Vanguard Total Stock Mkt Idx Instl		38.50
⊕	2 ml	Vanguard Total Intl Stock Idx Instl		25.66
⊕	2 ml	Vanguard Total Stock Market Idx I		15.23
⊕	6 ml	Vanguard Total Intl Stock Index Inv		10.14
⊕	5 ml	Vanguard Total Bond Market II Idx I		4.98
⊕	686,605	Vanguard Total Intl Bd Idx Institu		2.13
⊕	2 ml	Vanguard Total Bond Market II Idx		1.97
⊕	407,666	Vanguard Total Intl Bd Idx Adminratm		0.84

Front-End Load %	NA
Deferred Load %	NA
Fund Expenses	0.00
Management Fees %	0.00
12b1 Expense %	NA
<b>Net Expense Ratio %</b>	<b>0.09</b>
<b>Gross Expense Ratio %</b>	<b>0.09</b>

Fixed-Income Style			
Value	Brand	Grwth	Style
Large	Mid	Small	Style
■	■	■	High
■	■	■	Med
■	■	■	Low

Sector Weightings			
Sector	Stocks %	Rel Std Index	Rel Std Index
<b>Cyclical</b>	<b>36.4</b>		<b>0.91</b>
Basic Materials	4.5		0.98
Consumer Cyclical	10.3		1.06
Financial Services	17.4		0.98
Real Estate	4.2		0.52
<b>Sensitive</b>	<b>40.5</b>		<b>1.10</b>
Communication Services	8.6		1.23
Energy	5.0		0.95
Industrials	11.4		1.00
Technology	15.5		1.17
<b>Defensive</b>	<b>23.1</b>		<b>1.00</b>
Consumer Defensive	7.7		0.96
Healthcare	12.2		1.08
Utilities	3.2		0.84

Risk and Return Profile			
Morningstar Rating™	3 Yr	5 Yr	10 Yr
Morningstar Rating™	147 funds	34 funds	10 Yr
Morningstar Risk	—	—	—
Morningstar Return	—	—	—

Credit Quality Breakdown 11-30-2019			
AAA	AA	A	Bond %
AAA	52.19	15.64	52.19
AA	10.46	10.46	10.46
BBB	21.70	21.70	21.70
BB	0.00	0.00	0.00
B	0.00	0.00	0.00
Below B	0.00	0.00	0.00
NR	0.00	0.00	0.00

Regional Exposure			
Region	Stocks %	Rel Std Index	Rel Std Index
Americas	64.0		1.08
Greater Europe	18.3		1.00
Greater Asia	17.7		0.90

Standard Deviation			
3 Yr	5 Yr	10 Yr	Best Fit Index
3 Yr	—	—	—
5 Yr	—	—	—
10 Yr	—	—	—

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

12-Month Yield			
12-Month Yield	Potential Cap Gains Exp	1.92%	2.24%
12-Month Yield	Potential Cap Gains Exp	1.92%	2.24%

**Operations**  
 Family: Vanguard  
 Manager: Multiple  
 Tenure: 2.5 Years  
 Objective: Asset Allocation

Base Currency: USD  
 Ticker: VSNFX  
 ISIN: US9220265721  
 Minimum Initial Purchase: \$100 mil

Purchase Constraints:  
 Incept: 07-12-2017  
 Type: M/F  
 Total Assets: \$307.88 mil

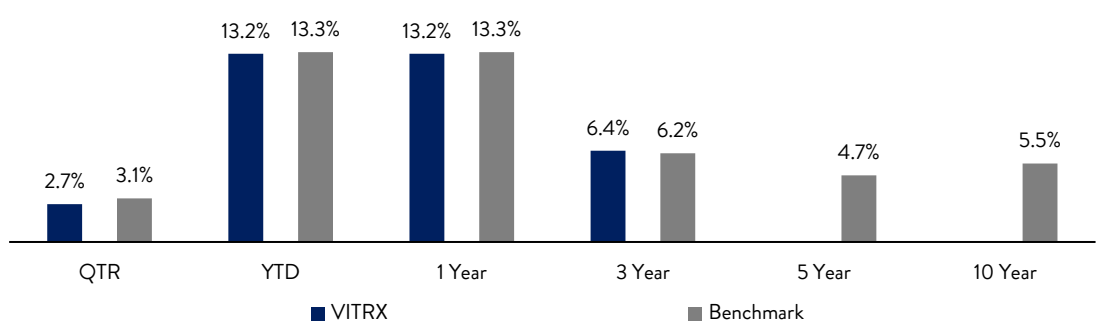
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**Product Details**

Name	Vanguard Instl Trgt Retire Inc Instl
Ticker	VITRX
Expense Ratio	0.090%
Morningstar Category	US Fund Target-Date Retirement
Benchmark	S&P Target Date Retirement Income TR USD
Inception Date	6/26/2015
Longest Tenured Manager	William A. Coleman;Walter Nejman;
Longest Manager Tenure	4.58 Years
Fund Size	\$6,526,708,966

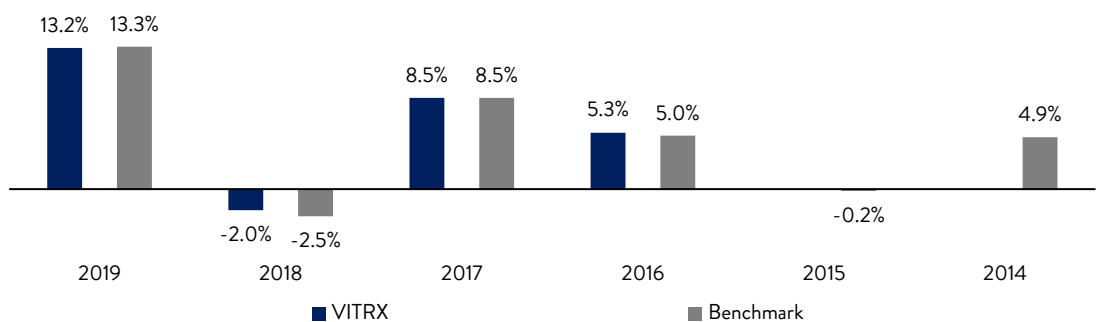
**Trailing Performance**



**Fund Characteristics**

	VITRX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$47,134	-\$5,236
P/E Ratio (TTM)	19.25	-0.39
P/B Ratio (TTM)	2.26	-0.13
Est. Dividend Yield	2.39%	-0.06%

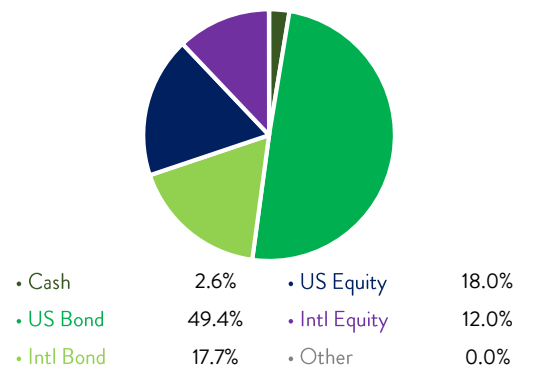
**Annual Performance**



**Sector Allocations**

	VITRX	Category	+/- Category
Materials	4.5%	3.7%	0.7%
Communication Services	8.6%	8.4%	0.2%
Consumer Discretionary	10.3%	9.9%	0.4%
Consumer Staples	7.8%	7.4%	0.3%
Healthcare	12.2%	12.4%	-0.2%
Industrials	11.7%	10.6%	1.1%
Real Estate	4.2%	6.6%	-2.4%
Technology	15.2%	15.5%	-0.3%
Energy	4.9%	5.1%	-0.2%
Financial Services	17.5%	17.2%	0.3%
Utilities	3.2%	3.3%	-0.1%
Other	0.0%	0.0%	0.0%

**Asset Allocation**



**Morningstar Style Box**

	Value	Core	Growth
Large			
Mid			
Small			

Vanguard Instl Trgt Retire Inc Instl  
VITRX

Fund Fact Sheet  
Data as of 12/31/2019

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• VITRX	2.66%	13.20%	13.20%	6.39%	-	-
• Benchmark	3.05%	13.33%	13.33%	6.23%	4.67%	5.50%
+/- Benchmark	-0.39%	-0.13%	-0.13%	0.16%	-	-
Peer Group Rank	39	45	45	28	-	-

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• VITRX	2.66%	1.49%	2.91%	5.58%
• Benchmark	3.05%	1.32%	2.82%	5.57%
+/- Benchmark	-0.39%	0.17%	0.09%	0.00%

Annual Performance	2019	2018	2017	2016	2015	2014
• VITRX	13.20%	-1.98%	8.54%	5.29%	-	-
• Benchmark	13.33%	-2.54%	8.54%	5.01%	-0.18%	4.86%
+/- Benchmark	-0.13%	0.56%	0.00%	0.28%	-	-
Peer Group Rank	45	13	50	35	-	-

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• VITRX	-3.21%	1.34%	0.45%	-0.52%
• Benchmark	-3.92%	1.55%	0.70%	-0.80%
+/- Benchmark	0.72%	-0.21%	-0.25%	0.28%

Rolling 5-Year Performance	01/2015 - 12/2019	10/2014 - 09/2019	07/2014 - 06/2019	04/2014 - 03/2019	01/2014 - 12/2018	10/2013 - 09/2018
• VITRX	-	-	-	-	-	-
• Benchmark	4.67%	4.36%	3.94%	3.89%	3.06%	4.37%
+/- Benchmark	-	-	-	-	-	-
Peer Group Rank	-	-	-	-	-	-

5-Year Quarterly Performance	4Q17	3Q17	2Q17	1Q17
• VITRX	2.05%	1.99%	1.78%	2.47%
• Benchmark	2.24%	2.06%	1.79%	2.20%
+/- Benchmark	-0.19%	-0.07%	-0.01%	0.27%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	0.54	0.00	-	0.00	-	0.00
Beta	0.91	1.00	-	1.00	-	1.00
Standard Deviation	3.58	3.89	-	3.87	-	4.23
Sharpe Ratio	1.27	1.13	-	0.92	-	1.15
Information Ratio	0.26	-	-	-	-	-
Treynor Ratio	5.15	4.52	-	3.57	-	4.91
Upside Capture Ratio	96.15	100.00	-	100.00	-	100.00
Downside Capture Ratio	82.34	100.00	-	100.00	-	100.00

5-Year Quarterly Performance	4Q16	3Q16	2Q16	1Q16
• VITRX	-1.00%	1.91%	2.03%	2.28%
• Benchmark	-0.76%	1.66%	1.86%	2.18%
+/- Benchmark	-0.24%	0.26%	0.16%	0.10%

5-Year Quarterly Performance	4Q15	3Q15	2Q15	1Q15
• VITRX	1.23%	-2.15%	-	-
• Benchmark	1.14%	-2.09%	-0.87%	1.69%
+/- Benchmark	0.09%	-0.05%	-	-

All data and information on this fact sheet is taken from sources believed to be accurate but is not guaranteed to be accurate, complete, or correct.



# Vanguard Instl Trgt Retire Inc Instl (USD)

**Morningstar Analyst Rating™** Overall Morningstar Rating™ Standard Index  
**Gold** 04-25-2019

★★★★★  
 157 US Fund Target-Date Retirement  
 Morningstar Mod US Fund Target-Date Retirement  
 Tgt Risk TR USD Lifetime Mod Inc Retirement TR USD

**Morningstar Cat**

Performance 12-31-2019					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2017	2.47	1.78	1.99	2.05	8.54
2018	-0.52	0.45	1.34	-3.21	-1.98
2019	5.58	2.91	1.49	2.66	13.20
Trailing Returns					
1 Yr	3 Yr	5 Yr	10 Yr	Incept	
Load-adj Mthly	13.20	6.39	—	5.11	
Std 12-31-2019	13.20	—	—	5.11	
Total Return	13.20	6.39	—	5.11	
+/- Std Index	-5.82	-2.74	—	—	
+/- Cat Index	-0.07	0.06	—	—	
% Rank Cat	45	33	—	—	
No. in Cat	183	157	—	—	
7-day Yield	Subsidized		Unsubsidized		
30-day SEC Yield 12-31-19	2.51		2.51		

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

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

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

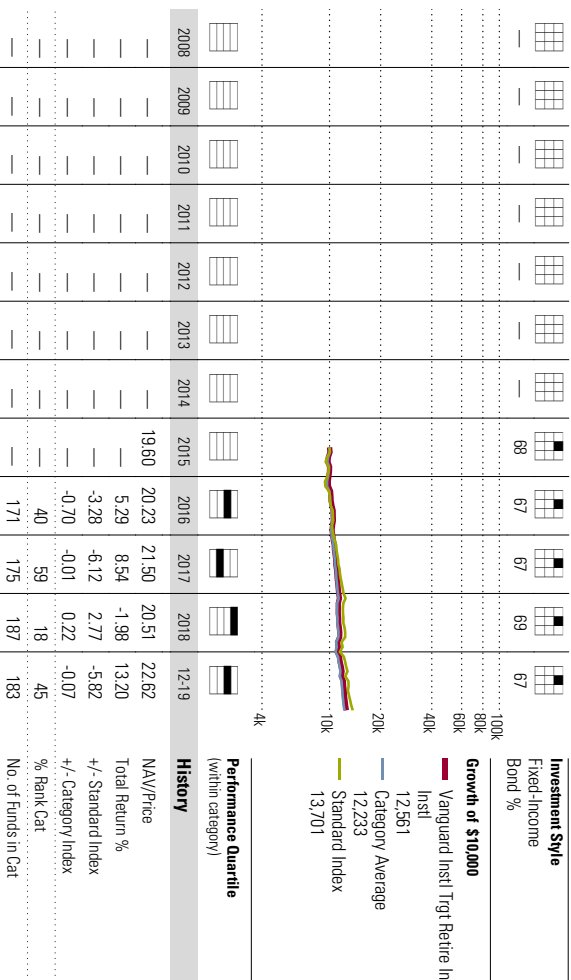
Sales Charges	NA
<b>Front-End Load %</b>	<b>NA</b>
<b>Deferred Load %</b>	<b>NA</b>
Fund Expenses	
Management Fees %	0.00
12b1 Expense %	NA
<b>Net Expense Ratio %</b>	<b>0.09</b>
<b>Gross Expense Ratio %</b>	<b>0.09</b>
Risk and Return Profile	
Morningstar Rating™	3 Yr 5 Yr 10 Yr 157 funds 131 funds 88 funds
Morningstar Risk	4★ Avg —
Morningstar Return	Avg — —
Standard Deviation	3 Yr 5 Yr 10 Yr 3.58 — —
Mean	6.39 — —
Sharpe Ratio	1.27 — —
MPT Statistics	
Standard Index	Best Fit Index Morningstar
Lifetime Mod 2015 TR USD	NR

Alpha	0.91
Beta	0.50
R-Squared	89.97
12-Month Yield	2.53%
Potential Cap Gains Exp	5.54%

**Operations**  
 Family: Vanguard  
 Manager: Multiple  
 Tenure: 4.6 Years  
 Objective: Asset Allocation

Base Currency: USD  
 Ticker: VTRX  
 ISIN: US92202E9986  
 Minimum Initial Purchase: \$100 mil

Purchase Constraints: —  
 Incept: 06-26-2015  
 Type: MF  
 Total Assets: \$6,526.71 mil



Portfolio Analysis 12-31-2019				
Asset Allocation %	Net %	Long %	Short %	Share Clng
Cash	2.60	2.60	0.00	11-2019
US Stocks	18.03	18.03	0.00	Amount: 9,279 Total Stocks: 16,656 Total Fixed-Income, 10% Turnover Ratio
Non-US Stocks	12.04	12.04	0.00	219 mil Vanguard Total Bond Market II ldx
Bonds	67.04	67.05	0.01	15 mil Vanguard Total Stock Market ldx I
Other/Not Clsfd	0.29	0.29	0.00	44 mil Vanguard Srt-Term Infl-Prot Sec I
Total	100.00	100.01	0.01	45 mil Vanguard Total Intl Bdl ldx Adminratm
				45 mil Vanguard Total Intl Stock Index Inv

Equity Style	Portfolio Statistics
Value Blend Growth	P/E Ratio TTM 19.2
Large Mid Small	P/C Ratio TTM 11.8
	P/B Ratio TTM 2.3
	Geo Avg Mkt Cap 47134
	1.27
	0.90

Fixed-Income Style	Portfolio Statistics
Lat Med Ext	Avg Eff Maturity 7.29
High Med Low	Avg Eff Duration 5.82
	Avg Wtd Coupon 2.28
	Avg Wtd Price 107.45

Credit Quality Breakdown	11-30-2019
AAA	Bond % 63.60
AA	7.95
A	11.91
BBB	16.54
BB	0.00
B	0.00
Below B	0.00
NR	0.00

Regional Exposure	Stocks %	Rel Std Index
Americas	63.9	1.03
Greater Europe	18.3	1.00
Greater Asia	17.8	0.91

NAV/Price	22.62
Total Return %	13.20
+/- Standard Index	-5.82
+/- Category Index	-0.07
% Rank Cat	45
No. of Funds in Cat	183

Stocks %	36.5
Rel Std Index	0.91
Cyclical	4.5
Basic Materials	0.97
Consumer Cyclical	10.3
Financial Services	17.5
Real Estate	4.2
Sensitive	40.3
Communication Services	8.6
Energy	4.9
Industrials	11.7
Technology	15.2
Defensive	23.2
Consumer Defensive	7.8
Healthcare	12.2
Utilities	3.2

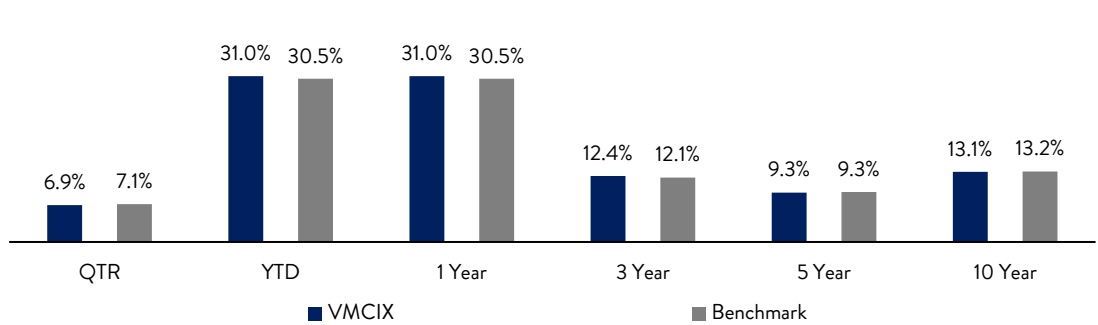
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**Product Details**

Name	Vanguard Mid Cap Index Institutional
Ticker	VMCIX
Expense Ratio	0.040%
Morningstar Category	US Fund Mid-Cap Blend
Benchmark	Russell Mid Cap TR USD
Inception Date	5/21/1998
Longest Tenured Manager	Donald M. Butler
Longest Manager Tenure	21.67 Years
Fund Size	\$111,567,412,175

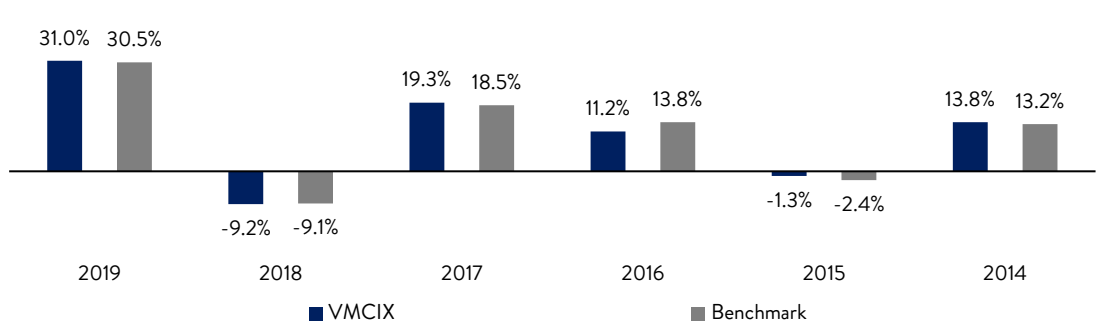
**Trailing Performance**



**Fund Characteristics**

VMCIX	+/- Category	
% Assets in Top 10 Holdings	6.63%	-17.18%
Average Market Cap (mil)	\$16,708	\$7,942
P/E Ratio (TTM)	22.42	0.32
P/B Ratio (TTM)	2.82	0.48
Est. Dividend Yield	1.63%	0.04%

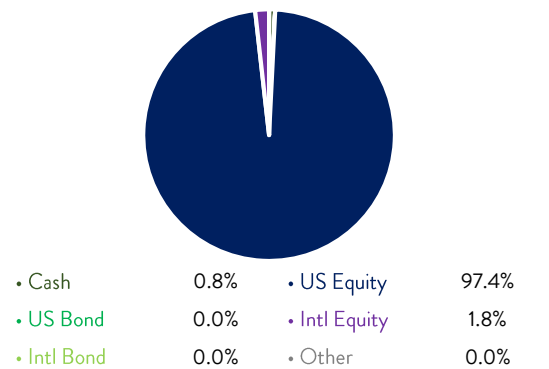
**Annual Performance**



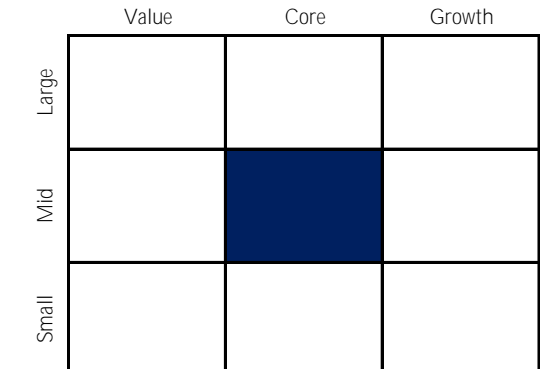
**Sector Allocations**

VMCIX	Category	+/- Category	
Materials	4.6%	4.5%	0.1%
Communication Services	5.5%	3.6%	1.9%
Consumer Discretionary	12.7%	12.7%	-0.1%
Consumer Staples	4.0%	4.2%	-0.1%
Healthcare	11.3%	10.7%	0.6%
Industrials	11.8%	15.9%	-4.1%
Real Estate	9.4%	9.5%	-0.1%
Technology	17.1%	15.4%	1.8%
Energy	4.5%	3.1%	1.5%
Financial Services	12.4%	16.1%	-3.7%
Utilities	6.6%	4.3%	2.3%
Other	0.0%	0.0%	0.0%

**Asset Allocation**



**Morningstar Style Box**



Vanguard Mid Cap Index Institutional  
VMCIX

Fund Fact Sheet  
Data as of 12/31/2019

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• VMCIX	6.87%	31.04%	31.04%	12.37%	9.26%	13.09%
• Benchmark	7.06%	30.54%	30.54%	12.06%	9.33%	13.19%
+/- Benchmark	-0.19%	0.50%	0.50%	0.31%	-0.07%	-0.10%
Peer Group Rank	53	17	17	11	14	5

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• VMCIX	6.87%	0.60%	4.36%	16.78%
• Benchmark	7.06%	0.48%	4.13%	16.54%
+/- Benchmark	-0.19%	0.12%	0.24%	0.25%

Annual Performance	2019	2018	2017	2016	2015	2014
• VMCIX	31.04%	-9.24%	19.29%	11.23%	-1.33%	13.78%
• Benchmark	30.54%	-9.06%	18.52%	13.80%	-2.44%	13.22%
+/- Benchmark	0.50%	-0.18%	0.78%	-2.57%	1.11%	0.57%
Peer Group Rank	17	27	20	72	18	9

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• VMCIX	-15.47%	4.68%	2.57%	0.00%
• Benchmark	-15.37%	5.00%	2.82%	-0.46%
+/- Benchmark	-0.09%	-0.32%	-0.25%	0.46%

Rolling 5-Year Performance	01/2015 - 12/2019	10/2014 - 09/2019	07/2014 - 06/2019	04/2014 - 03/2019	01/2014 - 12/2018	10/2013 - 09/2018
• VMCIX	9.26%	9.21%	8.83%	8.86%	6.22%	11.68%
• Benchmark	9.33%	9.10%	8.63%	8.81%	6.26%	11.65%
+/- Benchmark	-0.07%	0.11%	0.20%	0.05%	-0.04%	0.03%
Peer Group Rank	14	11	9	8	11	14

5-Year Quarterly Performance	4Q17	3Q17	2Q17	1Q17
• VMCIX	5.67%	3.44%	2.78%	6.19%
• Benchmark	6.07%	3.47%	2.70%	5.15%
+/- Benchmark	-0.40%	-0.04%	0.08%	1.04%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	0.36	0.00	-0.02	0.00	-0.12	0.00
Beta	0.99	1.00	1.00	1.00	1.00	1.00
Standard Deviation	13.00	13.08	12.75	12.76	13.92	13.84
Sharpe Ratio	0.83	0.81	0.67	0.68	0.91	0.93
Information Ratio	0.32	-	-0.06	-	-0.10	-
Treynor Ratio	10.74	10.34	8.20	8.23	12.46	12.60
Upside Capture Ratio	100.01	100.00	98.83	100.00	99.97	100.00
Downside Capture Ratio	97.63	100.00	98.56	100.00	100.62	100.00

5-Year Quarterly Performance	4Q16	3Q16	2Q16	1Q16
• VMCIX	2.13%	5.19%	2.32%	1.19%
• Benchmark	3.21%	4.52%	3.18%	2.24%
+/- Benchmark	-1.07%	0.67%	-0.86%	-1.06%

5-Year Quarterly Performance	4Q15	3Q15	2Q15	1Q15
• VMCIX	3.44%	-7.45%	-1.16%	4.28%
• Benchmark	3.62%	-8.01%	-1.54%	3.95%
+/- Benchmark	-0.18%	0.56%	0.37%	0.33%

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# Vanguard Mid Cap Index Institutional (USD)

**Morningstar Analyst Rating™ Overall Morningstar Rating™ Standard Index** **Category Index** **Morningstar Cat**  
**Gold** **★★★★★** **361 US Fund Mid-Cap Blend** **SP500 TR USD** **Russell Mid Cap TR** **US Fund Mid-Cap Blend**  
 08-23-2019

Performance 12-31-2019					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2017	6.19	2.78	3.44	5.67	19.29
2018	0.00	2.57	4.68	-15.47	-9.24
2019	16.78	4.36	0.60	6.87	31.04
Trailing Returns					
	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	31.04	12.37	9.26	13.09	10.04
Std 12-31-2019	31.04	—	9.26	13.09	10.04
Total Return	31.04	12.37	9.26	13.09	10.04
+/- Std Index	-0.44	-2.90	-2.44	-0.47	—
+/- Cat Index	0.50	0.31	-0.07	-0.10	—
% Rank Cat	13	11	17	7	—
No. in Cat	404	361	292	220	—

7-day Yield Subsidized Unsubsidized  
 30-day SEC Yield 01-24-20 1.55 1.55

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

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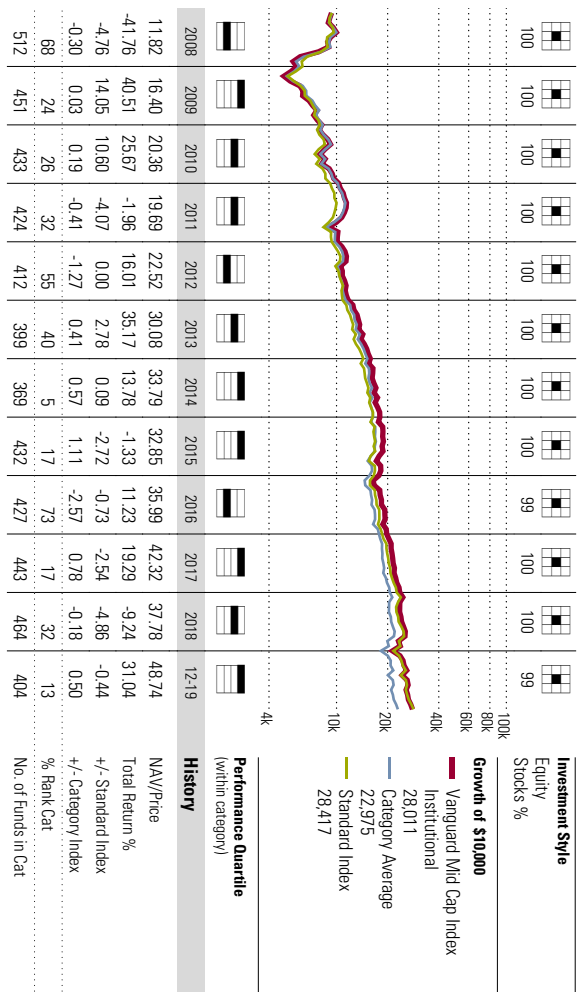
Sales Charges	NA
<b>Front-End Load %</b>	<b>NA</b>
<b>Deferred Load %</b>	<b>NA</b>
Fund Expenses	
Management Fees %	0.04
12b1 Expense %	NA
<b>Net Expense Ratio %</b>	<b>0.04</b>
<b>Gross Expense Ratio %</b>	<b>0.04</b>
Risk and Return Profile	
Morningstar Rating™	3 Yr 4★ 5 Yr 4★ 10 Yr 5★
Morningstar Risk	Avg -Avg -Avg
Morningstar Return	+Avg +Avg High
Standard Deviation	3 Yr 13.00 5 Yr 12.75 10 Yr 13.92
Mean	12.37 9.26 13.09
Sharpe Ratio	0.83 0.67 0.91

MFT Statistics	Standard Index	Best Fit Index
Alpha	-3.04	Morningstar US Mid Cap TR USD
Beta	1.04	-0.21
R-Squared	94.40	99.52
12-Month Yield	1.48%	1.48%
Potential Cap Gains Exp	25.59%	25.59%

**Operations**  
 Family: Vanguard  
 Manager: Multiple  
 Tenure: 21.7 Years  
 Objective: Growth

Base Currency: USD  
 Ticker: VMCIK  
 SIN: US9229088359  
 Minimum Initial Purchase: \$5 mil

Purchase Constraints:  
 Incept: 05-21-1998  
 Type: MF  
 Total Assets: \$111,567.41 mil



Portfolio Analysis 12-31-2019		
Asset Allocation %	Net %	Long %
Cash	0.77	0.77
US Stocks	97.44	97.44
Non-US Stocks	1.78	1.78
Bonds	0.01	0.01
Other/Not Cstfd	0.00	0.00
Total	100.00	100.00

Share Cng	Share Holdings	Net Assets %
11-2019	339 Total Stocks - 11 Total Fixed-Income, 16% Turnover Ratio	
⊕	21 mil Newmont Goldcorp Corp	0.80
⊕	7 mil Amphenol Corp Class A	0.72
⊕	10 mil ONEOK Inc	0.70
⊕	8 mil WEC Energy Group Inc	0.65
⊕	10 mil IHS Markt Ltd	0.64
⊕	1 mil TransDigm Group Inc	0.64
⊖	4 mil KLA Corp	0.63
⊕	4 mil Motorola Solutions Inc	0.62
⊕	8 mil Eversource Energy	0.62
⊕	3 mil SBA Communications Corp	0.61
⊕	3 mil Lululemon Athletica Inc	0.61
⊕	14 mil FirstEnergy Corp	0.59
⊕	3 mil Willis Towers Watson PLC	0.58
⊕	14 mil Advanced Micro Devices Inc	0.57
⊖	4 mil IDVA Holdings Inc	0.57

Equity Style	Portfolio Statistics	Port Avg	Rel Index	Rel Cat
Value	P/E Ratio TTM	22.4	0.99	1.01
Brand	P/C Ratio TTM	13.4	0.93	1.02
Growth	P/B Ratio TTM	2.8	0.83	1.21
Large	Geo Avg Mkt Cap	16708	0.13	1.91
Mid	Small			
Med	High			
Low	Low			

Fixed-Income Style	Ang Eff Maturity	Ang Eff Duration	Ang Wtd Coupon	Ang Wtd Price
AAA	—	—	—	—
AA	—	—	—	—
A	—	—	—	—
BBB	—	—	—	—
BB	—	—	—	—
B	—	—	—	—
Below B	—	—	—	—
NR	—	—	—	—

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

Regional Exposure	Stocks %	Rel Std Index
Americas	98.8	1.00
Greater Europe	0.5	0.61
Greater Asia	0.7	13.73

Sector Weightings	Stocks %	Rel Std Index
⊕ Cyclical	<b>39.1</b>	<b>1.27</b>
Basic Materials	4.6	2.02
Consumer Cyclical	12.7	1.32
Financial Services	12.4	0.78
Real Estate	9.4	3.21
⊖ Sensitive	<b>39.0</b>	<b>0.88</b>
Communication Services	5.5	0.33
Energy	4.5	1.04
Industrials	11.8	1.24
Technology	17.1	0.87
⊕ Defensive	<b>21.9</b>	<b>0.87</b>
Consumer Defensive	4.0	0.54
Healthcare	11.3	0.78
Utilities	6.6	1.99

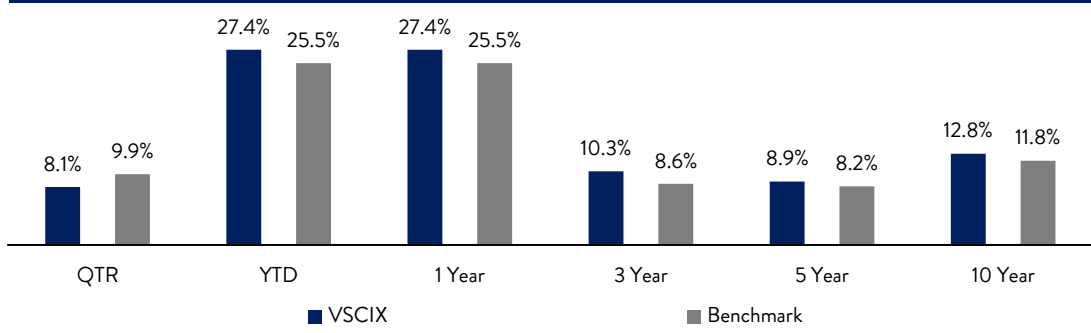
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**Product Details**

Name	Vanguard Small Cap Index I
Ticker	VSCIX
Expense Ratio	0.040%
Morningstar Category	US Fund Small Blend
Benchmark	Russell 2000 TR USD
Inception Date	7/7/1997
Longest Tenured Manager	Gerard C. O'Reilly; William A. Coleman;
Longest Manager Tenure	3.75 Years
Fund Size	\$96,752,368,291

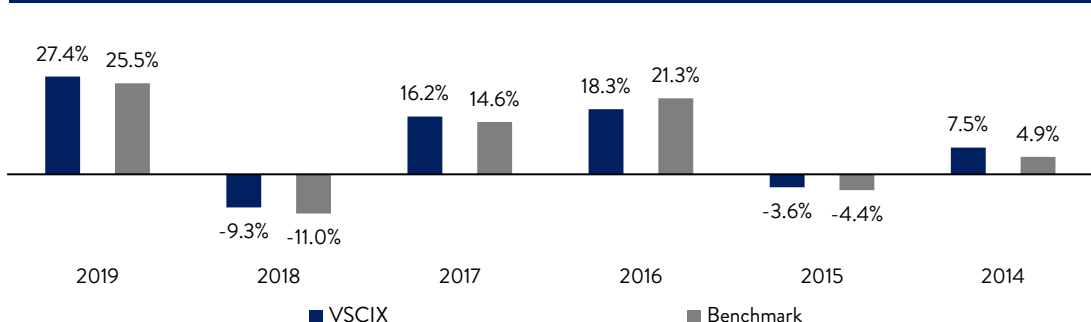
**Trailing Performance**



**Fund Characteristics**

	VSCIX	+/- Category
% Assets in Top 10 Holdings	3.22%	-15.54%
Average Market Cap (mil)	\$4,384	\$1,085
P/E Ratio (TTM)	19.50	-0.34
P/B Ratio (TTM)	2.26	0.00
Est. Dividend Yield	1.71%	0.46%

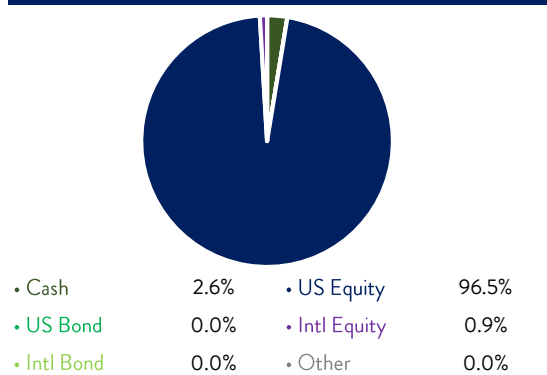
**Annual Performance**



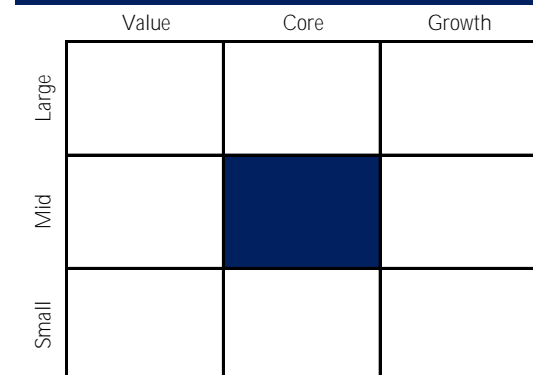
**Sector Allocations**

	VSCIX	Category	+/- Category
Materials	4.1%	4.6%	-0.5%
Communication Services	3.0%	2.0%	1.0%
Consumer Discretionary	11.6%	10.1%	1.5%
Consumer Staples	3.6%	4.8%	-1.2%
Healthcare	12.6%	12.5%	0.1%
Industrials	15.9%	19.6%	-3.7%
Real Estate	11.7%	8.4%	3.2%
Technology	17.4%	13.4%	4.1%
Energy	2.8%	3.2%	-0.4%
Financial Services	14.1%	18.2%	-4.1%
Utilities	3.2%	3.3%	0.0%
Other	0.0%	0.0%	0.0%

**Asset Allocation**



**Morningstar Style Box**



Vanguard Small Cap Index I  
VSCIX

Fund Fact Sheet  
Data as of 12/31/2019

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• VSCIX	8.14%	27.40%	27.40%	10.33%	8.90%	12.83%
• Benchmark	9.94%	25.52%	25.52%	8.59%	8.23%	11.83%
+/- Benchmark	-1.80%	1.88%	1.88%	1.74%	0.67%	1.00%
Peer Group Rank	50	18	18	7	18	10

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• VSCIX	8.14%	-1.45%	2.87%	16.20%
• Benchmark	9.94%	-2.40%	2.10%	14.58%
+/- Benchmark	-1.80%	0.95%	0.77%	1.62%

Annual Performance	2019	2018	2017	2016	2015	2014
• VSCIX	27.40%	-9.32%	16.25%	18.32%	-3.63%	7.53%
• Benchmark	25.52%	-11.01%	14.65%	21.31%	-4.41%	4.89%
+/- Benchmark	1.88%	1.70%	1.60%	-2.99%	0.78%	2.64%
Peer Group Rank	18	21	13	77	44	19

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• VSCIX	-18.34%	4.78%	6.21%	-0.21%
• Benchmark	-20.20%	3.58%	7.75%	-0.08%
+/- Benchmark	1.86%	1.20%	-1.55%	-0.12%

Rolling 5-Year Performance	01/2015 - 12/2019	10/2014 - 09/2019	07/2014 - 06/2019	04/2014 - 03/2019	01/2014 - 12/2018	10/2013 - 09/2018
• VSCIX	8.90%	8.63%	7.73%	7.92%	5.26%	11.49%
• Benchmark	8.23%	8.19%	7.06%	7.05%	4.41%	11.07%
+/- Benchmark	0.67%	0.44%	0.66%	0.86%	0.85%	0.42%
Peer Group Rank	18	25	19	14	18	24

5-Year Quarterly Performance	4Q17	3Q17	2Q17	1Q17
• VSCIX	5.10%	4.59%	1.94%	3.74%
• Benchmark	3.34%	5.67%	2.46%	2.47%
+/- Benchmark	1.76%	-1.08%	-0.52%	1.27%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	2.01	0.00	1.21	0.00	1.57	0.00
Beta	0.93	1.00	0.90	1.00	0.93	1.00
Standard Deviation	14.94	15.93	14.65	16.04	15.96	17.00
Sharpe Ratio	0.62	0.49	0.58	0.51	0.80	0.71
Information Ratio	0.71	-	0.24	-	0.40	-
Treynor Ratio	9.29	6.88	8.65	7.12	13.16	11.24
Upside Capture Ratio	96.61	100.00	90.41	100.00	94.49	100.00
Downside Capture Ratio	85.69	100.00	83.07	100.00	86.55	100.00

5-Year Quarterly Performance	4Q16	3Q16	2Q16	1Q16
• VSCIX	6.13%	6.15%	3.98%	1.00%
• Benchmark	8.83%	9.05%	3.79%	-1.52%
+/- Benchmark	-2.71%	-2.89%	0.19%	2.52%

5-Year Quarterly Performance	4Q15	3Q15	2Q15	1Q15
• VSCIX	3.12%	-10.32%	-0.56%	4.81%
• Benchmark	3.59%	-11.92%	0.42%	4.32%
+/- Benchmark	-0.48%	1.59%	-0.98%	0.49%

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# Vanguard Small Cap Index I (USD)

**Morningstar Analyst Rating™ Overall Morningstar Rating™ Standard Index**  
 Gold  
 07-10-2019

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

Performance 12-31-2019					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2017	3.74	1.94	4.59	5.10	16.25
2018	-0.21	6.21	4.78	-18.34	-9.32
2019	16.20	2.87	-1.45	8.14	27.40
Trailing Returns					
	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	27.40	10.33	8.90	12.83	9.02
Std 12-31-2019	27.40	—	8.90	12.83	9.02
Total Return	27.40	10.33	8.90	12.83	9.02
+/- Std Index	-4.09	-4.94	-2.80	-0.73	—
+/- Cat Index	1.88	1.74	0.67	1.00	—
% Rank Cat	18	7	17	9	—
No. in Cat	702	630	507	367	—

7-day Yield		
30-day SEC Yield 01-24-20	Subsidized	Unsubsidized
1.56	—	1.56

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

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.

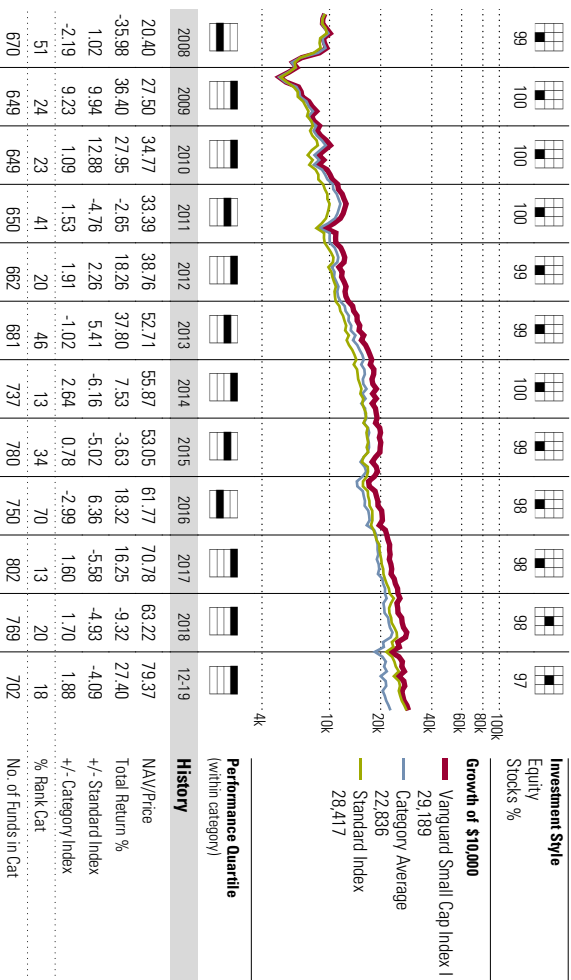
Sales Charges	
Front-End Load %	NA
Deferred Load %	NA
Fund Expenses	
Management Fees %	0.04
12b1 Expense %	NA
Net Expense Ratio %	0.04
Gross Expense Ratio %	0.04
Risk and Return Profile	
Morningstar Rating™	3 Yr 5Yr 10 Yr
630 funds 507 funds 367 funds	
Morningstar Risk	5★ 4★ 5★
-Avg -Avg -Avg	
Morningstar Return	High +Avg High

MPT Statistics		Standard Index		Best Fit Index Morningstar US Small Cap TR USD	
Alpha	-5.90	1.14	2.06	0.95	2.05
Beta	0.95	1.14	0.95	0.95	0.95
R-Squared	85.29	85.29	85.29	85.29	85.29
12-Month Yield	1.40%	1.40%	1.40%	1.40%	1.40%
Potential Cap Gains Exp	24.09%	24.09%	24.09%	24.09%	24.09%

**Operations**  
 Family: Vanguard  
 Manager: Multiple  
 Tenure: 3.8 Years  
 Objective: Small Company

Base Currency: USD  
 Ticker: VSCII  
 ISIN: US9229088763  
 Minimum Initial Purchase: \$5 mil

Purchase Constraints: —  
 Incept: 07-07-1997  
 Type: MF  
 Total Assets: \$96,752.37 mil



Portfolio Analysis 12-31-2019										
Asset Allocation %					Net %					
Cash	20.40	27.50	34.77	33.39	38.76	52.71	55.87	53.05	61.77	
US Stocks	-35.98	36.40	27.95	-2.65	18.26	37.80	7.53	-3.63	18.32	
Non-US Stocks	1.02	9.94	12.88	-4.76	2.26	5.41	-6.16	-5.02	6.36	
Bonds	-2.19	9.23	1.09	1.53	1.91	-1.02	2.64	-2.99	1.60	
Other/Not Cstfd	51	24	23	41	20	46	13	34	70	
Total	67.0	64.9	64.9	65.0	66.2	68.1	73.7	78.0	75.0	
Equity Style	Value Blend Growth		Port		Avg Index		Rel Cat		Rel	
	Large	Mid	Small	19.5	0.86	0.98	4 mi	Equity Lifestyle Properties Inc	0.32	0.31
	Large	Mid	Small	11.4	0.79	0.93	978,375	Tyler Technologies Inc	0.30	0.30
	Large	Mid	Small	2.3	0.66	1.00	2 mi	Allegion PLC	0.29	0.29
	Large	Mid	Small	4.384	0.04	1.33	4 mi	Teradyne Inc	0.29	0.29
	Large	Mid	Small	2 mi	West Pharmaceutical Services Inc	0.28	2 mi	EPAM Systems Inc	0.28	0.28
	Large	Mid	Small	1 mi	Medical Properties Trust Inc	0.28	13 mi	PerkinElmer Inc	0.27	0.27
	Large	Mid	Small	2 mi	Insulet Corp	0.27	2 mi	Insulet Corp	0.27	0.27

Fixed-Income Style		Credit Quality Breakdown		Bond %	
AAA	—	AAA	—	AAA	—
AA	—	AA	—	AA	—
A	—	A	—	A	—
BBB	—	BBB	—	BBB	—
BB	—	BB	—	BB	—
B	—	B	—	B	—
Below B	—	Below B	—	Below B	—
NR	—	NR	—	NR	—

Regional Exposure		Sector Weightings	
Americas	99.4	Cyclical	41.4
Greater Europe	0.3	Basic Materials	4.1
Greater Asia	0.4	Consumer Cyclical	11.6
		Financial Services	14.1
		Real Estate	11.7
		Sensitive	39.1
		Communication Services	3.0
		Energy	2.8
		Industrials	15.9
		Technology	17.4
		Defensive	19.4
		Consumer Defensive	3.6
		Healthcare	12.6
		Utilities	3.2

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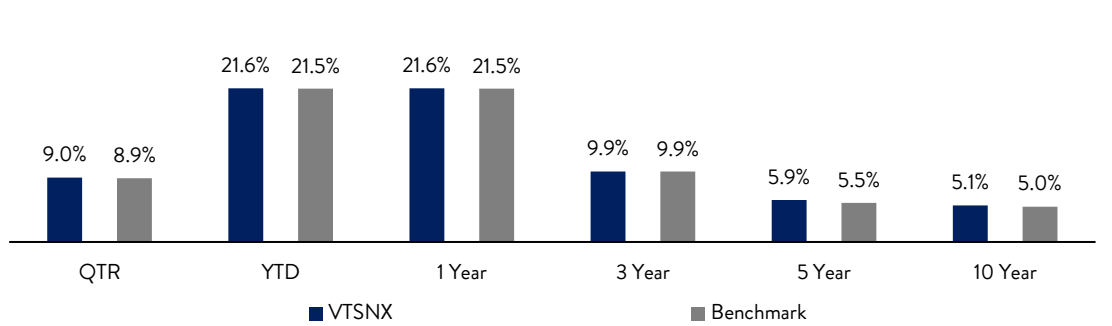
Vanguard Total Intl Stock Index I  
VTSNX

Fund Fact Sheet  
Data as of 12/31/2019

**Product Details**

Name	Vanguard Total Intl Stock Index I
Ticker	VTSNX
Expense Ratio	0.080%
Morningstar Category	US Fund Foreign Large Blend
Benchmark	MSCI ACWI Ex USA NR USD
Inception Date	11/29/2010
Longest Tenured Manager	Michael Perre
Longest Manager Tenure	11.42 Years
Fund Size	\$420,632,047,222

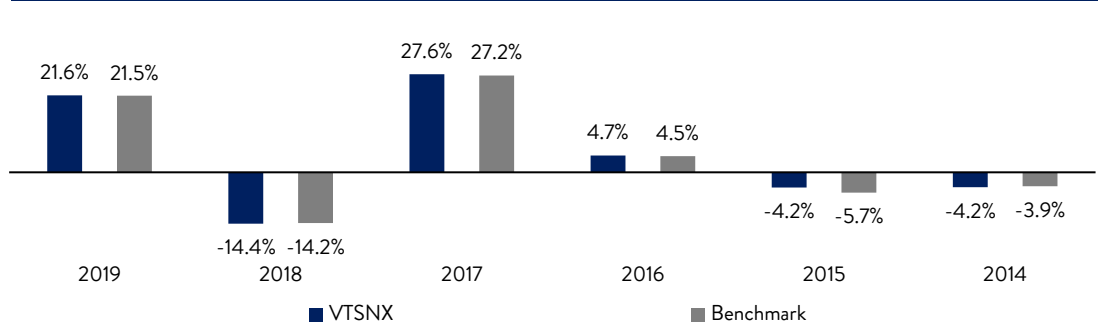
**Trailing Performance**



**Fund Characteristics**

	VTSNX	+/- Category
% Assets in Top 10 Holdings	8.90%	-5.77%
Average Market Cap (mil)	\$24,927	-\$17,406
P/E Ratio (TTM)	15.94	-0.81
P/B Ratio (TTM)	1.61	-0.12
Est. Dividend Yield	3.27%	0.02%

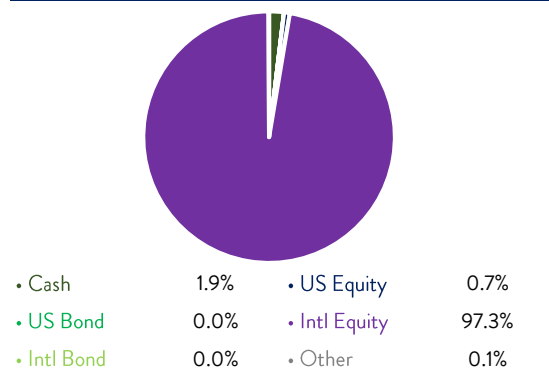
**Annual Performance**



**Sector Allocations**

	VTSNX	Category	+/- Category
Materials	7.6%	7.0%	0.7%
Communication Services	7.1%	7.2%	-0.1%
Consumer Discretionary	11.0%	10.4%	0.6%
Consumer Staples	8.9%	10.5%	-1.6%
Healthcare	9.0%	11.0%	-2.1%
Industrials	13.2%	15.0%	-1.7%
Real Estate	4.0%	2.8%	1.2%
Technology	9.6%	8.7%	0.8%
Energy	6.4%	5.4%	1.0%
Financial Services	20.0%	19.1%	0.9%
Utilities	3.3%	2.9%	0.3%
Other	0.0%	0.0%	0.0%

**Asset Allocation**



**Morningstar Style Box**

	Value	Core	Growth
Large			
Mid			
Small			



Vanguard Total Intl Stock Index I  
VTSNX

Fund Fact Sheet  
Data as of 12/31/2019

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• VTSNX	9.05%	21.56%	21.56%	9.90%	5.88%	5.13%
• Benchmark	8.92%	21.51%	21.51%	9.87%	5.51%	4.97%
+/- Benchmark	0.13%	0.04%	0.04%	0.03%	0.38%	0.17%
Peer Group Rank	38	56	56	28	27	56

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• VTSNX	9.05%	-1.61%	2.75%	10.26%
• Benchmark	8.92%	-1.80%	2.98%	10.31%
+/- Benchmark	0.13%	0.19%	-0.23%	-0.05%

Annual Performance	2019	2018	2017	2016	2015	2014
• VTSNX	21.56%	-14.39%	27.55%	4.70%	-4.24%	-4.15%
• Benchmark	21.51%	-14.20%	27.19%	4.50%	-5.66%	-3.87%
+/- Benchmark	0.04%	-0.20%	0.36%	0.20%	1.42%	-0.29%
Peer Group Rank	56	41	26	13	82	32

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• VTSNX	-11.66%	0.54%	-3.17%	-0.45%
• Benchmark	-11.46%	0.71%	-2.61%	-1.18%
+/- Benchmark	-0.20%	-0.16%	-0.56%	0.73%

Rolling 5-Year Performance	01/2015 - 12/2019	10/2014 - 09/2019	07/2014 - 06/2019	04/2014 - 03/2019	01/2014 - 12/2018	10/2013 - 09/2018
• VTSNX	5.88%	3.17%	2.34%	2.79%	0.97%	4.49%
• Benchmark	5.51%	2.90%	2.16%	2.57%	0.68%	4.12%
+/- Benchmark	0.38%	0.27%	0.18%	0.23%	0.29%	0.37%
Peer Group Rank	27	37	34	23	21	36

5-Year Quarterly Performance	4Q17	3Q17	2Q17	1Q17
• VTSNX	4.87%	5.97%	5.83%	8.46%
• Benchmark	5.00%	6.16%	5.78%	7.86%
+/- Benchmark	-0.13%	-0.20%	0.05%	0.60%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	0.03	0.00	0.50	0.00	0.18	0.00
Beta	1.00	1.00	0.96	1.00	1.00	1.00
Standard Deviation	11.58	11.50	12.15	12.53	14.71	14.59
Sharpe Ratio	0.72	0.73	0.44	0.40	0.37	0.37
Information Ratio	0.03	-	0.24	-	0.09	-
Treynor Ratio	8.18	8.15	4.97	4.40	4.54	4.38
Upside Capture Ratio	99.80	100.00	97.89	100.00	100.43	100.00
Downside Capture Ratio	99.39	100.00	94.84	100.00	99.61	100.00

5-Year Quarterly Performance	4Q16	3Q16	2Q16	1Q16
• VTSNX	-1.92%	6.66%	0.24%	-0.16%
• Benchmark	-1.25%	6.91%	-0.64%	-0.38%
+/- Benchmark	-0.66%	-0.25%	0.88%	0.22%

5-Year Quarterly Performance	4Q15	3Q15	2Q15	1Q15
• VTSNX	2.75%	-11.59%	1.30%	4.07%
• Benchmark	3.24%	-12.17%	0.53%	3.49%
+/- Benchmark	-0.50%	0.58%	0.78%	0.58%

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# Vanguard Total Intl Stock Index I (USD)

**Overall Morningstar Rating™ Standard Index** **★★★★★**  
 628 US Fund Foreign Large Blend  
 MSCI ACWI EX USA NR USD  
 MSCI ACWI EX USA NR USD  
 US Fund Foreign Large Blend

Performance 12-31-2019					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2017	8.46	5.83	5.97	4.87	27.55
2018	-0.45	-3.17	0.54	-11.66	-14.39
2019	10.26	2.75	-1.61	9.05	21.56
Trailing Returns					
	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	21.56	9.90	5.88	—	5.24
Std 12-31-2019	21.56	—	5.88	—	5.24
Total Return	21.56	9.90	5.88	5.13	5.24
+/- Std Index	0.05	0.03	0.38	0.17	—
+/- Cat Index	0.05	0.03	0.38	0.17	—
% Rank Cat	51	30	29	53	—
No. in Cat	732	628	495	372	—

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  
 12b1 Expense % NA  
**Net Expense Ratio %** 0.08  
**Gross Expense Ratio %** 0.08

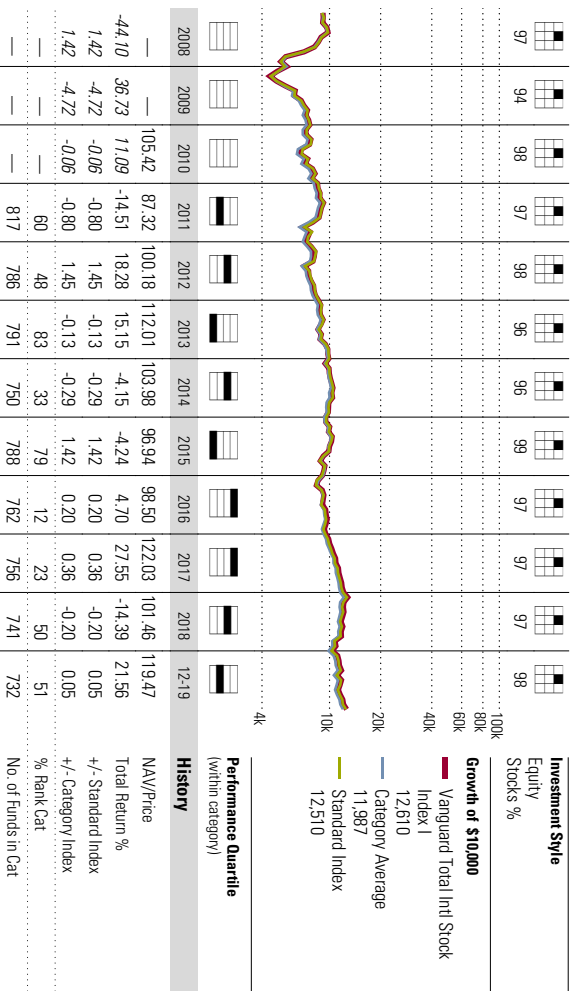
## Risk and Return Profile

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

Standard Deviation 11.58 12.15 14.71  
 Mean 9.90 5.88 5.13  
 Sharpe Ratio 0.73 0.44 0.37

MPT Statistics	Standard Index	Best Fit Index Morningstar Intl Mkts xUS GR USD
Alpha	0.03	-0.70
Beta	1.00	1.02
R-Squared	98.90	98.91
12-Month Yield	—	—
Potential Cap Gains Exp	14.70%	—

**Operations**  
 Family: Vanguard  
 Manager: Multiple  
 Tenure: 11.4 Years  
 Objective: Foreign Stock



**Portfolio Analysis 12-31-2019**

Asset Allocation %	Net %	Long %	Short %
Cash	1.90	1.90	0.00
US Stocks	0.74	0.74	0.00
Non-US Stocks	97.26	97.26	0.00
Bonds	0.01	0.01	0.00
Other/Not Cstfd	0.09	0.09	0.00
Total	100.00	100.00	0.00

**Equity Style**

Value	Share	Weight	Port	Rel	Rel
Index	Cat	Index	Avg	Index	Cat
P/E Ratio TTM	15.9	0.98	0.95		
P/C Ratio TTM	9.5	0.99	0.94		
P/B Ratio TTM	1.6	0.97	0.93		
Geo Avg Mkt Cap \$mil	24927	0.67	0.59		

**Fixed-Income Style**

Value	Share	Weight	Port	Rel	Rel
Index	Cat	Index	Avg	Index	Cat
Avg Eff Maturity	—	—	—		
Avg Eff Duration	—	—	—		
Avg Wtd Coupon	—	—	—		
Avg Wtd Price	—	—	—		

**Credit Quality Breakdown** —

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

**Regional Exposure**

	Stocks %	Rel Std Index
Americas	10.5	0.98
Greater Europe	45.1	1.00
Greater Asia	44.4	1.00

**Base Currency:** USD  
**Ticker:** VTSNXX  
**ISIN:** US9219097840  
**Minimum Initial Purchase:** \$5 mil

**Share Cng**

since	Amount	Holdings:	Net Assets %
11-2019	7.401 Total Stocks, 3 Total Fixed-Income, 4% Turnover Ratio	11 mil Roche Holding AG Dividend Right Ce	0.86
		34 mil Novartis AG	0.76
		40 mil Toyota Motor Corp	0.66
		327 mil HSBC Holdings PLC	0.60
		39 mil Total SA	0.51
		21 mil AstraZeneca PLC	0.50
		16 mil SAP SE	0.50
		70 mil Royal Dutch Shell PLC Class A	0.49
		195 mil AIA Group Ltd	0.48
		322 mil BP PLC	0.48
		388 mil Taiwan Semiconductor Manufacturing	1.05
		76 mil Samsung Electronics Co Ltd	1.01
		92 mil Tencent Holdings Ltd	0.86
		47 mil Nestle SA	1.19
		28 mil Alibaba Group Holding Ltd ADR	1.40

**Sector Weightings**

	Stocks %	Rel Std Index
<b>Cyclical</b>	<b>42.6</b>	<b>1.01</b>
Basic Materials	7.6	1.05
Consumer Cyclical	11.0	1.06
Financial Services	20.0	0.94
Real Estate	4.0	1.24
<b>Sensitive</b>	<b>36.3</b>	<b>1.01</b>
Communication Services	7.1	0.94
Energy	6.4	0.95
Industrials	13.2	1.11
Technology	9.6	1.00
<b>Defensive</b>	<b>21.1</b>	<b>0.96</b>
Consumer Defensive	8.9	0.94
Healthcare	9.0	0.98
Utilities	3.3	0.99

**Purchase Constraints:** —  
**Incept:** 11-29-2010  
**Type:** MF  
**Total Assets:** \$420,632,07 mil

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The Voya Fixed Account is available through a group annuity or other type of contract issued by Voya Retirement Insurance and Annuity Company ("VRIAC"). The Voya Fixed Account is an obligation of VRIAC's general account which supports all of the company's insurance and annuity commitments. All guarantees are based on the financial strength and claims-paying ability of VRIAC, who is solely responsible for all obligations under its contracts.

**Asset Class: Stability of Principal**

**Important Information**

This information should be read in conjunction with your contract prospectus, contract prospectus summary or disclosure booklet, as applicable. Please read them carefully before investing.

**Voya Retirement Insurance and Annuity Company**

One Orange Way  
Windsor, CT 06095-4774  
www.voyaretirementplans.com

**Investment Objective**

Stability of principal is the primary objective of this investment option. The Voya Fixed Account guarantees minimum rates of interest and may credit interest that exceeds the guaranteed minimum rates. Daily credited interest becomes part of principal and the investment increases through compound interest. All amounts invested by your plan in the Voya Fixed Account receive the same credited rate. This is known as a portfolio method of interest rate crediting.

**Key Features**

The Voya Fixed Account is intended to be a long-term investment for participants seeking stability of principal. The assets supporting it are invested by VRIAC with this goal in mind. Therefore, VRIAC may impose restrictions on transfers and withdrawals involving the Voya Fixed Account if competing investment options are offered. These restrictions help VRIAC to provide stable credited interest rates which historically have not varied significantly from month to month despite the general market's volatility in new money interest rates. Your local representative can confirm whether or not your plan includes competing investment options.

If the contract is surrendered completely, or if you surrender your account to transfer to another carrier within the plan, a Market Value Adjustment ("MVA") may be applied to the Voya Fixed Account

portion of your account (or the contract holder may elect to have the surrendered amount paid out over a period of 60 months, with interest paid). This MVA would not apply to any distribution made to you as a benefit payment. For contracts with a withdrawal fee schedule, the withdrawal may be subject to a withdrawal fee.

**Interest Rate Structure**

The Voya Fixed Account guarantees principal and a guaranteed minimum interest rate ("GMIR") for the life of the contract, as well as featuring two declared interest rates: a current rate, determined at least monthly, and a guaranteed minimum floor rate declared for a defined period - currently one calendar year. The guaranteed minimum floor rate may change after a defined period, but it will never be lower than the GMIR that applies for the life of the contract. The current rate, the guaranteed minimum floor rate and the GMIR are expressed as annual effective yields. Taking the effect of compounding into account, the interest credited to your account daily yields the then current credited rate.

VRIAC's determination of credited interest rates reflects a number of factors, which may include mortality and expense risks, interest rate guarantees, the investment income earned on invested assets and the amortization of any capital gains and/or losses realized on the sale of invested assets. Under this option, VRIAC assumes the risk of investment gain or loss by guaranteeing the principal amount you allocate to this option and promising a minimum interest rate during the accumulation period and also throughout the annuity payout period, if applicable.

Currently, the guaranteed minimum floor rate equals the GMIR. The current rate to be credited under a contract may be higher than the GMIR/guaranteed minimum floor rate and may be changed at any time, except that we will not apply a decrease to the current rate following a rate change initiated solely by us prior to the last day of the three-month period measured from the first day of the month in which such change was effective. The current rate for a plan's initial investment in the Voya Fixed Account may be in effect for less than a full three-month period.

Any insurance products, annuities and funding agreements that you may have purchased are issued by Voya Retirement Insurance and Annuity Company ("VRIAC"). VRIAC is solely responsible for

meeting its obligations. Plan administrative services provided by VRIAC or Voya Institutional Plan Services, LLC ("VIPS"). Neither VRIAC nor VIPS engage in the sale or solicitation of securities. If custodial or trust agreements are part of this arrangement, they may be provided by Voya Institutional Trust Company. All companies are members of the Voya® family of companies. Securities distributed by Voya Financial Partners, LLC (member SIPC) or other broker-dealers with which it has a selling agreement. All products or services may not be available in all states.

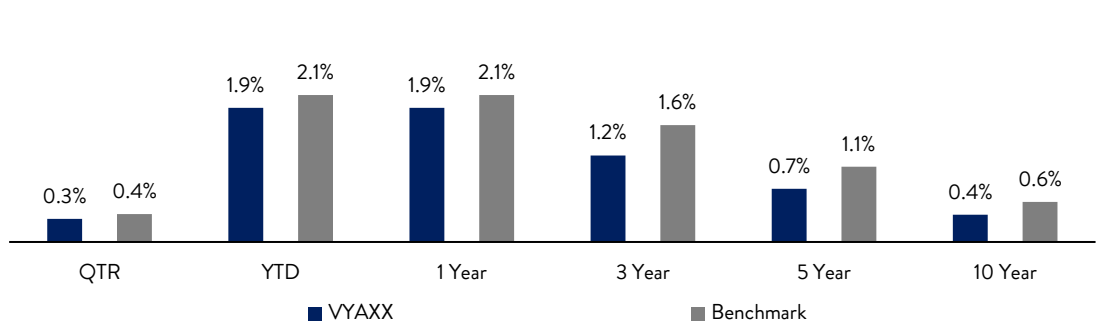
Voya Government Money Market A  
VYAXX

Fund Fact Sheet  
Data as of 12/31/2019

**Product Details**

Name	Voya Government Money Market A
Ticker	VYAXX
Expense Ratio	0.400%
Morningstar Category	US Fund Money Market - Taxable
Benchmark	USTREAS Stat US T-Bill 90 Day TR
Inception Date	4/15/1994
Longest Tenured Manager	David S. Yealy
Longest Manager Tenure	15.17 Years
Fund Size	\$199,066,303

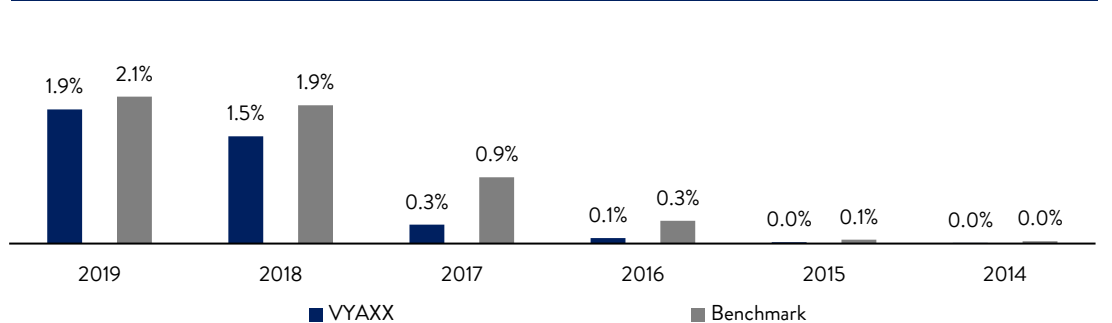
**Trailing Performance**



**Fund Characteristics**

VYAXX	+/- Category
% Assets in Top 10 Holdings	88.32% / 79.55%
Average Eff Duration	- / -
Average Eff Maturity	- / -
Average Credit Quality	- / AA (Cat Avg.)
Average Coupon	- / -

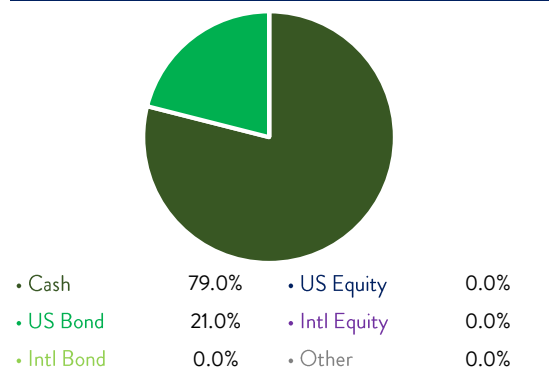
**Annual Performance**



**Sector Allocations**

VYAXX	Category	+/- Category
Government	21.0%	11.4% / 9.6%
Municipal	0.0%	0.6% / -0.6%
Bank Loan	0.0%	0.0% / 0.0%
Convertible	0.0%	0.1% / -0.1%
Corporate Bond	0.0%	0.9% / -0.9%
Preferred Stock	0.0%	0.0% / 0.0%
Agency MBS	0.0%	0.1% / -0.1%
Non-Agency RMBS	0.0%	0.0% / 0.0%
Commercial MBS	0.0%	0.0% / 0.0%
Asset-Backed	0.0%	0.0% / 0.0%
Cash & Equivalents	79.0%	86.9% / -7.9%
Other	0.0%	0.0% / 0.0%

**Asset Allocation**



**Morningstar Style Box**

	Low IR Sens	Mod IR Sens	Ext IR Sens
High Qual			
Med Qual			
Low Qual			

Voya Government Money Market A  
VYAXX

Fund Fact Sheet  
Data as of 12/31/2019

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• VYAXX	0.32%	1.88%	1.88%	1.22%	0.75%	0.38%
• Benchmark	0.39%	2.06%	2.06%	1.64%	1.06%	0.56%
+/- Benchmark	-0.07%	-0.18%	-0.18%	-0.43%	-0.31%	-0.18%
Peer Group Rank	66	44	44	56	51	51

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• VYAXX	0.32%	0.50%	0.53%	0.52%
• Benchmark	0.39%	0.49%	0.57%	0.59%
+/- Benchmark	-0.07%	0.01%	-0.04%	-0.07%

Annual Performance	2019	2018	2017	2016	2015	2014
• VYAXX	1.88%	1.51%	0.26%	0.08%	0.02%	0.01%
• Benchmark	2.06%	1.94%	0.93%	0.32%	0.05%	0.03%
+/- Benchmark	-0.18%	-0.43%	-0.67%	-0.24%	-0.03%	-0.02%
Peer Group Rank	44	45	77	39	20	22

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• VYAXX	0.47%	0.40%	0.35%	0.27%
• Benchmark	0.57%	0.51%	0.46%	0.39%
+/- Benchmark	-0.10%	-0.10%	-0.11%	-0.12%

Rolling 5-Year Performance	01/2015 - 12/2019	10/2014 - 09/2019	07/2014 - 06/2019	04/2014 - 03/2019	01/2014 - 12/2018	10/2013 - 09/2018
• VYAXX	0.75%	0.68%	0.58%	0.48%	0.37%	0.28%
• Benchmark	1.06%	0.98%	0.88%	0.77%	0.65%	0.54%
+/- Benchmark	-0.31%	-0.29%	-0.30%	-0.29%	-0.28%	-0.26%
Peer Group Rank	51	50	53	54	55	56

5-Year Quarterly Performance	4Q17	3Q17	2Q17	1Q17
• VYAXX	0.13%	0.09%	0.04%	0.01%
• Benchmark	0.30%	0.26%	0.22%	0.15%
+/- Benchmark	-0.17%	-0.17%	-0.18%	-0.14%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	-0.77	0.00	-0.24	0.00	-0.11	0.00
Beta	-3.94	1.00	2.49	1.00	4.08	1.00
Standard Deviation	0.22	0.17	0.24	0.24	0.20	0.22
Sharpe Ratio	-7.79	-8.88	-4.51	-4.09	-2.87	-2.39
Information Ratio	-6.32	-	-4.13	-	-2.75	-
Treynor Ratio	0.13	-0.07	-0.14	-0.05	-0.05	-0.02
Upside Capture Ratio	74.17	100.00	70.84	100.00	67.74	100.00
Downside Capture Ratio	-	-	-	-	-	-

5-Year Quarterly Performance	4Q16	3Q16	2Q16	1Q16
• VYAXX	0.01%	0.07%	0.00%	0.00%
• Benchmark	0.11%	0.07%	0.06%	0.07%
+/- Benchmark	-0.09%	-0.01%	-0.06%	-0.07%

5-Year Quarterly Performance	4Q15	3Q15	2Q15	1Q15
• VYAXX	0.02%	0.00%	0.00%	0.00%
• Benchmark	0.03%	0.01%	0.01%	0.01%
+/- Benchmark	-0.01%	-0.01%	-0.01%	-0.01%

All data and information on this fact sheet is taken from sources believed to be accurate but is not guaranteed to be accurate, complete, or correct.