



HYAS
GROUP

COUNTY OF SAN BERNARDINO

Combined Retirement and RMT Plans

December 31, 2018 Performance Report

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Markets and Economic Update

Fourth Quarter 2018

BACK TO NORMAL – “RETURN OF VOLATILITY”

For most investors 2018 likely felt anything but normal. December was a particularly difficult month that saw the US equity market (S&P 500 Index) down 9%, the worst December since 1931. The equity markets were up or down more than 1% nine times in December alone, and 64 times in 2018. In contrast, we saw 1% moves only eight times in all of 2017. The year also saw the Dow Jones, an index representing the largest blue-chip stocks, post swings of 1,000 points five times. It's only done so eight times in its entire 100+ year history. So what's normal about this?

A closer look at volatility through a long-term historical lens shows a very different picture. The average daily VIX (a leading measure of volatility) in 2018 was 16.6, nearly identical to the median historical calendar year for the past 25 years. This compares to a VIX of 11.1 in 2017. This year-over-year change in the VIX is among the largest in history. Hence, our perception is likely skewed by a recent and extended period of historically low market volatility during an extended bull market.

The question then becomes what's driven this return of volatility? In short, monetary policy has been a leading contributor to both historically low volatility during an extended period of accommodative (easing) policy and now higher volatility as the Federal Reserve (Fed) transitions to a restrictive (tightening) policy. In our last quarterly market commentary we cited a domestic yield curve that indicated a disconnect between the Fed and the broader financial markets with respect to projected future economic growth and inflation. The tension created by these diverging views came to a flash point in the final quarter of 2018. Despite a strong contractionary demand shock from China and subsequent declining global growth forecasts, the Fed held steadfastly to its previous policy guidance. Global equity markets responded with a sharp selloff that took US equities down 13.5% and foreign stocks down 11.5% in the fourth quarter.

Despite the equity market declines, nowhere have the diverging views of economic growth been reflected more clearly than the recent bond market. 10-year Treasury yields marched steadily higher over most of the year, rising from 2.40% at the beginning of the year to 3.15% at the end of October. Yield increases were supported by strong economic growth, low unemployment and signs of modest wage inflation. Market opinions on global growth changed sharply as the fourth quarter progressed. Slowing economic data out of China seemed to suddenly make the impacts of tough trade rhetoric a tangible reality. Slower expected growth in combination with aggressive Fed tightening resulted in a near freefall in bond yields. Yields dropped from 3.15% to 2.69% by year-end, a largely unprecedented pace.

In reaction to a combination of new economic data and increasing political pressure the Fed appears to have acquiesced from its rigid policy stance to start off the new year. Fed Chairman Jerome Powell made a public statement acknowledging an economic slowdown and assuring markets the Fed would be patient and flexible in policy decisions this year. At least for now, it would appear views are converging around slower growth expectations going forward. Expect volatility to normalize, but understand that after 10 years of a bull market, “normal” may look and feel very different.

GLOBAL ECONOMIC LANDSCAPE

- December's headline employment number came in well above estimates as employers added 312,000 workers, versus expectations of 184,000. On a rolling three-month basis, employers are adding 254,000 workers per month. Despite higher job creation the unemployment rate actually ticked up slightly to 3.9% due to an increase in the labor force participation rate. Average hourly earnings rose 0.4% for the month of December. This translates to annualized wage growth of 3.2%, the highest since 2009.
- The Fed raised short-term borrowing rates four times in 2018 and is forecasting two rate hikes for 2019. Recent policy language appears to signal an end to the current tightening cycle in the face of slowing global economic growth.
- Global central banks look poised to continue their path to normalized interest rates which may continue to be a headwind for global growth. The Bank of Canada raised interest rates three times and the Bank of England once during 2018. The European Central Bank and Bank of Japan have kept rates low and are expected to continue this policy through 2019.
- Economic global divergence has emerged over the course of 2018. Major economies appear to be in very different stages of economic cycles. The US and UK look to be in the very late stages of an economic cycle followed closely by Canada and China. The Eurozone appears to be near the middle of an economic cycle while India and Brazil are on the verge of accelerating into a new economic cycle. While the increasing divergence brings more uncertainty, the International Monetary Fund is projecting a relatively strong 3.7% global growth rate in 2019.
- The latest data shows China's economy growing at 6.5% annualized, the slowest pace since 2016 despite continued stimulus efforts. Consumer spending, manufacturing, credit growth and housing are all showing signs of weakness. A slower growth China is likely to have a large impact on other nations, especially emerging markets whose economies are dependent on Chinese imports of raw materials.

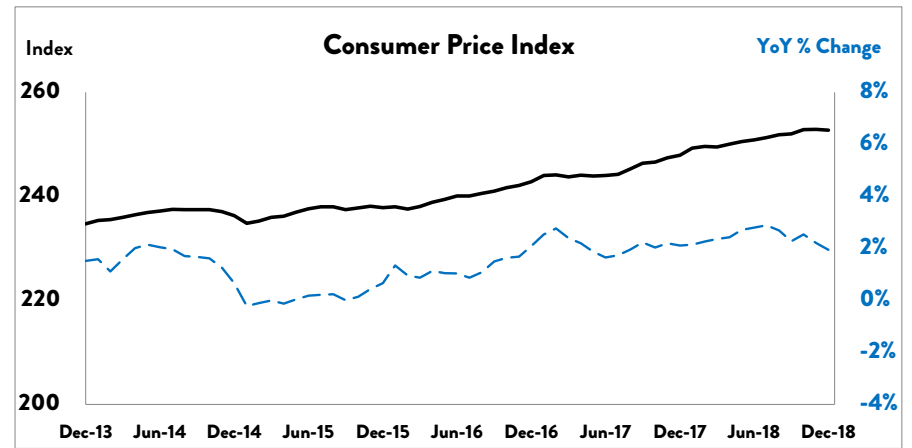
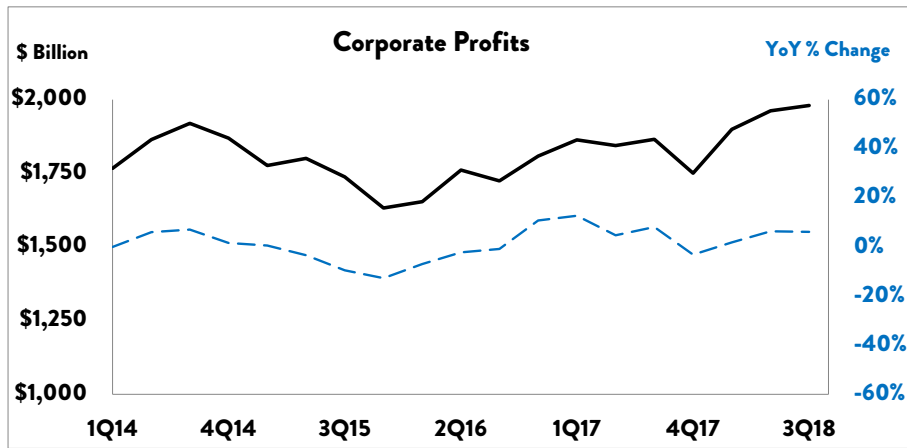
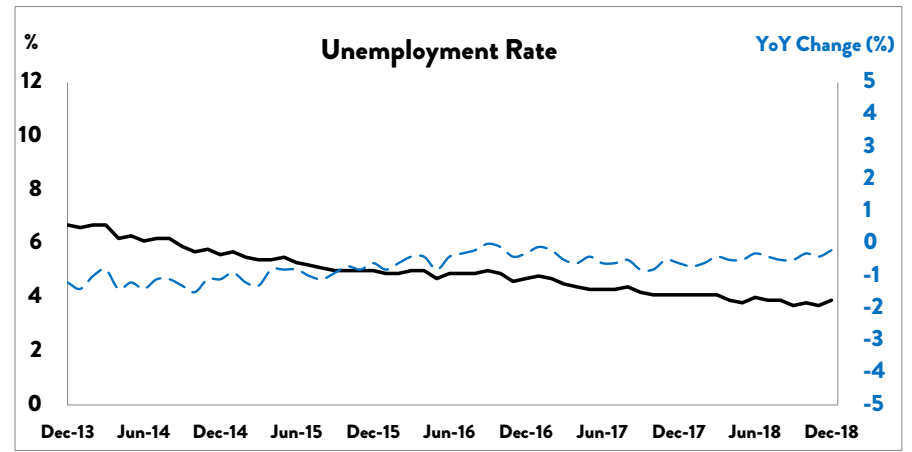
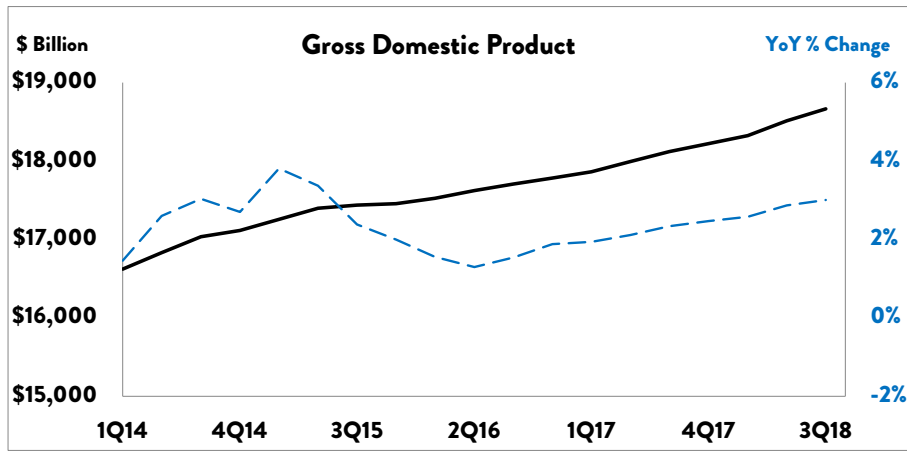
GLOBAL FINANCIAL MARKETS

- Domestic credit spreads widened modestly throughout most of 2018, but suddenly gapped wider during the fourth quarter. Credit spreads on investment grade and high yield bonds ended the year at levels not seen since 2016. Despite the wider end of year spreads, investment grade and high yield bonds ended the year with only minor losses.
- Technology stocks (including the new communications services stocks) have grown to represent nearly 30% of the S&P 500 Index and increasingly provide market leadership. Technology stocks led the market sharply lower in the fourth quarter of the year despite largely strong earnings. Concerns over slowing growth rates coupled with relatively high valuations drove negative investment sentiment. It is worth noting that the technology sector has gained over 500% since the last bear market.
- Is this the turning point for value stocks? The past 10 years have been the most difficult in modern history for value stocks relative to growth stocks. On a rolling 3-year basis, global value stocks have underperformed growth stocks for more than 130 months! Some in the value investing community are referring to this lagging decade as the "nuclear winter".
- The MSCI All Country World Index entered the year trading at 21 times trailing 1-year earnings. As of the end of the year the Index traded at 17 times trailing earnings, the result of higher earnings and declining stock prices in 2018. While global valuations are broadly lower, emerging markets have been hit the hardest. Emerging markets now trade at 13 times trailing earnings.
- For nearly a decade, international and emerging equity markets have lagged domestic markets. In fact, the relative performance of US stocks vs. international stocks is at the highest level in nearly 14 years. However, the performance gap is not without credible support in the form of higher earnings growth rates.

This report is being provided for informational purposes only. The information and opinions presented in this report do not constitute investment advice and have been obtained from sources believed by Hyas Group to be reliable. Hyas Group makes no representation as to their accuracy or completeness. All opinions expressed herein are subject to change.

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4Q2018 Economic Data



Labor Market Statistics (Monthly)					
Category	Recent	5-Yr High	5-Yr Low	5-Yr Avg.	Date
Jobs Added/Lost Monthly	312,000	351,000	14,000	214,783	Dec-18
Unemployment Rate	3.9%	6.7%	3.7%	4.9%	Dec-18
Median Unemployment Length (Weeks)	8.9	18.4	6.6	11.2	Dec-18
Average Hourly Earnings	\$27.48	\$27.48	\$24.22	\$25.70	Dec-18

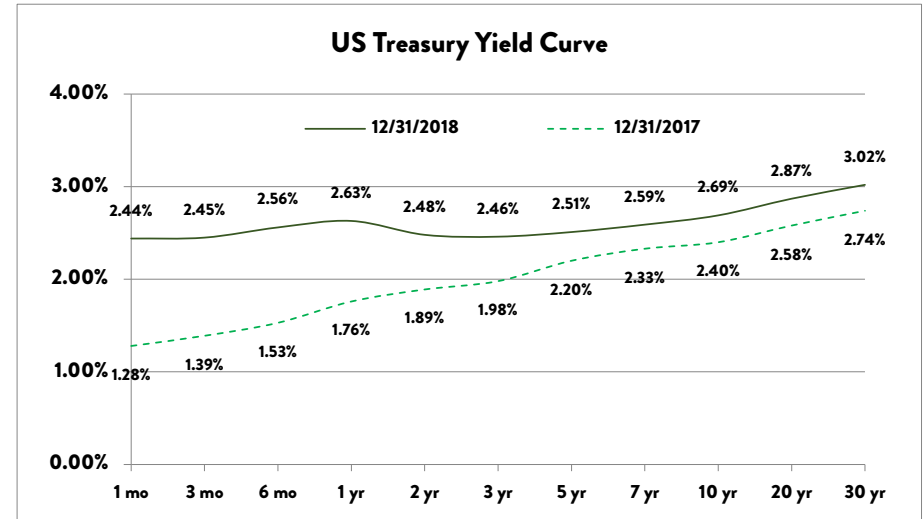
Other Prices and Indexes (Monthly)					
Category	Recent	5-Yr High	5-Yr Low	% Off Peak	Date
Gas: Price per Gallon	\$2.33	\$3.70	\$1.79	-36.9%	Dec-18
Spot Oil	\$56.96	\$105.79	\$30.32	-46.2%	Nov-18
Case-Shiller Home Price Index	213.6	213.6	166.0	28.7%*	Oct-18
Medical Care CPI	489.1	489.1	430.1	13.7%*	Dec-18

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

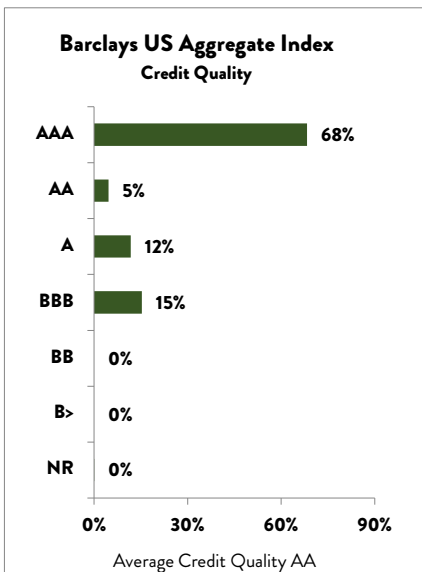
*% Off Low

4Q2018 Bond Market Data

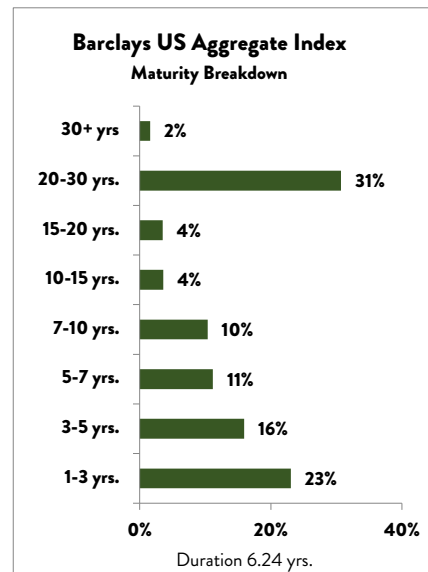
Index	QTR	YTD	1 yr.	3 yrs.	5 yrs.	10 yrs.
90-Day T-Bill	0.50%	1.69%	1.69%	0.88%	0.54%	0.32%
Barclays US Aggregate	1.64%	0.01%	0.01%	2.06%	2.52%	3.48%
Barclays Short US Treasury	0.60%	1.88%	1.88%	1.07%	0.68%	0.46%
Barclays Int. US Treasury	2.24%	1.41%	1.41%	1.20%	1.47%	1.79%
Barclays Long US Treasury	4.19%	-1.84%	-1.84%	2.58%	5.93%	4.09%
Barclays US TIPS	-0.42%	-1.26%	-1.26%	2.11%	1.69%	3.64%
Barclays US Credit	0.01%	-2.11%	-2.11%	3.16%	3.22%	5.52%
Barclays US Mortgage-Backed	2.08%	0.99%	0.99%	1.71%	2.53%	3.11%
Barclays US Asset-Backed	1.25%	1.77%	1.77%	1.78%	1.70%	4.55%
Barclays US 20-Yr Municipal	1.83%	1.08%	1.08%	2.96%	5.10%	6.32%
Barclays US High Yield	-4.53%	-2.08%	-2.08%	7.23%	3.83%	11.12%
Barclays Global	1.20%	-1.20%	-1.20%	2.70%	1.08%	2.49%
Barclays International	0.91%	-2.15%	-2.15%	3.15%	-0.01%	1.74%
Barclays Emerging Market	-0.18%	-2.46%	-2.46%	5.05%	4.23%	8.47%



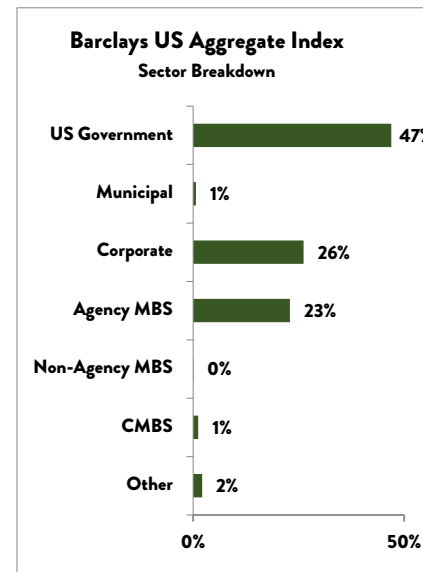
Source: Department of US Treasury



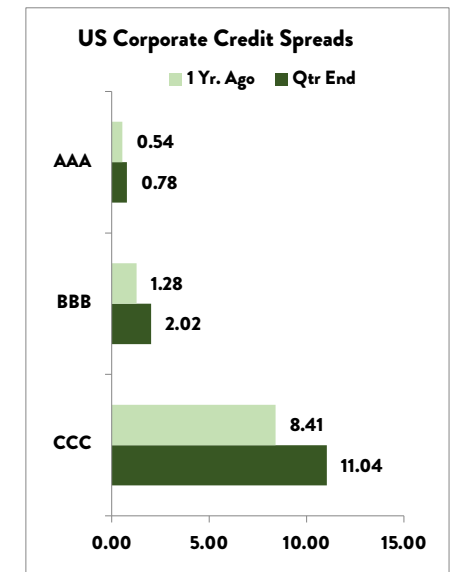
Source: Morningstar



Source: Morningstar



Source: Morningstar



Source: Federal Reserve / Bank of America

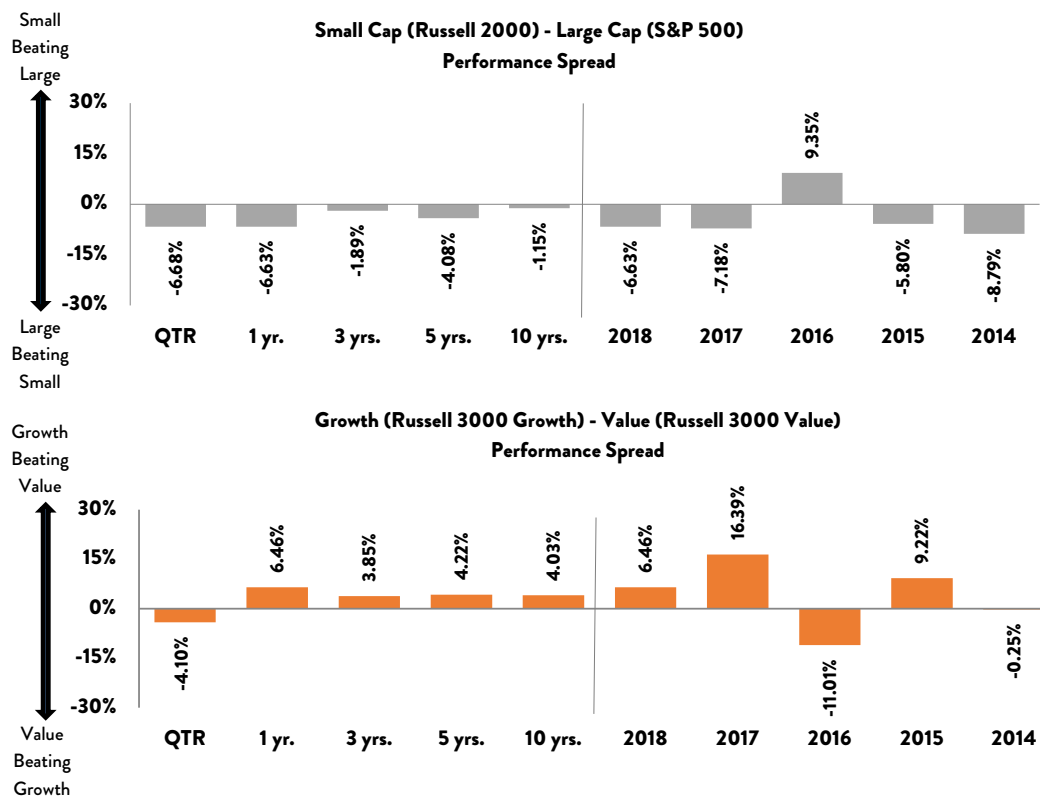
4Q2018 US Equity Market Data

Sectors Weights/Returns (ranked by quarter performance)

	Wgt.	Sector	QTR	YTD	1 Yr.
S&P 500 Index	3%	Utilities	1.36%	4.11%	4.11%
	3%	Real Estate	-3.83%	-2.22%	-2.22%
	7%	Consumer Staples	-5.21%	-8.38%	-8.38%
	16%	Health Care	-8.72%	6.47%	6.47%
	3%	Materials	-12.31%	-14.70%	-14.70%
	13%	Financials	-13.11%	-13.03%	-13.03%
	10%	Communication Services	-13.19%	-12.53%	-12.53%
	10%	Consumer Discretionary	-16.42%	0.83%	0.83%
	9%	Industrials	-17.29%	-13.29%	-13.29%
	20%	Information Technology	-17.34%	-0.29%	-0.29%
5%	Energy	-23.78%	-18.10%	-18.10%	
S&P Midcap 400 Index	Wgt.	Sector	QTR	YTD	1 Yr.
	6%	Utilities	-0.72%	6.81%	6.81%
	3%	Consumer Staples	-8.01%	-7.15%	-7.15%
	3%	Communication Services	-9.97%	2.27%	2.27%
	10%	Real Estate	-10.56%	-5.99%	-5.99%
	16%	Financials	-15.77%	-15.95%	-15.95%
	15%	Information Technology	-16.85%	-5.47%	-5.47%
	12%	Consumer Discretionary	-18.16%	-17.92%	-17.92%
	15%	Industrials	-18.58%	-14.89%	-14.89%
	7%	Materials	-19.50%	-20.37%	-20.37%
10%	Health Care	-19.93%	6.51%	6.51%	
4%	Energy	-41.67%	-29.42%	-29.42%	
S&P Smallcap 600 Index	Wgt.	Sector	QTR	YTD	1 Yr.
	3%	Utilities	-5.64%	-0.41%	-0.41%
	7%	Real Estate	-11.16%	-11.10%	-11.10%
	19%	Financials	-14.19%	-6.29%	-6.29%
	4%	Consumer Staples	-14.34%	-4.86%	-4.86%
	14%	Information Technology	-17.67%	-8.93%	-8.93%
	14%	Consumer Discretionary	-19.53%	-8.12%	-8.12%
	2%	Communication Services	-21.06%	0.90%	0.90%
	11%	Health Care	-23.07%	9.93%	9.93%
	19%	Industrials	-23.32%	-12.15%	-12.15%
4%	Materials	-26.46%	-22.25%	-22.25%	
3%	Energy	-45.80%	-42.77%	-42.77%	

Index Performance Data

Index	QTR	YTD	1 yr.	Annualized		
				3 yrs.	5 yrs.	10 yrs.
S&P 500	-13.52%	-4.38%	-4.38%	9.26%	8.49%	13.12%
Russell 1000 Value	-11.72%	-8.27%	-8.27%	6.95%	5.95%	11.18%
Russell 1000 Growth	-15.89%	-1.51%	-1.51%	11.15%	10.40%	15.29%
Russell Mid Cap	-15.37%	-9.06%	-9.06%	7.04%	6.26%	14.03%
Russell Mid Cap Value	-14.95%	-12.29%	-12.29%	6.06%	5.44%	13.03%
Russell Mid Cap Growth	-15.99%	-4.75%	-4.75%	8.59%	7.42%	15.12%
Russell 2000	-20.20%	-11.01%	-11.01%	7.36%	4.41%	11.97%
Russell 2000 Value	-18.67%	-12.86%	-12.86%	7.37%	3.61%	10.40%
Russell 2000 Growth	-21.65%	-9.31%	-9.31%	7.24%	5.13%	13.52%
Russell 3000	-14.30%	-5.24%	-5.24%	8.97%	7.91%	13.18%
DJ US Select REIT	-6.61%	-4.22%	-4.22%	1.97%	7.89%	12.05%



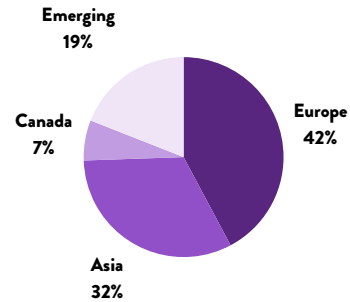
4Q2018 International Market Data

Index Performance Data (net)

Index (US\$)	QTR	YTD	1 yr.	3 yrs.	5 yrs.	10 yrs.
MSCI ACWI ex-US	-11.46%	-14.20%	-14.20%	4.48%	0.68%	6.57%
MSCI EAFE	-12.54%	-13.79%	-13.79%	2.87%	0.53%	6.32%
Europe	-12.72%	-14.86%	-14.86%	2.10%	-0.61%	6.15%
United Kingdom	-11.78%	-14.15%	-14.15%	1.60%	-1.71%	6.84%
Germany	-15.48%	-22.17%	-22.17%	0.70%	-2.13%	5.55%
France	-15.05%	-12.76%	-12.76%	5.61%	1.17%	5.49%
Pacific	-12.20%	-12.02%	-12.02%	4.54%	2.73%	6.76%
Japan	-14.23%	-12.88%	-12.88%	3.41%	3.06%	5.33%
Hong Kong	-4.53%	-7.83%	-7.83%	8.68%	6.05%	12.22%
Australia	-10.01%	-11.99%	-11.99%	5.56%	0.46%	8.88%
Canada	-15.30%	-17.20%	-17.20%	6.18%	-1.62%	5.72%
MSCI EM	-7.47%	-14.58%	-14.58%	9.25%	1.65%	8.02%
MSCI EM Latin America	0.36%	-6.57%	-6.57%	14.85%	-1.73%	4.98%
MSCI EM Asia	-9.29%	-15.45%	-15.45%	8.63%	3.94%	9.81%
MSCI EM Eur/Mid East	-4.31%	-8.07%	-8.07%	9.18%	-4.69%	4.09%
MSCI ACWI Value ex-US	-10.71%	-13.97%	-13.97%	4.75%	-0.38%	5.95%
MSCI ACWI Growth ex-US	-12.20%	-14.43%	-14.43%	4.19%	1.69%	7.15%
MSCI ACWI Sm Cap ex-US	-14.43%	-18.20%	-18.20%	3.82%	1.96%	10.02%

Regional Exposure

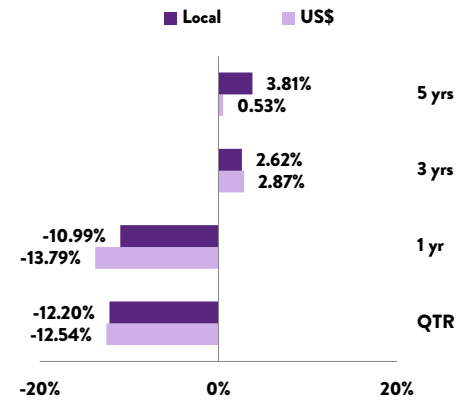
MSCI ACWI ex-USA



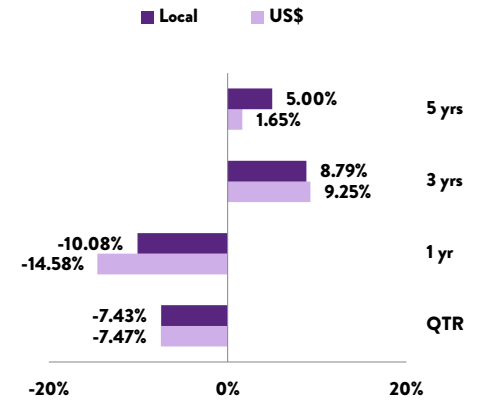
Top 10 Countries (MSCI AC World ex-USA)

Japan	16%
UK	12%
China	8%
France	7%
Canada	7%
Germany	6%
Switzerland	6%
Australia	5%
South Korea	4%
Taiwan	3%

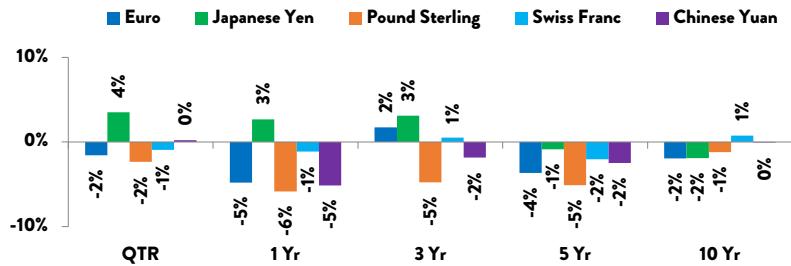
MSCI EAFE Index Return



MSCI Emerging Index Return

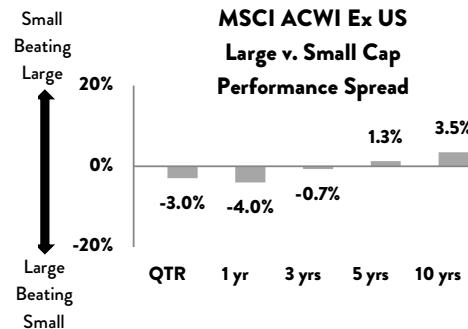


Foreign Currency v. US\$ Returns

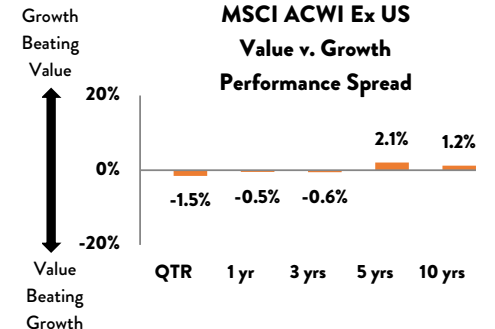


Exchange Rates	QTR	3Q18	2Q18	1Q18	4Q17	3Q17
Japanese Yen	109.70	113.48	110.71	106.20	112.69	112.64
Euro	0.87	0.86	0.86	0.81	0.83	0.85
British Pound	0.78	0.77	0.76	0.71	0.74	0.75
Swiss Franc	0.98	0.98	0.99	0.95	0.97	0.97
Chinese Yuan	6.88	6.87	6.62	6.27	6.51	6.65

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	4Q18
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 7.38%	US Bonds 1.64%
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%	Core Real Estate 1.53%
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%	Global Bonds 1.20%
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%	Cash 0.50%
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%	TIPS -0.42%
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%	High Yield -4.53%
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%	Emerging Markets -7.47%
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%	Global Balanced -7.61%
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%	Commod. -9.41%
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%	Intl -11.46%
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%	Large Cap -13.52%
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%	Mid Cap -15.37%
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%	Small Cap -20.20%

Global Balanced is composed of 60% MSCI World Stock Index, 35% Barclays 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 2018

Fixed Income	Ticker	Assets	%
Stabilizer	-	\$268,569,953	25.9%
Voya Fixed Account	-	\$73,597,967	7.1%
Voya Government Money Market A	AEMXX	\$8,518	0.0%
Loomis Sayles Investment Grade Bond Y	LSIIX	\$23,452,300	2.3%
Oppenheimer International Bond I	OIBIX	\$3,988,837	0.4%
Pioneer Global High Yield Y	GHYYX	\$5,418,435	0.5%
Total		\$375,036,010	36.1%

Large Cap	Ticker	Assets	%
Vanguard Institutional Index Instl Plus	VIIIX	\$97,356,293	9.4%
American Funds Growth Fund of America R6	RGAGX	\$93,083,367	9.0%
Total		\$190,439,660	18.3%

Mid Cap	Ticker	Assets	%
Vanguard Mid Cap Index Instl	VMCIX	\$48,654,309	4.7%
Total		\$48,654,309	4.7%

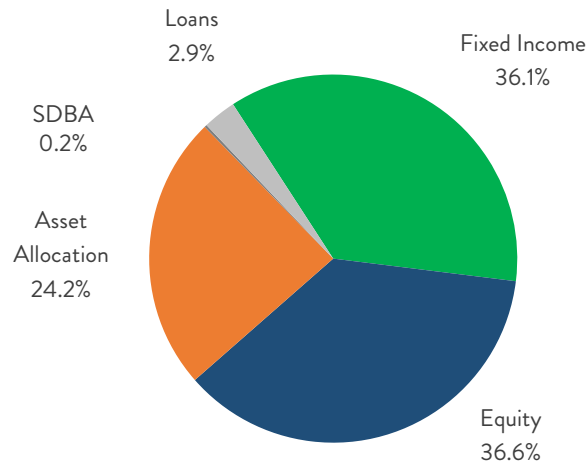
Small Cap	Ticker	Assets	%
Invesco Small Cap Value Y	VSMIX	\$6,538,942	0.6%
Vanguard Small Cap Index Instl	VSCIX	\$34,447,198	3.3%
Baron Growth Instl	BGRIX	\$26,050,093	2.5%
Total		\$67,036,233	6.5%

International	Ticker	Assets	%
Dodge & Cox International Stock	DODFX	\$10,291,737	1.0%
Vanguard Total Intl Stock Index I	VTSNX	\$20,107,311	1.9%
American Funds Capital World Gr & Inc R6	RWIGX	\$43,143,084	4.2%
Total		\$73,542,133	7.1%

Asset Allocation	Ticker	Assets	%
Conservative Allocation Portfolio	-	\$25,625,882	2.5%
Moderate Allocation Portfolio	-	\$71,858,089	6.9%
Aggressive Allocation Portfolio	-	\$47,709,787	4.6%
Vanguard Instl Target Retirement Income Instl	VITRX	\$5,377,673	0.5%
Vanguard Instl Target Retirement 2020 Instl	VITWX	\$23,082,268	2.2%
Vanguard Instl Target Retirement 2030 Instl	VTTWX	\$32,564,888	3.1%
Vanguard Instl Target Retirement 2040 Instl	VIRSX	\$27,334,338	2.6%
Vanguard Instl Target Retirement 2050 Instl	VTRLX	\$17,205,548	1.7%
Total		\$250,758,472	24.2%

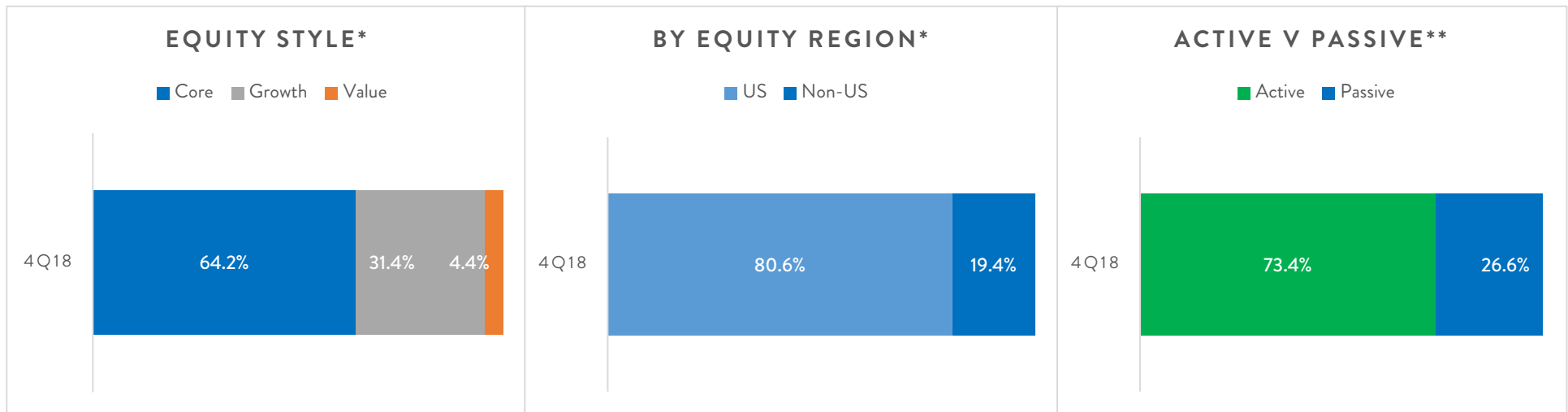
Miscellaneous	Ticker	Assets	%
Self-Directed Brokerage Account	-	\$2,294,463	0.2%
Participant Loans	-	\$30,316,581	2.9%
Total		\$32,611,044	3.1%

TOTAL PLAN ASSETS **\$1,038,077,861**



HISTORICAL PLAN ALLOCATION

Asset Class	4Q18	2017	2016	2015	2014	2013	2012	2011
Fixed Income	36.1%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Large Cap	18.3%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mid Cap	4.7%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Small Cap	6.5%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
International	7.1%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Asset Allocation	24.2%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SDBA	0.2%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Loans	2.9%	N/A	N/A	N/A	N/A	N/A	N/A	N/A



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

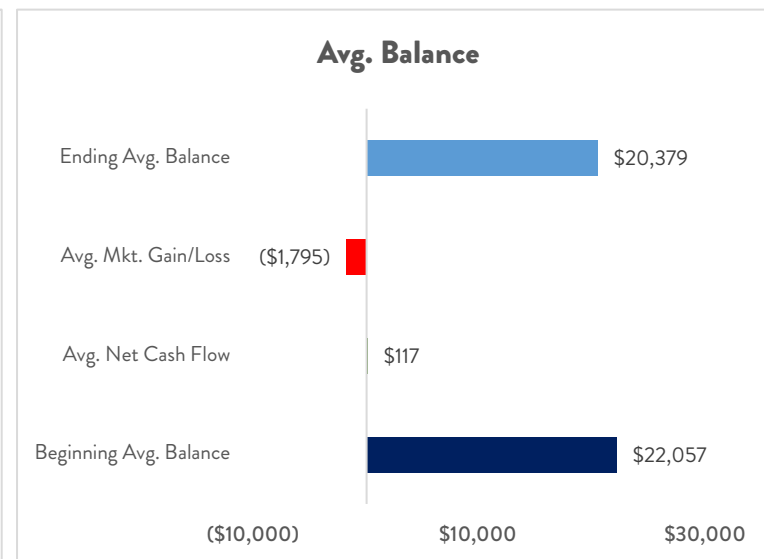
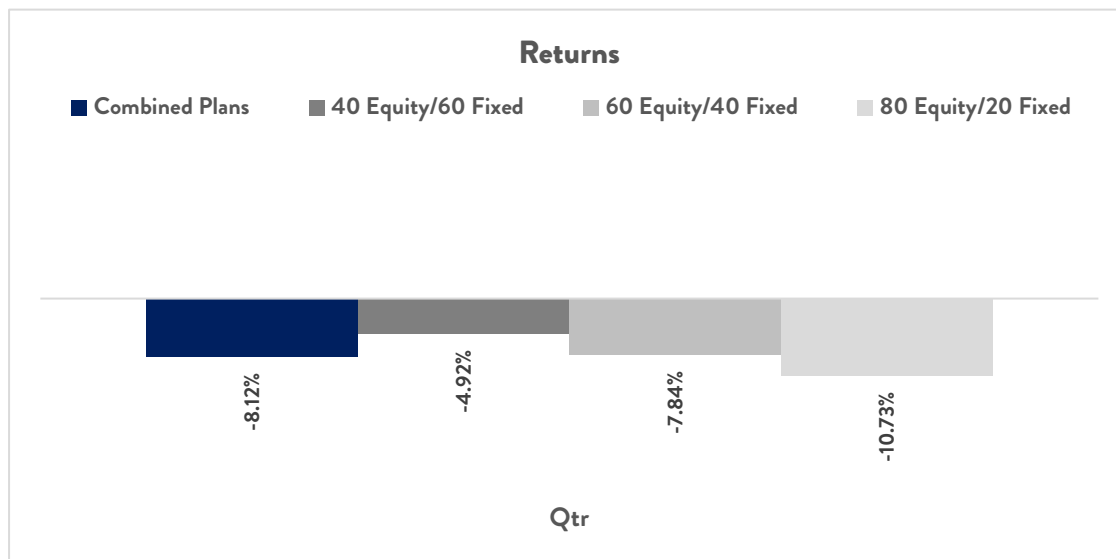
**Excludes Asset Allocation, SDBA, and Loan assets

PLAN LEVEL CASH FLOWS

	Beginning Value	Cash Flow (+)	Cash Flow (-)	Transfer	Market Gain/Loss	Ending Value
Fixed Income	\$368,937,410	\$7,100,202	(\$7,002,476)	\$4,359,165	\$1,641,710	\$375,036,010
Large Cap	\$221,045,422	\$2,906,361	(\$2,651,242)	\$963,242	(\$31,824,121)	\$190,439,660
Mid Cap	\$58,025,266	\$897,933	(\$649,502)	(\$668,341)	(\$8,951,047)	\$48,654,309
Small Cap	\$82,319,541	\$1,464,442	(\$909,814)	(\$59,549)	(\$15,778,388)	\$67,036,233
International	\$83,326,468	\$1,505,322	(\$904,673)	(\$620,721)	(\$9,764,263)	\$73,542,133
Asset Allocation	\$274,483,958	\$7,488,818	(\$3,446,767)	(\$3,983,797)	(\$23,783,741)	\$250,758,472
SDBA	\$2,600,442	\$0	\$0	\$10,000	(\$315,979)	\$2,294,463
Total	\$1,090,738,508	\$21,363,077	(\$15,564,475)	\$0	(\$88,775,830)	\$1,007,761,280

HISTORICAL PLAN CASH FLOWS

	Beginning Value	Net Cash Flow	Market Gain/Loss	Ending Value
4Q18	\$1,090,738,508	\$5,798,602	(\$88,775,830)	\$1,007,761,280
YTD	N/A	N/A	N/A	N/A
2017	N/A	N/A	N/A	N/A
2016	N/A	N/A	N/A	N/A
2015	N/A	N/A	N/A	N/A
2014	N/A	N/A	N/A	N/A
2013	N/A	N/A	N/A	N/A



Equity Indices: Russell 3000, MSCI ACWI ex USA; Fixed Indices: US Treasury 90 Day T-Bill, Barclays Global

Aggregate Bond (rebalanced quarterly)

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COUNTY OF SAN BERNARDINO

457 Deferred Compensation Plan

PLAN ASSET ALLOCATION

Fourth Quarter 2018

Fixed Income	Ticker	Assets	%
Stabilizer	-	\$190,259,150	26.4%
Loomis Sayles Investment Grade Bond Y	LSIIX	\$19,484,996	2.7%
Oppenheimer International Bond I	OIBIX	\$3,152,869	0.4%
Pioneer Global High Yield Y	GHYYX	\$4,090,446	0.6%
Total		\$216,987,461	30.2%

Large Cap	Ticker	Assets	%
Vanguard Institutional Index Instl Plus	VIIIIX	\$79,004,923	11.0%
American Funds Growth Fund of America R6	RGAGX	\$75,115,362	10.4%
Total		\$154,120,285	21.4%

Mid Cap	Ticker	Assets	%
Vanguard Mid Cap Index Instl	VMCIX	\$38,745,398	5.4%
Total		\$38,745,398	5.4%

Small Cap	Ticker	Assets	%
Invesco Small Cap Value Y	VSMIX	\$5,247,844	0.7%
Vanguard Small Cap Index Instl	VSCIX	\$28,468,541	4.0%
Baron Growth Instl	BGRIX	\$21,091,732	2.9%
Total		\$54,808,117	7.6%

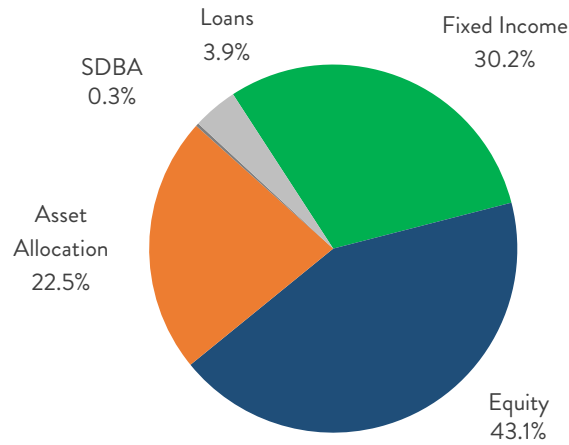
International	Ticker	Assets	%
Dodge & Cox International Stock	DODFX	\$8,564,814	1.2%
Vanguard Total Intl Stock Index I	VTSNX	\$16,910,715	2.3%
American Funds Capital World Gr & Inc R6	RWIGX	\$37,352,465	5.2%
Total		\$62,827,994	8.7%

Asset Allocation	Ticker	Assets	%
Conservative Allocation Portfolio	-	\$17,549,753	2.4%
Moderate Allocation Portfolio	-	\$53,289,564	7.4%
Aggressive Allocation Portfolio	-	\$37,341,788	5.2%
Vanguard Instl Target Retirement Income Instl	VITRX	\$3,159,958	0.4%
Vanguard Instl Target Retirement 2020 Instl	VITWX	\$9,563,004	1.3%
Vanguard Instl Target Retirement 2030 Instl	VTTWX	\$12,671,265	1.8%
Vanguard Instl Target Retirement 2040 Instl	VIRSX	\$14,924,919	2.1%
Vanguard Instl Target Retirement 2050 Instl	VTRLX	\$13,429,666	1.9%
Total		\$161,929,918	22.5%

Miscellaneous	Ticker	Assets	%
Self-Directed Brokerage Account	-	\$1,893,408	0.3%
Participant Loans	-	\$28,364,329	3.9%
Total		\$30,257,737	4.2%

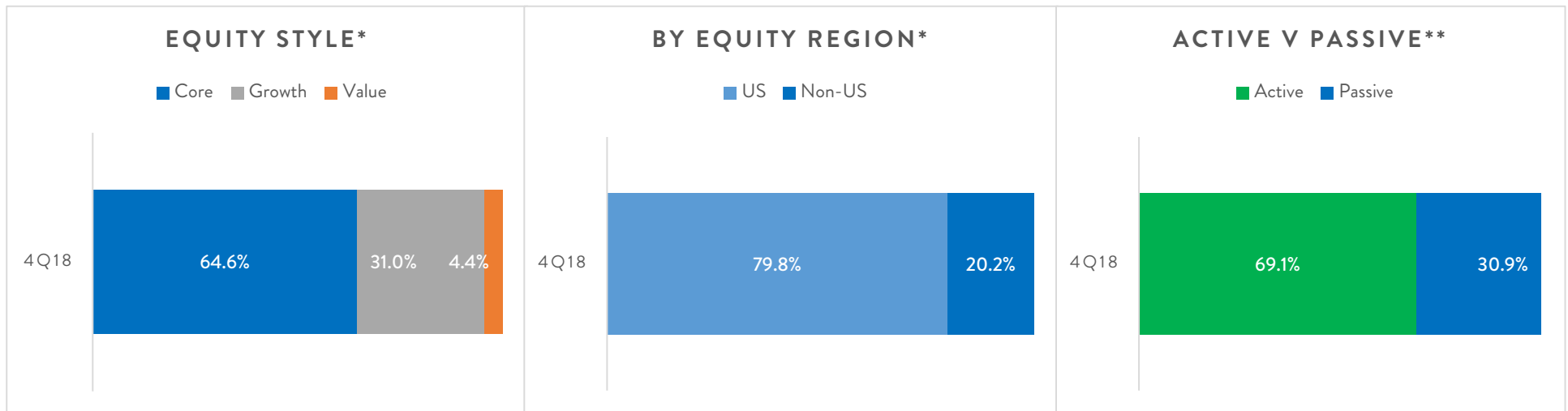
TOTAL PLAN ASSETS

\$719,676,911



HISTORICAL PLAN ALLOCATION

Asset Class	4Q18	2017	2016	2015	2014	2013	2012	2011
Fixed Income	30.2%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Large Cap	21.4%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mid Cap	5.4%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Small Cap	7.6%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
International	8.7%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Asset Allocation	22.5%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Specialty	0.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SDBA	0.3%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Loans	3.9%	N/A	N/A	N/A	N/A	N/A	N/A	N/A



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

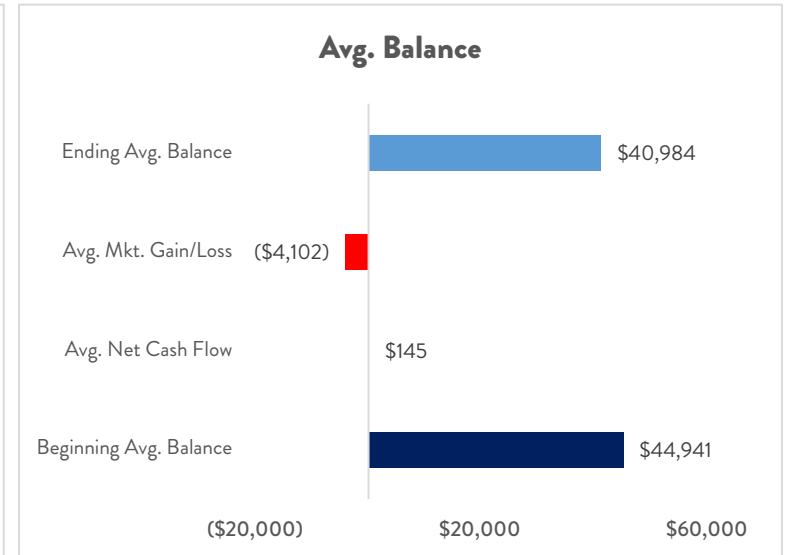
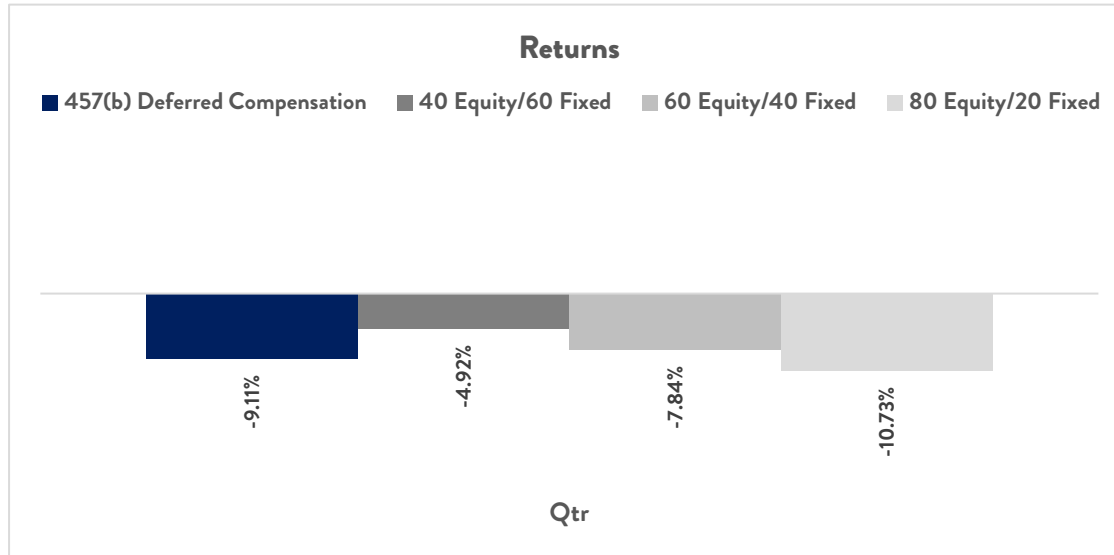
**Excludes Asset Allocation, SDBA, and Loan assets

PLAN LEVEL CASH FLOWS

	Beginning Value	Cash Flow (+)	Cash Flow (-)	Transfer	Market Gain/Loss	Ending Value
Fixed Income	\$212,726,922	\$2,420,439	(\$4,447,088)	\$5,406,898	\$880,290	\$216,987,461
Large Cap	\$179,394,101	\$2,301,536	(\$2,174,113)	\$400,297	(\$25,801,537)	\$154,120,285
Mid Cap	\$46,286,980	\$713,568	(\$497,826)	(\$630,760)	(\$7,126,564)	\$38,745,398
Small Cap	\$67,367,089	\$1,219,985	(\$819,198)	(\$63,446)	(\$12,896,314)	\$54,808,117
International	\$71,375,835	\$1,214,166	(\$823,203)	(\$585,474)	(\$8,353,330)	\$62,827,994
Asset Allocation	\$178,792,595	\$6,050,436	(\$2,715,262)	(\$4,537,516)	(\$15,660,335)	\$161,929,918
SDBA	\$2,126,220	\$0	\$0	\$10,000	(\$242,812)	\$1,893,408
Total	\$758,069,743	\$13,920,130	(\$11,476,690)	\$0	(\$69,200,601)	\$691,312,582

HISTORICAL PLAN CASH FLOWS

	Beginning Value	Net Cash Flow	Market Gain/Loss	Ending Value
4Q18	\$758,069,743	\$2,443,440	(\$69,200,601)	\$691,312,582
YTD	N/A	N/A	N/A	N/A
2017	N/A	N/A	N/A	N/A
2016	N/A	N/A	N/A	N/A
2015	N/A	N/A	N/A	N/A
2014	N/A	N/A	N/A	N/A
2013	N/A	N/A	N/A	N/A



Equity Indices: Russell 3000, MSCI ACWI ex USA; Fixed Indices: US Treasury 90 Day T-Bill, Barclays Global Aggregate Bond (rebalanced quarterly)

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COUNTY OF SAN BERNARDINO

401(a) Defined Contribution Plan

PLAN ASSET ALLOCATION

Fourth Quarter 2018

Fixed Income	Ticker	Assets	%
Stabilizer	-	\$1,462,450	7.8%
Loomis Sayles Investment Grade Bond Y	LSIIX	\$113,003	0.6%
Oppenheimer International Bond I	OIBIX	\$32,192	0.2%
Pioneer Global High Yield Y	GHYYX	\$29,298	0.2%
Total		\$1,636,943	8.7%

Large Cap	Ticker	Assets	%
Vanguard Institutional Index Instl Plus	VIIIIX	\$490,900	2.6%
American Funds Growth Fund of America R6	RGAGX	\$324,636	1.7%
Total		\$815,536	4.3%

Mid Cap	Ticker	Assets	%
Vanguard Mid Cap Index Instl	VMCIX	\$254,190	1.4%
Total		\$254,190	1.4%

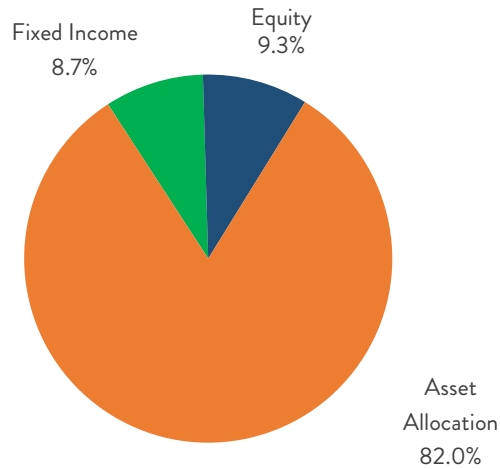
Small Cap	Ticker	Assets	%
Invesco Small Cap Value Y	VSMIX	\$70,211	0.4%
Vanguard Small Cap Index Instl	VSCIX	\$149,049	0.8%
Baron Growth Instl	BGRIX	\$130,990	0.7%
Total		\$350,249	1.9%

International	Ticker	Assets	%
Dodge & Cox International Stock	DODFX	\$80,457	0.4%
Vanguard Total Intl Stock Index I	VTSNX	\$153,102	0.8%
American Funds Capital World Gr & Inc R6	RWIGX	\$90,301	0.5%
Total		\$323,860	1.7%

Asset Allocation	Ticker	Assets	%
Conservative Allocation Portfolio	-	\$530,909	2.8%
Moderate Allocation Portfolio	-	\$755,956	4.0%
Aggressive Allocation Portfolio	-	\$703,142	3.7%
Vanguard Instl Target Retirement Income Instl	VITRX	\$545,414	2.9%
Vanguard Instl Target Retirement 2020 Instl	VITWX	\$3,119,916	16.6%
Vanguard Instl Target Retirement 2030 Instl	VTTWX	\$4,674,364	24.9%
Vanguard Instl Target Retirement 2040 Instl	VIRSX	\$3,816,202	20.3%
Vanguard Instl Target Retirement 2050 Instl	VTRLX	\$1,275,735	6.8%
Total		\$15,421,637	82.0%

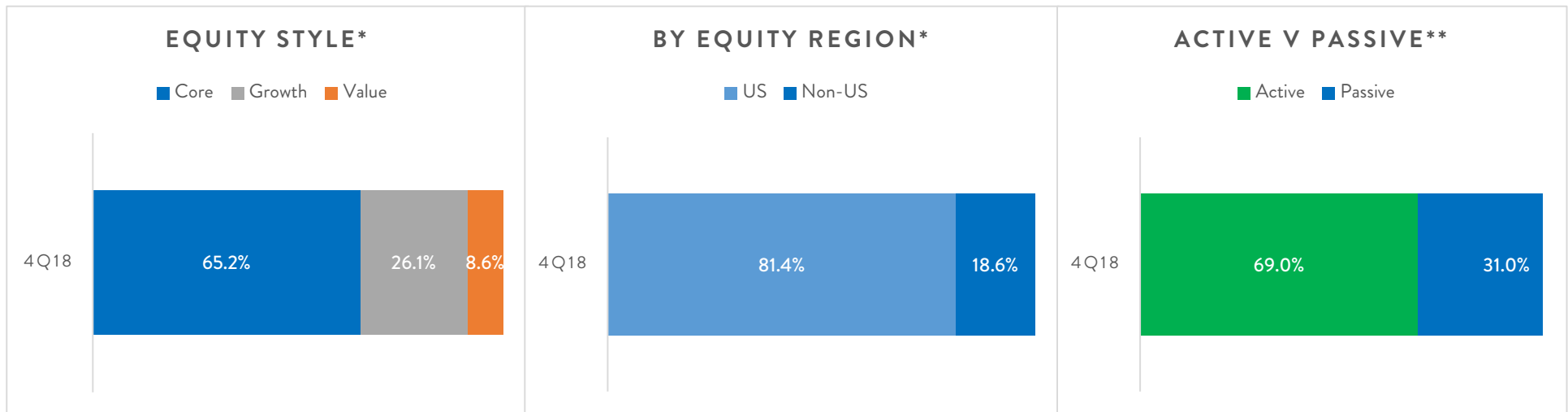
TOTAL PLAN ASSETS

\$18,802,415



HISTORICAL PLAN ALLOCATION

Asset Class	4Q18	2017	2016	2015	2014	2013	2012	2011
Fixed Income	8.7%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Large Cap	4.3%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mid Cap	1.4%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Small Cap	1.9%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
International	1.7%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Asset Allocation	82.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A



*Excludes Fixed Income and Asset Allocation assets

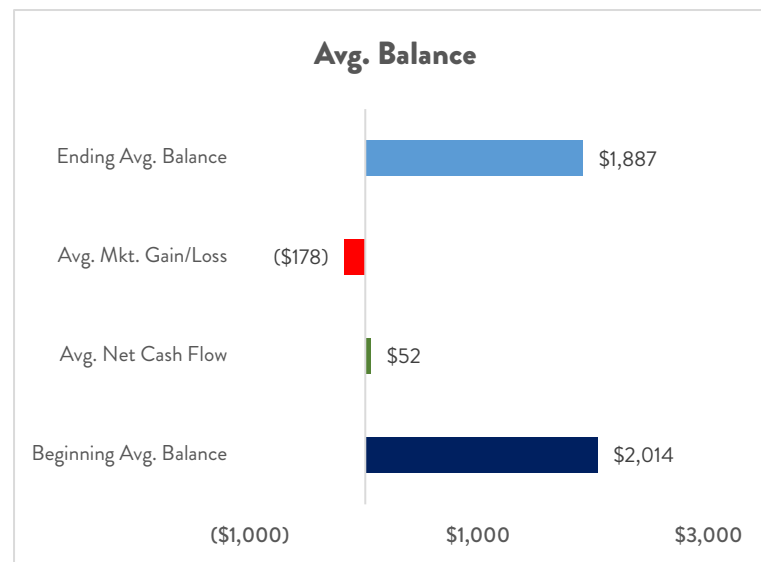
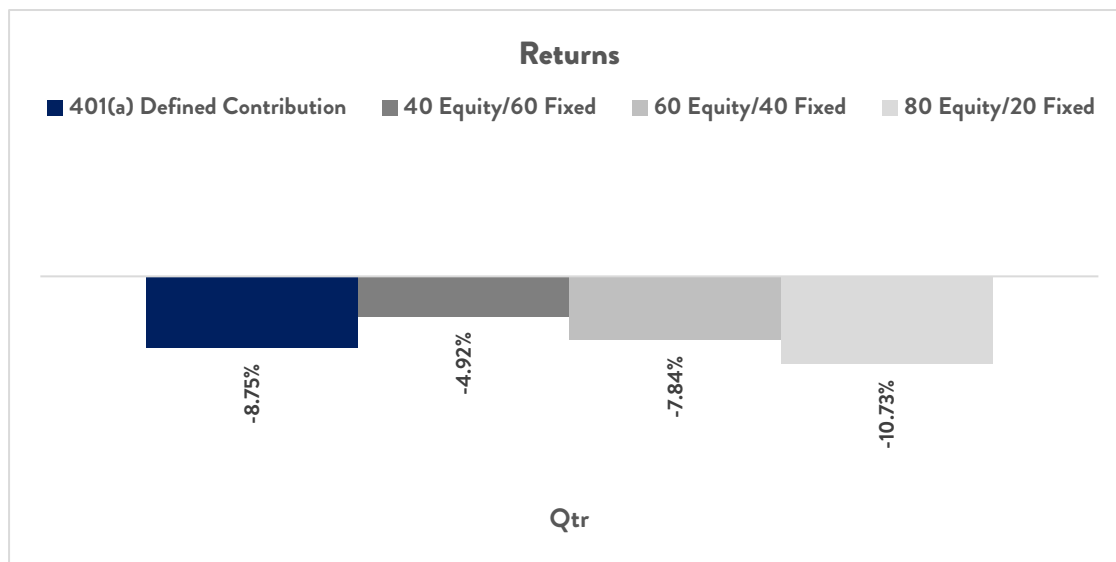
**Excludes Asset Allocation assets

PLAN LEVEL CASH FLOWS

	Beginning Value	Cash Flow (+)	Cash Flow (-)	Transfer	Market Gain/Loss	Ending Value
Fixed Income	\$1,556,652	\$37,437	(\$19,976)	\$55,769	\$7,061	\$1,636,943
Large Cap	\$903,935	\$29,444	(\$5,418)	\$19,058	(\$131,484)	\$815,536
Mid Cap	\$294,827	\$10,335	(\$2,762)	(\$2,209)	(\$46,001)	\$254,190
Small Cap	\$428,459	\$16,219	(\$936)	(\$8,113)	(\$85,381)	\$350,249
International	\$357,571	\$8,655	(\$144)	\$535	(\$42,757)	\$323,860
Asset Allocation	\$16,521,389	\$546,554	(\$101,889)	(\$65,040)	(\$1,479,377)	\$15,421,637
Total	\$20,062,833	\$648,645	(\$131,124)	\$0	(\$1,777,939)	\$18,802,415

HISTORICAL PLAN CASH FLOWS

	Beginning Value	Net Cash Flow	Market Gain/Loss	Ending Value
4Q18	\$20,062,833	\$517,521	(\$1,777,939)	\$18,802,415
YTD	N/A	N/A	N/A	N/A
2017	N/A	N/A	N/A	N/A
2016	N/A	N/A	N/A	N/A
2015	N/A	N/A	N/A	N/A
2014	N/A	N/A	N/A	N/A



Equity Indices: Russell 3000, MSCI ACWI ex USA; Fixed Indices: US Treasury 90 Day T-Bill, Barclays Global

Aggregate Bond (rebalanced quarterly)

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COUNTY OF SAN BERNARDINO

401(k) Defined Contribution Plan

PLAN ASSET ALLOCATION

Fourth Quarter 2018

Fixed Income	Ticker	Assets	%
Stabilizer	-	\$40,183,026	29.0%
Loomis Sayles Investment Grade Bond Y	LSIIX	\$3,585,648	2.6%
Oppenheimer International Bond I	OIBIX	\$674,231	0.5%
Pioneer Global High Yield Y	GHYYX	\$1,121,376	0.8%
Total		\$45,564,281	32.9%

Large Cap	Ticker	Assets	%
Vanguard Institutional Index Instl Plus	VIIIIX	\$16,211,665	11.7%
American Funds Growth Fund of America R6	RGAGX	\$15,746,930	11.4%
Total		\$31,958,595	23.1%

Mid Cap	Ticker	Assets	%
Vanguard Mid Cap Index Instl	VMCIX	\$7,990,546	5.8%
Total		\$7,990,546	5.8%

Small Cap	Ticker	Assets	%
Invesco Small Cap Value Y	VSMIX	\$966,948	0.7%
Vanguard Small Cap Index Instl	VSCIX	\$5,212,452	3.8%
Baron Growth Instl	BGRIX	\$4,001,574	2.9%
Total		\$10,180,973	7.4%

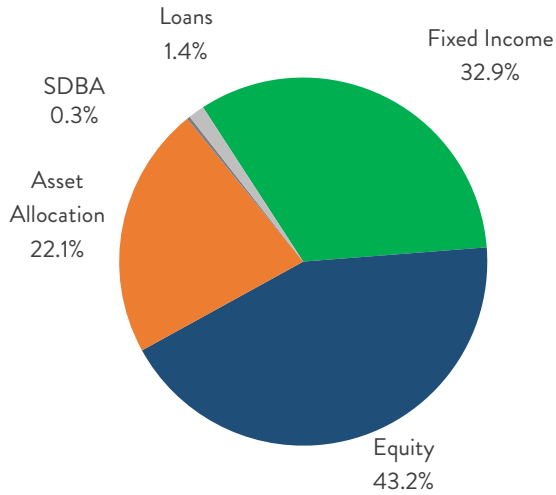
International	Ticker	Assets	%
Dodge & Cox International Stock	DODFX	\$1,462,968	1.1%
Vanguard Total Intl Stock Index I	VTSNX	\$2,807,937	2.0%
American Funds Capital World Gr & Inc R6	RWIGX	\$5,402,724	3.9%
Total		\$9,673,629	7.0%

Asset Allocation	Ticker	Assets	%
Conservative Allocation Portfolio	-	\$6,186,036	4.5%
Moderate Allocation Portfolio	-	\$13,428,672	9.7%
Aggressive Allocation Portfolio	-	\$5,677,387	4.1%
Vanguard Instl Target Retirement Income Instl	VITRX	\$352,569	0.3%
Vanguard Instl Target Retirement 2020 Instl	VITWX	\$1,132,023	0.8%
Vanguard Instl Target Retirement 2030 Instl	VTTWX	\$1,955,705	1.4%
Vanguard Instl Target Retirement 2040 Instl	VIRSX	\$925,884	0.7%
Vanguard Instl Target Retirement 2050 Instl	VTRLX	\$979,074	0.7%
Total		\$30,637,350	22.1%

Miscellaneous	Ticker	Assets	%
Self-Directed Brokerage Account	-	\$401,055	0.3%
Participant Loans	-	\$1,952,251	1.4%
Total		\$2,353,307	1.7%

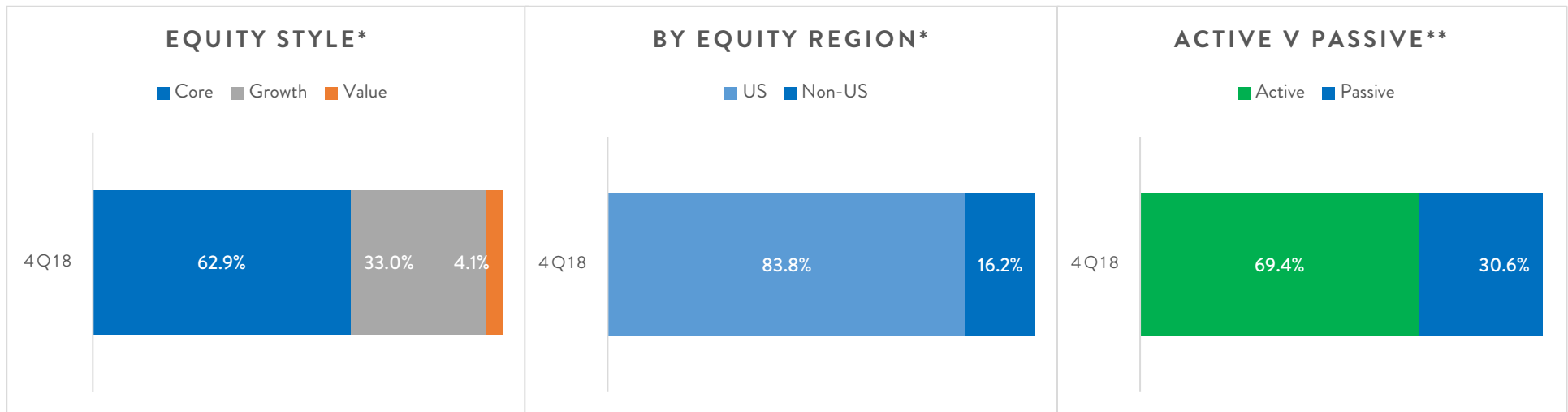
TOTAL PLAN ASSETS

\$138,358,680



HISTORICAL PLAN ALLOCATION

Asset Class	4Q18	2017	2016	2015	2014	2013	2012	2011
Fixed Income	32.9%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Large Cap	23.1%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mid Cap	5.8%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Small Cap	7.4%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
International	7.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Asset Allocation	22.1%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Specialty	0.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SDBA	0.3%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Loans	1.4%	N/A	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

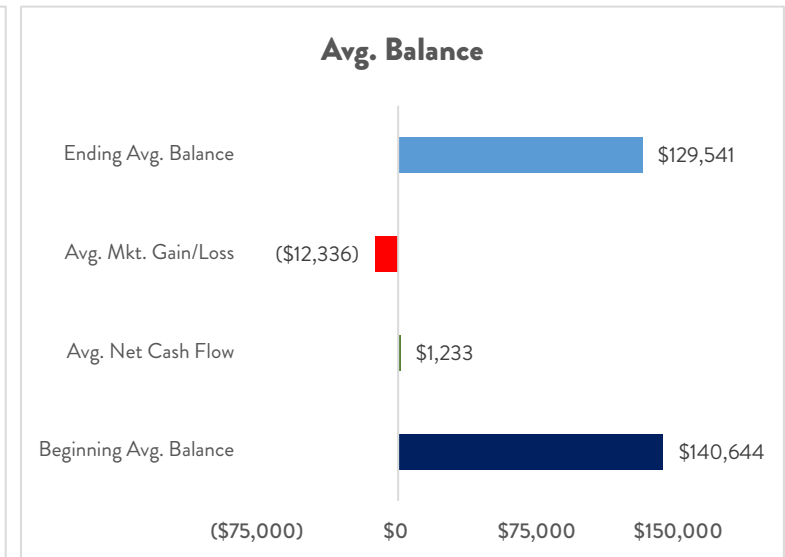
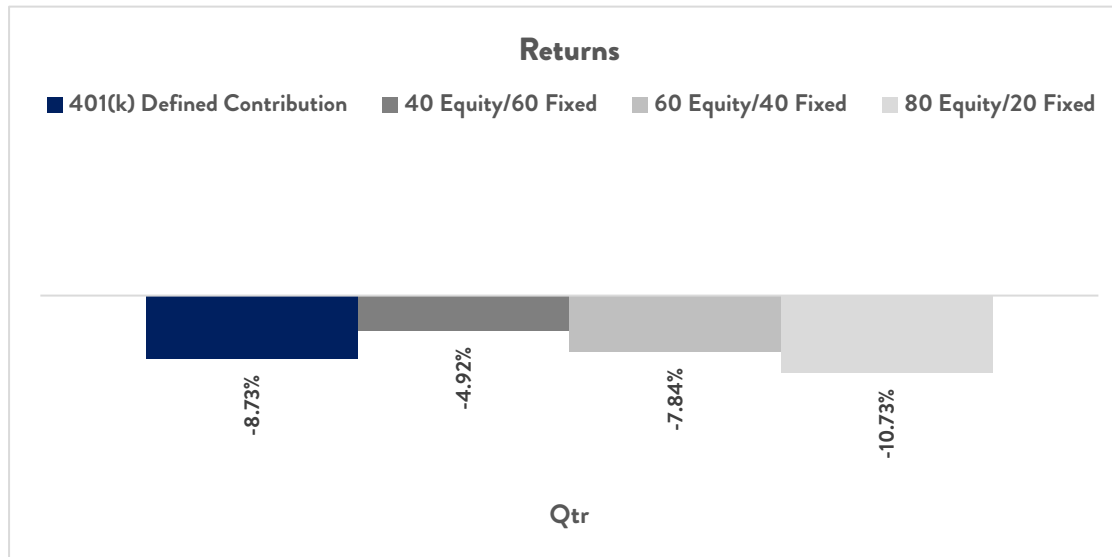
Fourth Quarter 2018

PLAN LEVEL CASH FLOWS

	Beginning Value	Cash Flow (+)	Cash Flow (-)	Transfer	Market Gain/Loss	Ending Value
Fixed Income	\$44,932,147	\$655,571	(\$547,123)	\$344,880	\$178,807	\$45,564,281
Large Cap	\$36,618,349	\$575,380	(\$413,434)	\$474,846	(\$5,296,548)	\$31,958,595
Mid Cap	\$9,608,124	\$174,030	(\$121,064)	(\$191,323)	(\$1,479,221)	\$7,990,546
Small Cap	\$12,451,334	\$227,656	(\$69,211)	(\$35,158)	(\$2,393,648)	\$10,180,973
International	\$10,845,405	\$282,453	(\$72,002)	(\$106,896)	(\$1,275,331)	\$9,673,629
Asset Allocation	\$33,168,278	\$890,390	(\$284,572)	(\$486,350)	(\$2,650,396)	\$30,637,350
SDBA	\$474,222	\$0	\$0	\$0	(\$73,167)	\$401,055
Total	\$148,097,859	\$2,805,480	(\$1,507,406)	\$0	(\$12,989,505)	\$136,406,428

HISTORICAL PLAN CASH FLOWS

	Beginning Value	Net Cash Flow	Market Gain/Loss	Ending Value
4Q18	\$148,097,859	\$1,298,073	(\$12,989,505)	\$136,406,428
YTD	N/A	N/A	N/A	N/A
2017	N/A	N/A	N/A	N/A
2016	N/A	N/A	N/A	N/A
2015	N/A	N/A	N/A	N/A
2014	N/A	N/A	N/A	N/A
2013	N/A	N/A	N/A	N/A



Equity Indices: Russell 3000, MSCI ACWI ex USA; Fixed Indices: US Treasury 90 Day T-Bill, Barclays Global

Aggregate Bond (rebalanced quarterly)

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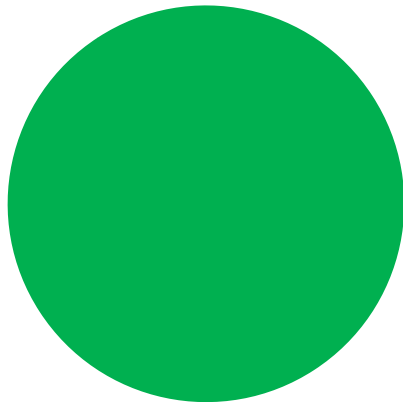
Fixed Income	Ticker	Assets	%
Stabilizer	-	\$36,665,327	100.0%
Total		\$36,665,327	100.0%

HISTORICAL PLAN CASH FLOWS

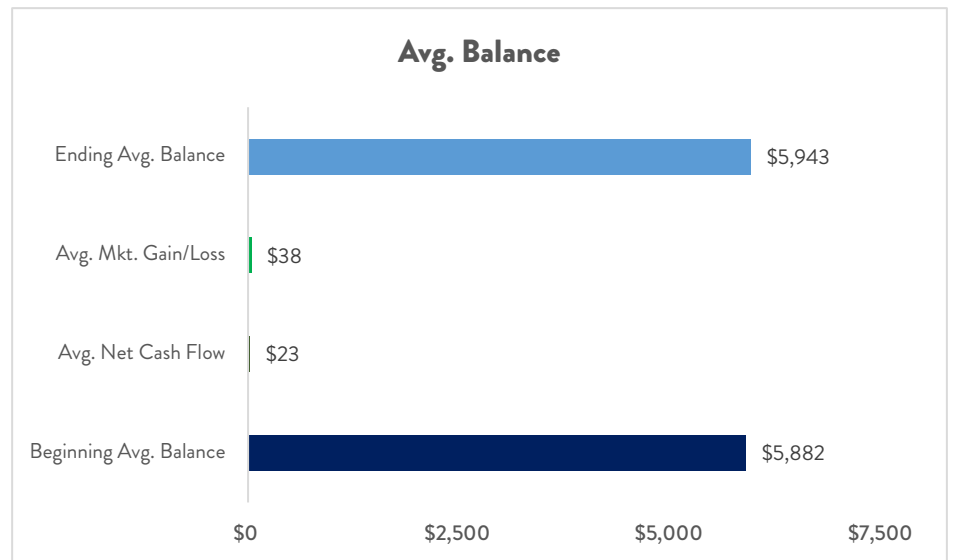
	Beginning Value	Net Cash Flow	Market Gain/Loss	Ending Value
4Q18	\$36,292,234	\$141,099	\$231,994	\$36,665,327
YTD	N/A	N/A	N/A	N/A
2017	N/A	N/A	N/A	N/A
2016	N/A	N/A	N/A	N/A
2015	N/A	N/A	N/A	N/A
2014	N/A	N/A	N/A	N/A

TOTAL PLAN ASSETS \$36,665,327

Fixed Income
100.0%



Avg. Balance



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COUNTY OF SAN BERNARDINO

Retirement Medical Trust

PLAN ASSET ALLOCATION

Fourth Quarter 2018

Fixed Income	Ticker	Assets	%
Voya Fixed Account	-	\$73,597,967	59.1%
Voya Government Money Market A	AEMXX	\$8,518	0.0%
Loomis Sayles Investment Grade Bond Y	LSIIX	\$268,654	0.2%
Oppenheimer International Bond I	OIBIX	\$129,544	0.1%
Pioneer Global High Yield Y	GHYYX	\$177,315	0.1%
Total		\$74,181,998	59.5%

Large Cap	Ticker	Assets	%
Vanguard Institutional Index Instl Plus	VIIIX	\$1,648,805	1.3%
American Funds Growth Fund of America R6	RGAGX	\$1,896,440	1.5%
Total		\$3,545,245	2.8%

Mid Cap	Ticker	Assets	%
Vanguard Mid Cap Index Instl	VMCIX	\$1,664,176	1.3%
Total		\$1,664,176	1.3%

Small Cap	Ticker	Assets	%
Invesco Small Cap Value Y	VSMIX	\$253,940	0.2%
Vanguard Small Cap Index Instl	VSICX	\$617,157	0.5%
Baron Growth Instl	BGRIX	\$825,797	0.7%
Total		\$1,696,894	1.4%

International	Ticker	Assets	%
Dodge & Cox International Stock	DODFX	\$183,499	0.1%
Vanguard Total Intl Stock Index I	VTSNX	\$235,557	0.2%
American Funds Capital World Gr & Inc R6	RWIGX	\$297,594	0.2%
Total		\$716,650	0.6%

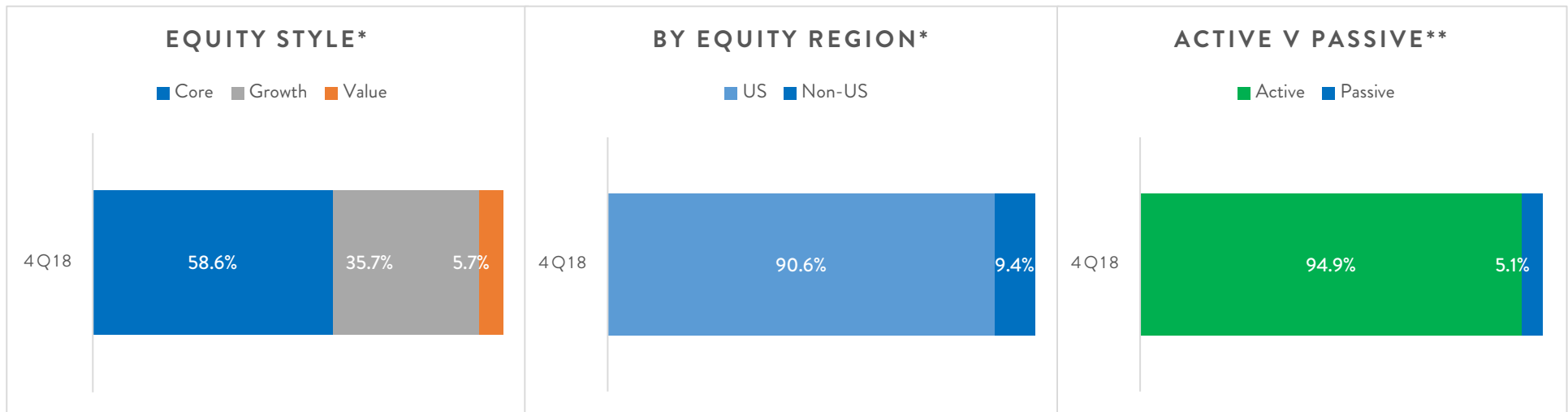
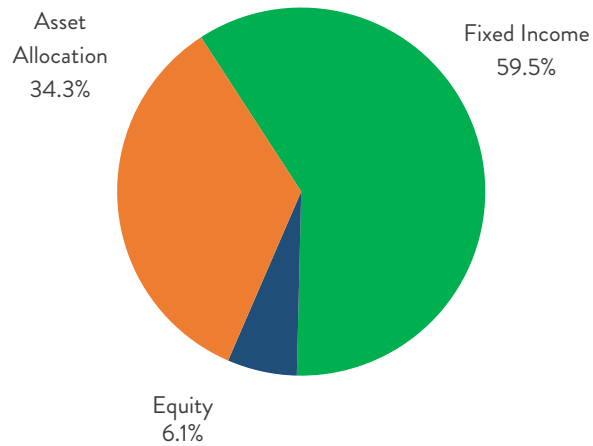
Asset Allocation	Ticker	Assets	%
Conservative Allocation Portfolio	-	\$1,359,184	1.1%
Moderate Allocation Portfolio	-	\$4,383,897	3.5%
Aggressive Allocation Portfolio	-	\$3,987,470	3.2%
Vanguard Instl Target Retirement Income Instl	VITRX	\$1,319,733	1.1%
Vanguard Instl Target Retirement 2020 Instl	VITWX	\$9,267,325	7.4%
Vanguard Instl Target Retirement 2030 Instl	VTTWX	\$13,263,554	10.6%
Vanguard Instl Target Retirement 2040 Instl	VIRSX	\$7,667,333	6.2%
Vanguard Instl Target Retirement 2050 Instl	VTRLX	\$1,521,072	1.2%
Total		\$42,769,567	34.3%

TOTAL PLAN ASSETS

\$124,574,529

HISTORICAL PLAN ALLOCATION

Asset Class	4Q18	2017	2016	2015	2014	2013	2012	2011
Fixed Income	59.5%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Large Cap	2.8%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mid Cap	1.3%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Small Cap	1.4%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
International	0.6%	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Asset Allocation	34.3%	N/A	N/A	N/A	N/A	N/A	N/A	N/A



*Excludes Fixed Income and Asset Allocation assets

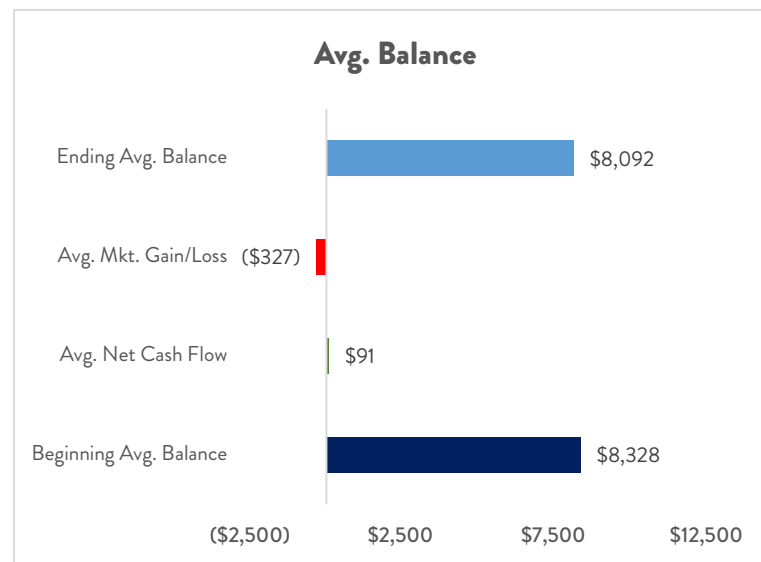
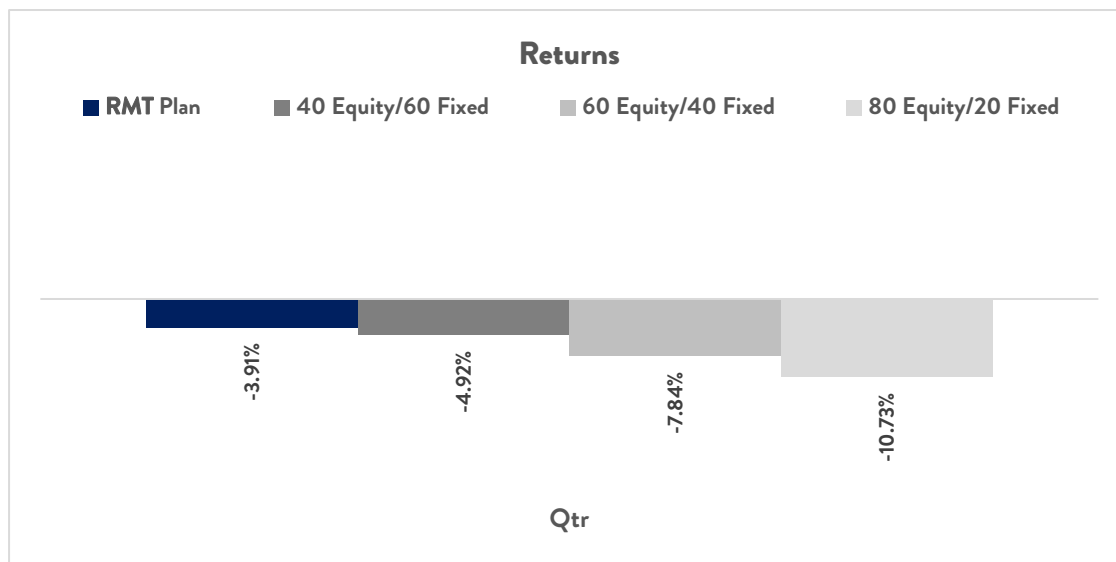
**Excludes Asset Allocation assets

PLAN LEVEL CASH FLOWS

	Beginning Value	Cash Flow (+)	Cash Flow (-)	Transfer	Market Gain/Loss	Ending Value
Fixed Income	\$73,429,455	\$3,118,698	(\$1,261,331)	(\$1,448,382)	\$343,559	\$74,181,998
Large Cap	\$4,129,036	\$0	(\$58,278)	\$69,040	(\$594,554)	\$3,545,245
Mid Cap	\$1,835,336	\$0	(\$27,850)	\$155,951	(\$299,261)	\$1,664,176
Small Cap	\$2,072,659	\$582	(\$20,469)	\$47,168	(\$403,045)	\$1,696,894
International	\$747,657	\$48	(\$9,324)	\$71,114	(\$92,846)	\$716,650
Asset Allocation	\$46,001,696	\$1,438	(\$345,044)	\$1,105,109	(\$3,993,632)	\$42,769,567
Total	\$128,215,839	\$3,120,766	(\$1,722,297)	\$0	(\$5,039,779)	\$124,574,529

HISTORICAL PLAN CASH FLOWS

	Beginning Value	Net Cash Flow	Market Gain/Loss	Ending Value
4Q18	\$128,215,839	\$1,398,469	(\$5,039,779)	\$124,574,529
YTD	N/A	N/A	N/A	N/A
2017	N/A	N/A	N/A	N/A
2016	N/A	N/A	N/A	N/A
2015	N/A	N/A	N/A	N/A
2014	N/A	N/A	N/A	N/A



Equity Indices: Russell 3000, MSCI ACWI ex USA; Fixed Indices: US Treasury 90 Day T-Bill, Barclays Global

Aggregate Bond (rebalanced quarterly)

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Section 3

Key: Ⓟ Pass / ● Fail

Proposed Investment Policy Status

	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	Ⓟ	Ⓟ	-	
Oppenheimer International Bond I	Ⓟ	Ⓟ	-	
Pioneer Global High Yield Y	●	Ⓟ	-	Trailing Benchmark and Peer Group for 5 year period.
Vanguard Institutional Index Instl Plus	Ⓟ	Ⓟ	-	
American Funds Growth Fund of America R6	Ⓟ	Ⓟ	-	
Vanguard Mid Cap Index Instl	Ⓟ	Ⓟ	-	
Invesco Small Cap Value Y	●	Ⓟ	-	Trailing Benchmark and Peer Group for 5 year period.
Vanguard Small Cap Index Instl	Ⓟ	Ⓟ	-	
Baron Growth Instl	Ⓟ	Ⓟ	-	
Dodge & Cox International Stock	Ⓟ	Ⓟ	-	
Vanguard Total Intl Stock Index I	Ⓟ	Ⓟ	-	
American Funds Capital World Gr & Inc R6	Ⓟ	Ⓟ	-	
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 2030 Instl	Ⓟ	Ⓟ	-	
Vanguard Instl Target Retirement 2040 Instl	Ⓟ	Ⓟ	-	
Vanguard Instl Target Retirement 2050 Instl	Ⓟ	Ⓟ	-	

COUNTY OF SAN BERNARDINO

All Plans - Combined

PERFORMANCE REVIEW

Fourth Quarter 2018

	QTR	YTD	1Yr	<i>Annualized</i>			2017	2016	2015	2014	2013	2012
				3Yr	5Yr	10Yr						
Stabilizer	0.62	2.50	2.50	2.44	2.35	2.35	N/A	N/A	N/A	N/A	N/A	N/A
5 Yr Constant Maturity US Treasury Yield	0.71	2.75	2.75	2.03	1.85	1.68	1.91	1.44	1.53	1.64	1.16	0.76
+/- Index	(0.09)	(0.25)	(0.25)	0.41	0.50	0.67	-	-	-	-	-	-
US Stable Value	13	8	8	3	4	24	N/A	N/A	N/A	N/A	N/A	N/A
Voya Fixed Account	0.48	1.90	1.90	2.00	2.10	2.48	N/A	N/A	N/A	N/A	N/A	N/A
5 Yr Constant Maturity US Treasury Yield	0.71	2.75	2.75	2.03	1.85	1.68	1.91	1.44	1.53	1.64	1.16	0.76
+/- Index	(0.23)	(0.85)	(0.85)	(0.03)	0.25	0.80	-	-	-	-	-	-
US Stable Value	56	43	43	19	11	17	N/A	N/A	N/A	N/A	N/A	N/A
Voya Government Money Market A	0.47	1.50	1.50	0.61	0.37	0.20	0.26	0.08	0.02	0.01	0.02	0.03
US 90 Day T-Bill	0.57	1.94	1.94	1.06	0.65	0.38	0.93	0.32	0.05	0.03	0.06	0.08
+/- Index	(0.10)	(0.43)	(0.43)	(0.45)	(0.28)	(0.17)	(0.67)	(0.24)	(0.03)	(0.02)	(0.03)	(0.06)
US Money Market - Taxable	46	45	45	55	55	57	76	43	25	26	14	18
Loomis Sayles Investment Grade Bond Y	-0.59	-0.32	-0.32	4.12	2.41	6.69	6.66	6.16	-5.08	5.14	1.36	12.25
BBgBarc Capital US Aggregate Bond Index	1.64	0.01	0.01	2.06	2.52	3.48	3.54	2.65	0.55	5.97	-2.02	4.21
+/- Index	(2.22)	(0.33)	(0.33)	2.06	(0.11)	3.22	3.12	3.51	(5.63)	(0.83)	3.38	8.04
US Fund Intermediate-Term Bond	93	41	41	3	42	6	2	3	98	60	5	5
Oppenheimer International Bond I	-0.44	-5.53	-5.53	3.88	1.78	3.58	11.12	6.79	-3.31	0.77	-3.88	11.29
BBgBarc Capital Global Agg Ex-USA Index	0.91	-2.15	-2.15	3.15	-0.01	1.74	10.51	1.49	-6.02	-3.08	-3.08	4.09
+/- Index	(1.35)	(3.38)	(3.38)	0.73	1.79	1.84	0.61	5.30	2.71	3.86	(0.80)	7.20
US Fund World Bond	74	91	91	19	28	52	9	13	34	55	68	-

COUNTY OF SAN BERNARDINO

All Plans - Combined

PERFORMANCE REVIEW

Fourth Quarter 2018

	QTR	YTD	1Yr	Annualized			2017	2016	2015	2014	2013	2012
				3Yr	5Yr	10Yr						
Pioneer Global High Yield Y	-4.61	-5.13	-5.13	5.89	1.88	9.84	10.21	13.57	-5.92	-1.72	5.07	16.57
BBgBarc Global High Yield Index	-3.49	-4.06	-4.06	6.58	3.33	11.06	10.43	14.27	-2.72	0.01	7.33	19.60
+/- Index	(1.12)	(1.07)	(1.07)	(0.69)	(1.44)	(1.21)	(0.22)	(0.70)	(3.20)	(1.73)	(2.26)	(3.03)
US Fund High Yield Bond	54	93	93	40	86	33	3	48	82	95	85	21
Vanguard Institutional Index Instl Plus	-13.53	-4.41	-4.41	9.24	8.48	13.13	21.82	11.95	1.39	13.68	32.37	16.00
S&P 500 Index	-13.52	-4.38	-4.38	9.26	8.49	13.12	21.83	11.96	1.38	13.69	32.39	16.00
+/- Index	(0.01)	(0.02)	(0.02)	(0.02)	(0.01)	0.01	(0.02)	(0.01)	0.01	(0.01)	(0.02)	0.00
US Fund Large Blend	43	25	25	15	9	18	28	26	20	18	41	34
American Funds Growth Fund of America R6	-15.06	-2.60	-2.60	10.27	9.22	13.85	26.53	8.82	5.70	9.63	34.29	20.98
Russell 1000 Growth Index	-15.89	-1.51	-1.51	11.15	10.40	15.29	30.21	7.08	5.67	13.05	33.48	15.26
+/- Index	0.82	(1.09)	(1.09)	(0.87)	(1.19)	(1.44)	(3.69)	1.74	0.03	(3.42)	0.81	5.73
US Fund Large Growth	42	53	53	31	38	48	57	9	34	56	44	6
Vanguard Mid Cap Index Instl	-15.47	-9.24	-9.24	6.39	6.22	13.89	19.29	11.23	-1.33	13.78	35.17	16.01
Vanguard US Mid Cap Index	-15.46	-9.22	-9.22	6.40	6.24	13.91	19.30	11.25	-1.28	13.83	35.21	16.04
+/- Index	(0.01)	(0.02)	(0.02)	(0.01)	(0.03)	(0.03)	0.00	(0.02)	(0.05)	(0.04)	(0.04)	(0.03)
US Fund Mid-Cap Blend	39	32	32	50	14	10	17	73	17	5	40	55
Invesco Small Cap Value Y	-23.92	-25.11	-25.11	1.74	0.67	11.06	18.58	18.61	-8.64	7.43	44.55	22.91
Russell 2000 Value Index	-18.67	-12.86	-12.86	7.37	3.61	10.40	7.84	31.74	-7.47	4.22	34.52	18.05
+/- Index	(5.26)	(12.25)	(12.25)	(5.63)	(2.94)	0.66	10.74	(13.13)	(1.17)	3.21	10.03	4.86
US Fund Small Value	91	98	98	91	76	48	1	87	76	7	5	6

COUNTY OF SAN BERNARDINO

All Plans - Combined

PERFORMANCE REVIEW

Fourth Quarter 2018

	QTR	YTD	1Yr	<i>Annualized</i>			2017	2016	2015	2014	2013	2012
				3Yr	5Yr	10Yr						
Vanguard Small Cap Index Instl	-18.34	-9.32	-9.32	7.64	5.26	13.60	16.25	18.32	-3.63	7.53	37.80	18.26
Vanguard US Small Cap Index	-18.33	-9.33	-9.33	7.62	5.24	13.53	16.24	18.26	-3.68	7.54	37.77	18.20
+/- Index	(0.02)	0.01	0.01	0.02	0.02	0.07	0.01	0.05	0.05	(0.01)	0.03	0.07
US Fund Small Blend	29	20	20	23	13	8	13	70	34	13	46	20
Baron Growth Instl	-18.53	-2.67	-2.67	9.63	5.76	13.77	27.35	6.31	-4.06	4.66	38.69	16.74
Russell 2000 Growth Index	-21.65	-9.31	-9.31	7.24	5.13	13.52	22.17	11.32	-1.38	5.60	43.30	14.59
+/- Index	3.12	6.64	6.64	2.39	0.63	0.25	5.19	(5.01)	(2.68)	(0.95)	(4.62)	2.15
US Fund Small Growth	15	28	28	34	40	45	20	80	69	31	63	18
Dodge & Cox International Stock	-12.39	-17.98	-17.98	3.24	-0.48	7.72	23.94	8.26	-11.35	0.08	26.31	21.03
MSCI ACWI Ex-USA Value (Net) Index	-10.71	-13.97	-13.97	4.75	-0.38	5.95	22.66	8.92	-10.06	-5.10	15.04	16.97
+/- Index	(1.68)	(4.01)	(4.01)	(1.50)	(0.09)	1.76	1.28	(0.66)	(1.29)	5.18	11.27	4.06
US Fund Foreign Large Value	43	81	81	40	43	9	37	11	95	4	8	16
Vanguard Total Intl Stock Index I	-11.66	-14.39	-14.39	4.56	0.97	6.38	27.55	4.70	-4.24	-4.15	15.15	18.28
Vanguard Total International Stock Index	-11.79	-14.62	-14.62	4.44	1.05	6.64	27.41	4.72	-4.29	-3.39	15.76	17.04
+/- Index	0.13	0.22	0.22	0.12	(0.08)	(0.26)	0.14	(0.02)	0.05	(0.76)	(0.61)	1.24
US Fund Foreign Large Blend	26	50	50	12	21	31	23	12	79	33	83	48
American Funds Capital World Gr & Inc R6	-11.60	-9.97	-9.97	6.36	4.26	9.39	25.08	6.85	-1.88	4.36	25.28	19.56
MSCI World (Net) Index	-13.42	-8.71	-8.71	6.30	4.56	9.67	22.40	7.51	-0.87	4.94	26.68	15.83
+/- Index	1.81	(1.26)	(1.26)	0.06	(0.29)	(0.28)	2.68	(0.66)	(1.00)	(0.58)	(1.40)	3.73
US Fund World Large Stock	28	56	56	39	40	50	33	34	55	30	51	23

COUNTY OF SAN BERNARDINO

All Plans - Combined

PERFORMANCE REVIEW

Fourth Quarter 2018

	QTR	YTD	1Yr	Annualized			2017	2016	2015	2014	2013	2012
				3Yr	5Yr	10Yr						
Conservative Allocation Portfolio	-3.62	-0.82	-0.82	4.59	3.53	6.23	N/A	N/A	N/A	N/A	N/A	N/A
Dow Jones Conservative Index	-1.25	-0.62	-0.62	2.67	2.24	4.22	5.73	3.01	-0.63	3.86	1.41	5.44
+/- Index	(2.37)	(0.20)	(0.20)	1.92	1.29	2.01	-	-	-	-	-	-
US Fund Conservative Allocation	24	1	1	11	11	51	N/A	N/A	N/A	N/A	N/A	N/A
Moderate Allocation Portfolio	-8.23	-6.01	-6.01	5.04	4.14	8.77	N/A	N/A	N/A	N/A	N/A	N/A
Dow Jones Moderate Index	-7.70	-5.21	-5.21	5.53	4.11	8.22	15.15	7.67	-1.21	5.35	14.46	11.24
+/- Index	(0.53)	(0.80)	(0.80)	(0.49)	0.03	0.55	-	-	-	-	-	-
US Fund Moderate Allocation	44	50	50	35	34	34	N/A	N/A	N/A	N/A	N/A	N/A
Aggressive Allocation Portfolio	-10.98	-8.33	-8.33	5.88	4.12	10.51	N/A	N/A	N/A	N/A	N/A	N/A
Dow Jones Aggressive Index	-14.07	-9.45	-9.45	7.38	5.16	11.63	23.20	10.98	-2.56	6.59	27.00	16.83
+/- Index	3.09	1.12	1.12	(1.50)	(1.04)	(1.12)	-	-	-	-	-	-
US Fund Aggressive Allocation	39	50	50	17	25	6	N/A	N/A	N/A	N/A	N/A	N/A
Vanguard Instl Target Retirement Income Instl	-3.21	-1.98	-1.98	3.85	3.39	5.96	8.54	5.29	-0.13	5.58	5.91	8.27
Vanguard Retirement Income Index	-3.24	-1.98	-1.98	3.92	3.51	6.05	8.67	5.35	0.12	5.76	6.03	8.42
+/- Index	0.03	0.00	0.00	(0.07)	(0.12)	(0.09)	(0.13)	(0.06)	(0.25)	(0.18)	(0.12)	(0.15)
US Fund Target-Date Retirement	20	10	10	23	13	37	58	38	11	15	47	65
Vanguard Instl Target Retirement 2020 Instl	-6.49	-4.21	-4.21	5.38	4.48	8.57	14.13	7.04	-0.63	7.16	15.90	12.40
Vanguard Retirement 2020 Index	-6.47	-4.14	-4.14	5.47	4.64	8.75	14.22	7.17	-0.40	7.37	16.21	12.47
+/- Index	(0.02)	(0.07)	(0.07)	(0.09)	(0.16)	(0.18)	(0.09)	(0.13)	(0.23)	(0.21)	(0.31)	(0.07)
US Fund Target-Date 2020	61	41	41	11	3	22	13	27	27	1	22	39

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

COUNTY OF SAN BERNARDINO

All Plans - Combined

PERFORMANCE REVIEW

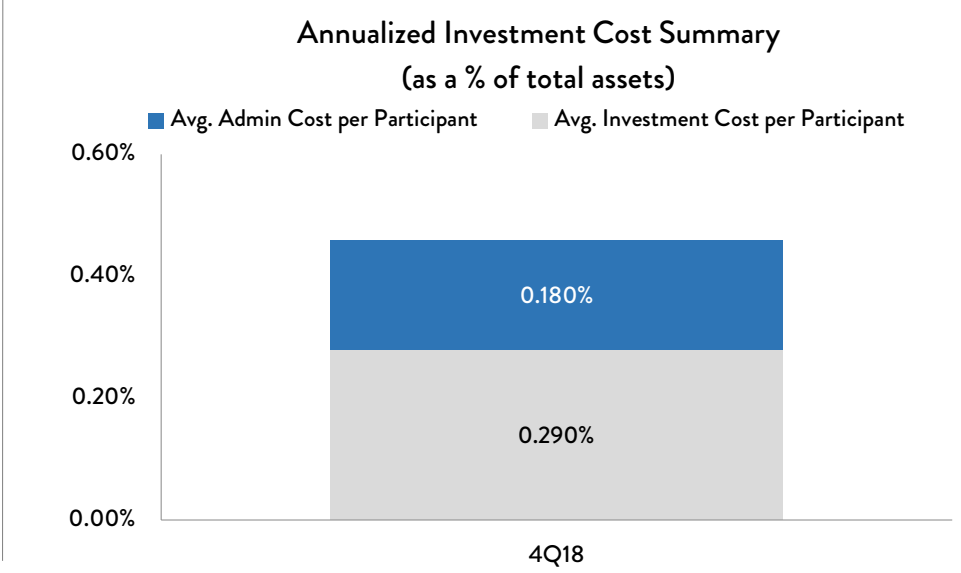
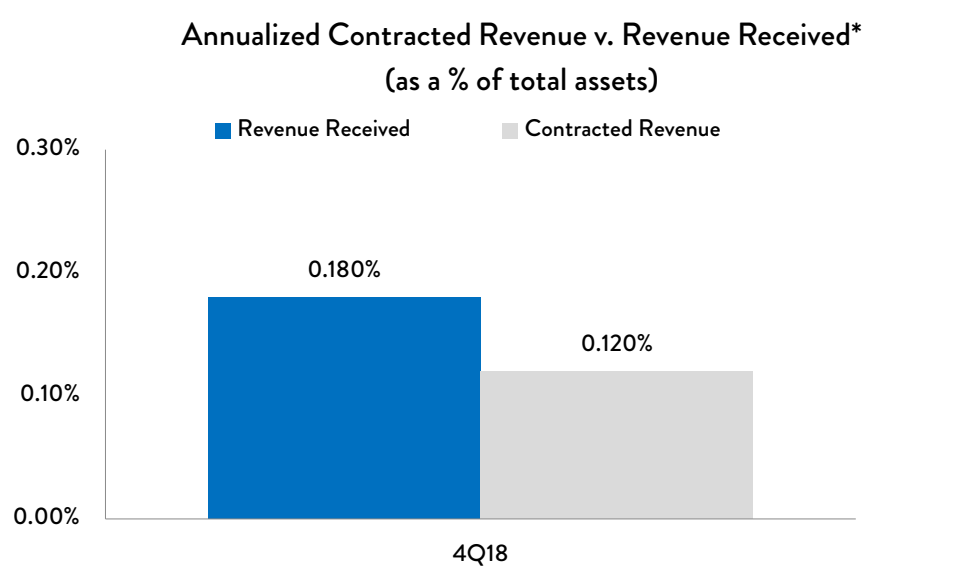
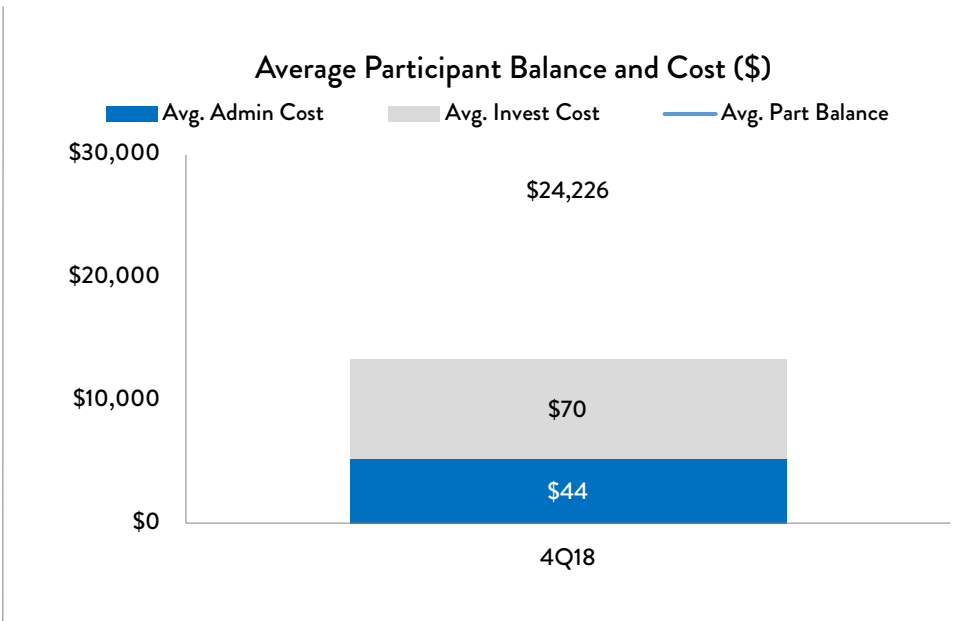
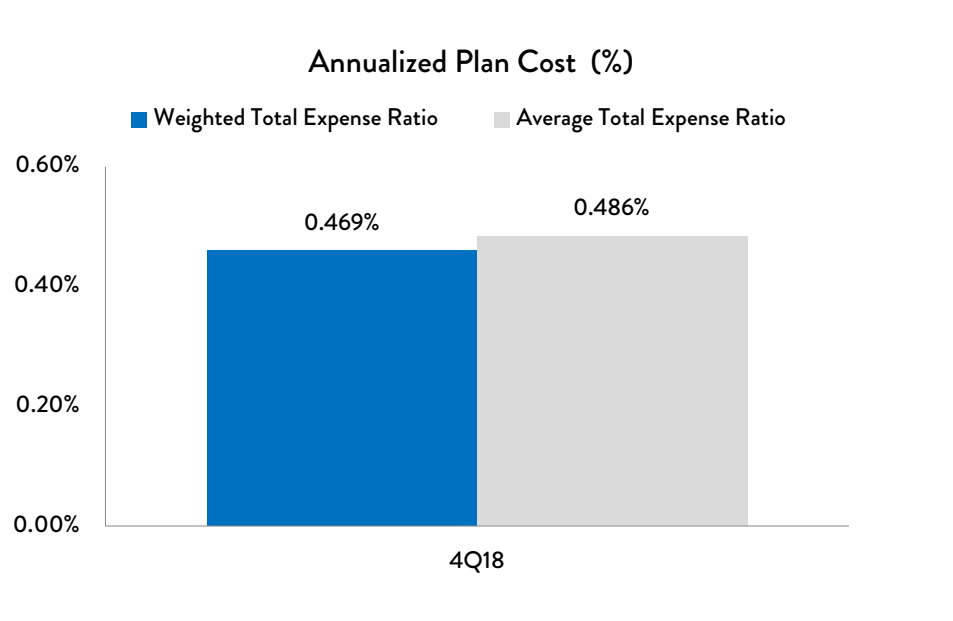
Fourth Quarter 2018

	QTR	YTD	1Yr	<i>Annualized</i>			2017	2016	2015	2014	2013	2012
				3Yr	5Yr	10Yr						
Vanguard Instl Target Retirement 2030 Instl	-8.85	-5.82	-5.82	6.13	4.87	9.62	17.57	7.97	-0.97	7.23	20.55	14.30
Vanguard Retirement 2030 Index	-8.82	-5.74	-5.74	6.24	5.04	9.81	17.65	8.11	-0.80	7.51	20.88	14.31
+/- Index	(0.03)	(0.08)	(0.08)	(0.11)	(0.17)	(0.19)	(0.08)	(0.14)	(0.17)	(0.28)	(0.33)	(0.01)
US Fund Target-Date 2030	42	32	32	18	10	29	32	29	36	9	30	43
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2017	2016	2015	2014	2013	2012
Vanguard Instl Target Retirement 2040 Instl	-11.04	-7.31	-7.31	6.78	5.16	10.32	20.73	8.81	-1.52	7.22	24.44	15.63
Vanguard Retirement 2040 Index	-10.98	-7.22	-7.22	6.92	5.37	10.53	20.87	8.98	-1.25	7.61	24.79	15.58
+/- Index	(0.06)	(0.09)	(0.09)	(0.14)	(0.21)	(0.21)	(0.14)	(0.17)	(0.27)	(0.39)	(0.35)	0.05
US Fund Target-Date 2040	47	29	29	13	9	20	27	21	51	15	20	36
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2017	2016	2015	2014	2013	2012
Vanguard Instl Target Retirement 2050 Instl	-11.79	-7.87	-7.87	6.83	-	-	21.47	8.95	-1.51	7.25	24.41	15.65
Vanguard Retirement 2050 Index	-11.73	-7.77	-7.77	6.95	5.39	10.54	21.54	9.13	-1.25	7.61	24.79	15.58
+/- Index	(0.06)	(0.10)	(0.10)	(0.12)	-	-	(0.07)	(0.18)	(0.25)	(0.36)	(0.38)	0.08
US Fund Target-Date 2050	48	34	34	16	-	-	33	28	51	19	32	42

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

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*Revenue received is 0.18% annually on all assets excluding SDBA. Contracted revenue is 0.12% annually on all assets excluding SDBA.

COUNTY OF SAN BERNARDINO

All Plans - Combined

PLAN FEE ANALYSIS

Fourth Quarter 2018

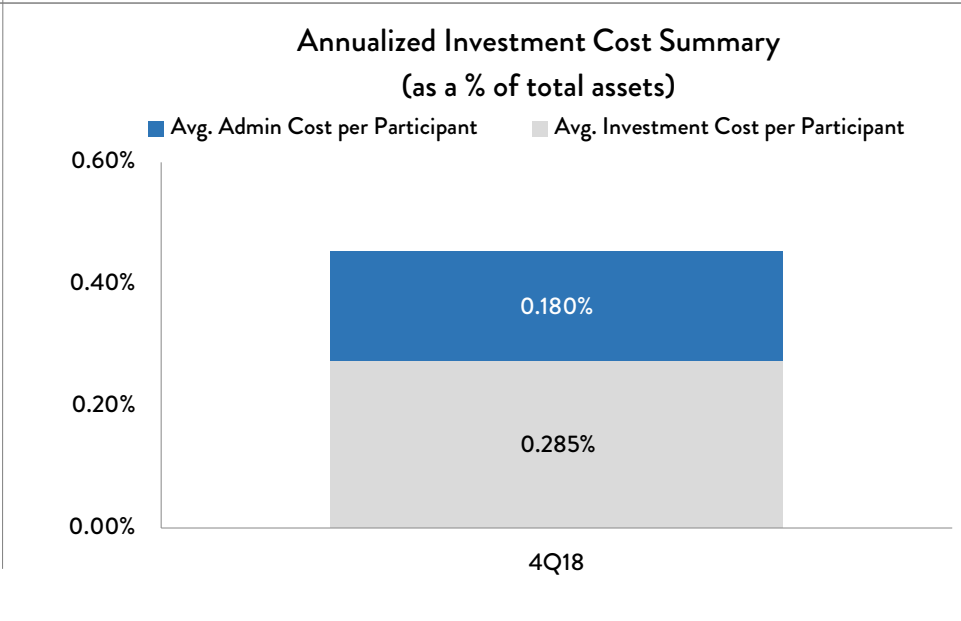
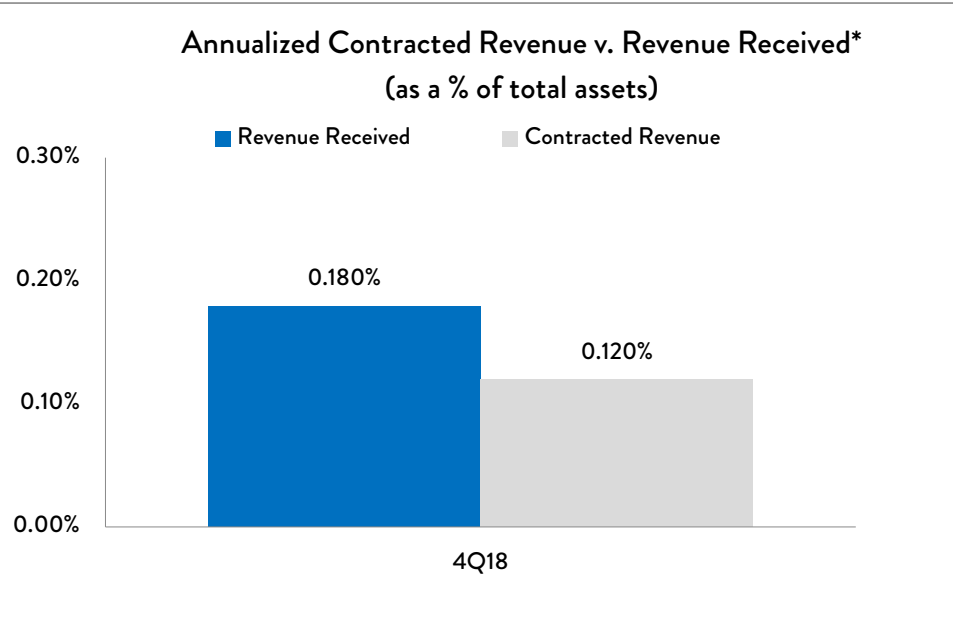
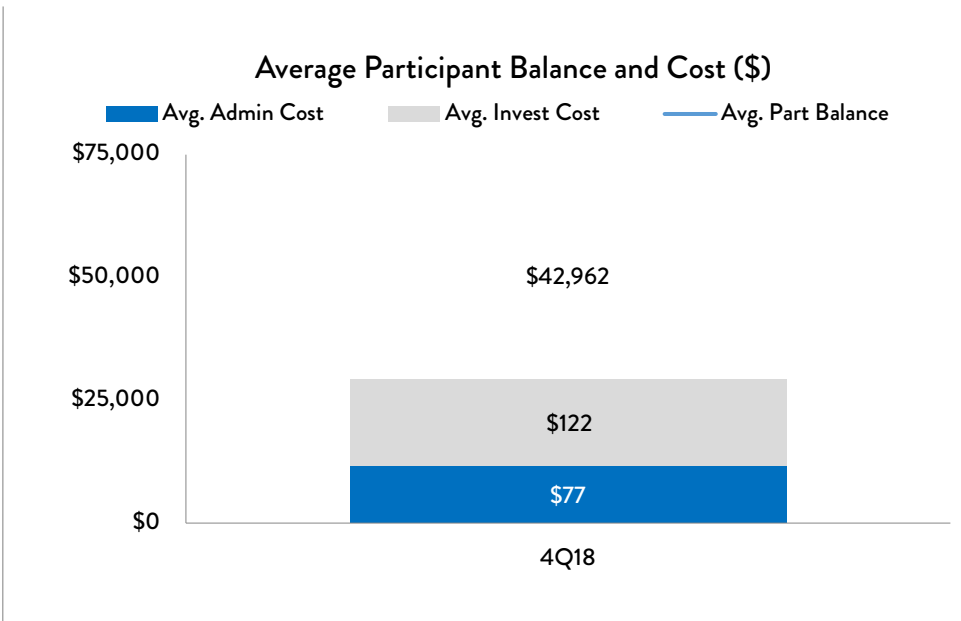
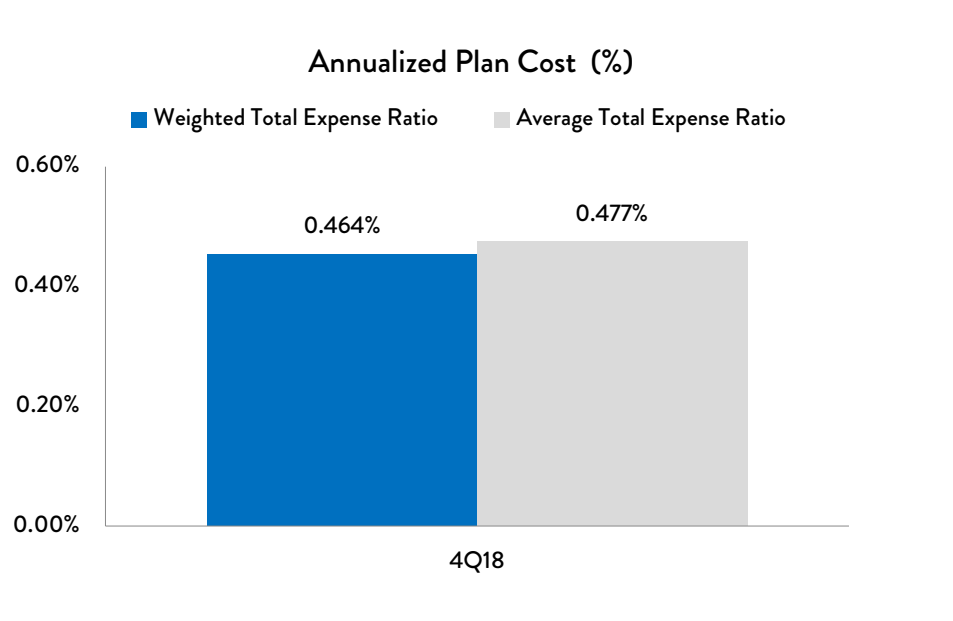
Annualized

Fund	Ticker	Quarter Average			Est. Total Invest. Cost	Est. Total Admin. Cost
		Assets	Net Expense Ratio	Admin Fee		
Stabilizer	-	\$266,095,398	0.44%	0.18%	\$1,170,820	\$478,972
Voya Fixed Account**	-	\$73,223,755	0.40%	0.18%	\$292,895	\$131,803
Voya Government Money Market A	AEMXX	\$8,157	0.40%	0.18%	\$33	\$15
Loomis Sayles Investment Grade Bond Y*	LSIIX	\$23,158,278	0.38%	0.18%	\$88,001	\$41,685
Oppenheimer International Bond I	OIBIX	\$4,033,607	0.59%	0.18%	\$23,798	\$7,260
Pioneer Global High Yield Y*	GHYYX	\$5,467,515	0.66%	0.18%	\$36,086	\$9,842
Vanguard Institutional Index Instl Plus	VIIIIX	\$104,218,496	0.02%	0.18%	\$20,844	\$187,593
American Funds Growth Fund of America R6	RGAGX	\$101,524,045	0.33%	0.18%	\$335,029	\$182,743
Vanguard Mid Cap Index Instl	VMCIX	\$53,339,788	0.04%	0.18%	\$21,336	\$96,012
Invesco Small Cap Value Y*	VSMIX	\$7,415,849	0.62%	0.18%	\$45,978	\$13,349
Vanguard Small Cap Index Instl	VSCIX	\$38,062,931	0.04%	0.18%	\$15,225	\$68,513
Baron Growth Instl*	BGRIX	\$29,199,107	0.89%	0.18%	\$259,872	\$52,558
Dodge & Cox International Stock*	DODFX	\$11,194,424	0.53%	0.18%	\$59,330	\$20,150
Vanguard Total Intl Stock Index I	VTSNX	\$20,490,114	0.09%	0.18%	\$18,441	\$36,882
American Funds Capital World Gr & Inc R6	RWIGX	\$46,749,762	0.45%	0.18%	\$210,374	\$84,150
Conservative Allocation Portfolio	-	\$26,037,537	0.33%	0.18%	\$85,924	\$46,868
Moderate Allocation Portfolio*	-	\$75,345,325	0.23%	0.18%	\$173,294	\$135,622
Aggressive Allocation Portfolio*	-	\$50,857,980	0.15%	0.18%	\$76,287	\$91,544
Vanguard Instl Target Retirement Income Instl	VITRX	\$5,590,730	0.09%	0.18%	\$5,032	\$10,063
Vanguard Instl Target Retirement 2020 Instl	VITWX	\$24,079,498	0.09%	0.18%	\$21,672	\$43,343
Vanguard Instl Target Retirement 2030 Instl	VTTWX	\$33,815,167	0.09%	0.18%	\$30,434	\$60,867
Vanguard Instl Target Retirement 2040 Instl	VIRSX	\$28,850,945	0.09%	0.18%	\$25,966	\$51,932
Vanguard Instl Target Retirement 2050 Instl	VTRLX	\$18,044,032	0.09%	0.18%	\$16,240	\$32,479
Self-Directed Brokerage Account	-	\$2,447,453	-	0.00%	-	\$0
TOTAL		\$1,049,249,894			\$3,032,910	\$1,884,244

Plan Administration Cost	Quarter	Annualized
Contracted Revenue to Voya (12 bps excluding SDBA - est):	\$314,041	\$1,256,163
Contractual Reimbursement to County of San Bernardino:	\$126,250	\$505,000
Additional Revenue to Voya (est):	\$30,770	\$123,081
Total Plan Administration Cost (18 bps excluding SDBA - est):	\$471,061	\$1,884,244

*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 0.40% is assumed for reporting purposes.



*Revenue received is 0.18% annually on all assets excluding SDBA. Contracted revenue is 0.12% annually on all assets excluding SDBA.

COUNTY OF SAN BERNARDINO

457 Deferred Compensation Plan

PLAN FEE ANALYSIS

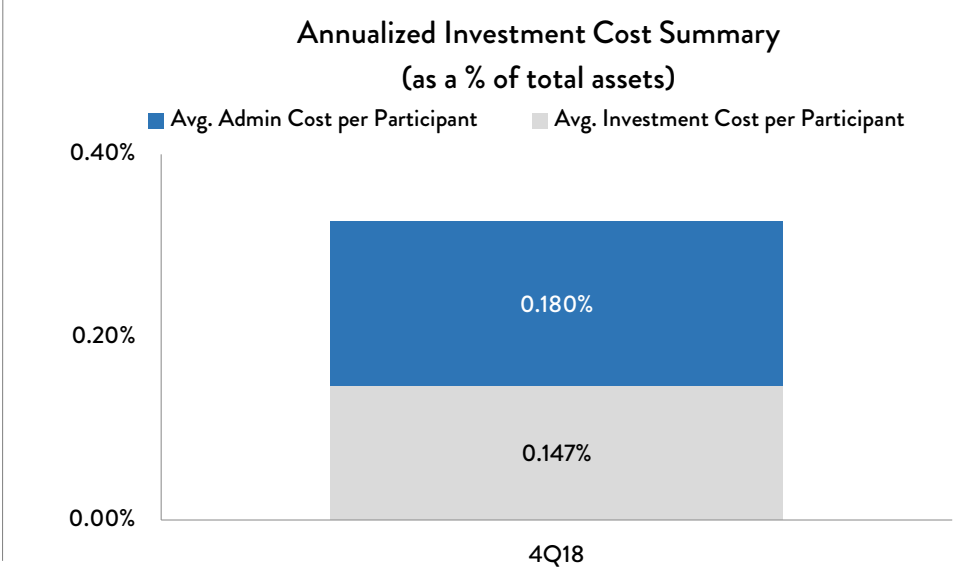
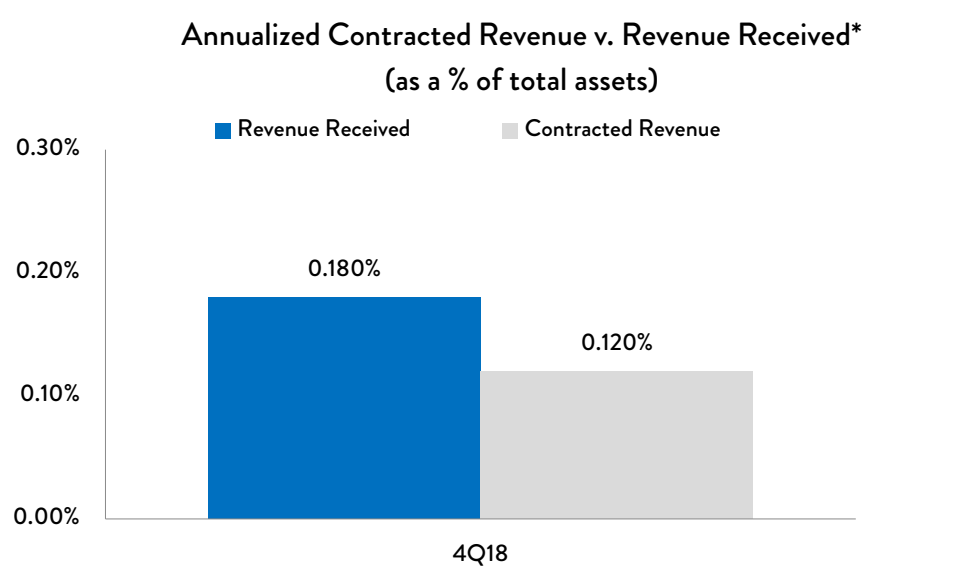
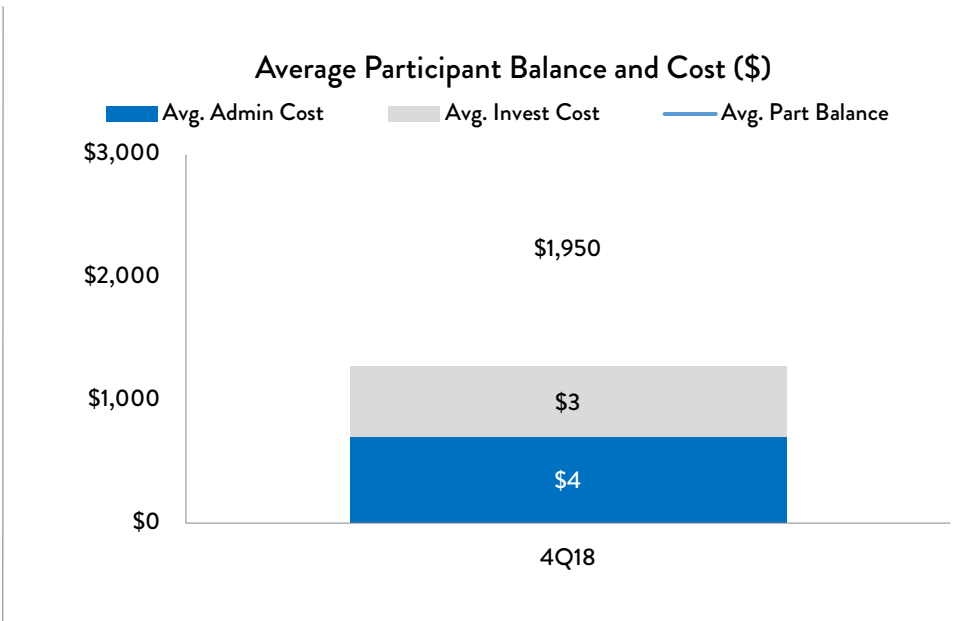
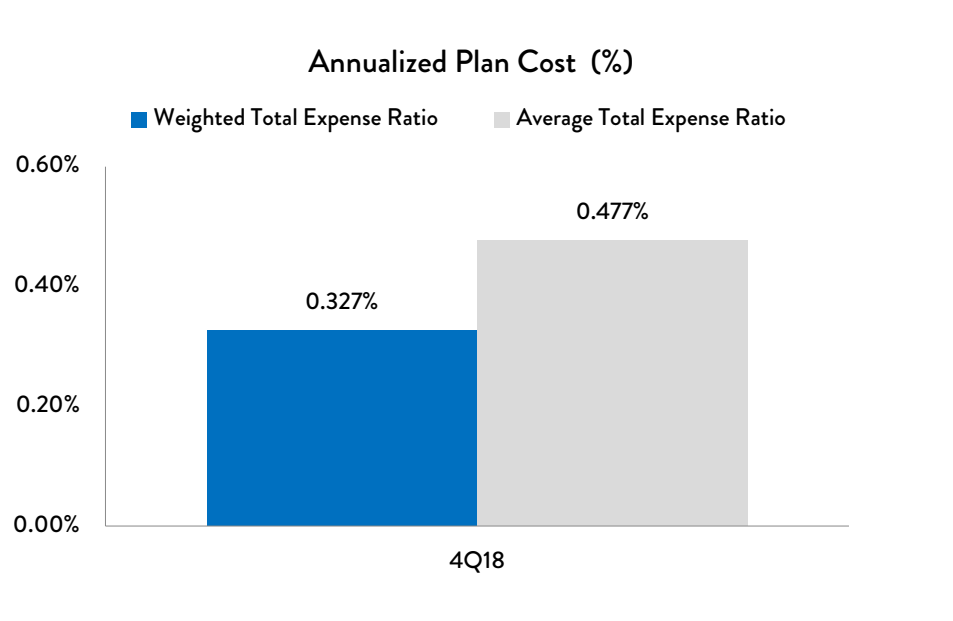
Fourth Quarter 2018

Annualized

Fund	Ticker	Quarter Average			Admin Fee	Est. Total Invest.	Est. Total Admin.
		Assets	Net Expense Ratio			Cost	Cost
Stabilizer	-	\$188,285,199	0.44%	0.18%	\$828,455	\$338,913	
Loomis Sayles Investment Grade Bond Y*	LSIIX	\$19,265,802	0.38%	0.18%	\$73,210	\$34,678	
Oppenheimer International Bond I	OIBIX	\$3,208,719	0.59%	0.18%	\$18,931	\$5,776	
Pioneer Global High Yield Y*	GHYYX	\$4,097,471	0.66%	0.18%	\$27,043	\$7,375	
Vanguard Institutional Index Instl Plus	VIIIIX	\$84,549,237	0.02%	0.18%	\$16,910	\$152,189	
American Funds Growth Fund of America R6	RGAGX	\$82,207,956	0.33%	0.18%	\$271,286	\$147,974	
Vanguard Mid Cap Index Instl	VMCIX	\$42,516,189	0.04%	0.18%	\$17,006	\$76,529	
Invesco Small Cap Value Y*	VSMIX	\$5,825,235	0.62%	0.18%	\$36,116	\$10,485	
Vanguard Small Cap Index Instl	VSCIX	\$31,439,731	0.04%	0.18%	\$12,576	\$56,592	
Baron Growth Instl*	BGRIX	\$23,822,638	0.89%	0.18%	\$212,021	\$42,881	
Dodge & Cox International Stock*	DODFX	\$9,352,846	0.53%	0.18%	\$49,570	\$16,835	
Vanguard Total Intl Stock Index I	VTSNX	\$17,130,193	0.09%	0.18%	\$15,417	\$30,834	
American Funds Capital World Gr & Inc R6	RWIGX	\$40,618,875	0.45%	0.18%	\$182,785	\$73,114	
Conservative Allocation Portfolio	-	\$17,832,254	0.33%	0.18%	\$58,846	\$32,098	
Moderate Allocation Portfolio*	-	\$55,887,456	0.23%	0.18%	\$128,541	\$100,597	
Aggressive Allocation Portfolio*	-	\$39,713,937	0.15%	0.18%	\$59,571	\$71,485	
Vanguard Instl Target Retirement Income Instl	VITRX	\$3,298,263	0.09%	0.18%	\$2,968	\$5,937	
Vanguard Instl Target Retirement 2020 Instl	VITWX	\$10,165,125	0.09%	0.18%	\$9,149	\$18,297	
Vanguard Instl Target Retirement 2030 Instl	VTTWX	\$13,517,851	0.09%	0.18%	\$12,166	\$24,332	
Vanguard Instl Target Retirement 2040 Instl	VIRSX	\$15,884,664	0.09%	0.18%	\$14,296	\$28,592	
Vanguard Instl Target Retirement 2050 Instl	VTRLX	\$14,061,706	0.09%	0.18%	\$12,656	\$25,311	
Self-Directed Brokerage Account	-	\$2,009,814	-	0.00%	-	\$0	
TOTAL		\$724,691,162			\$2,059,522	\$1,300,826	

Plan Administration Cost	Quarter	Annualized
Plan Generated Revenue (est):	\$325,207	\$1,300,826
Contracted Revenue (est):	\$216,804	\$867,218
Net Excess/(Deficit) (est):	\$108,402	\$433,609

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*Revenue received is 0.18% annually on all assets excluding SDBA. Contracted revenue is 0.12% annually on all assets excluding SDBA.

COUNTY OF SAN BERNARDINO

401(a) Defined Contribution Plan

PLAN FEE ANALYSIS

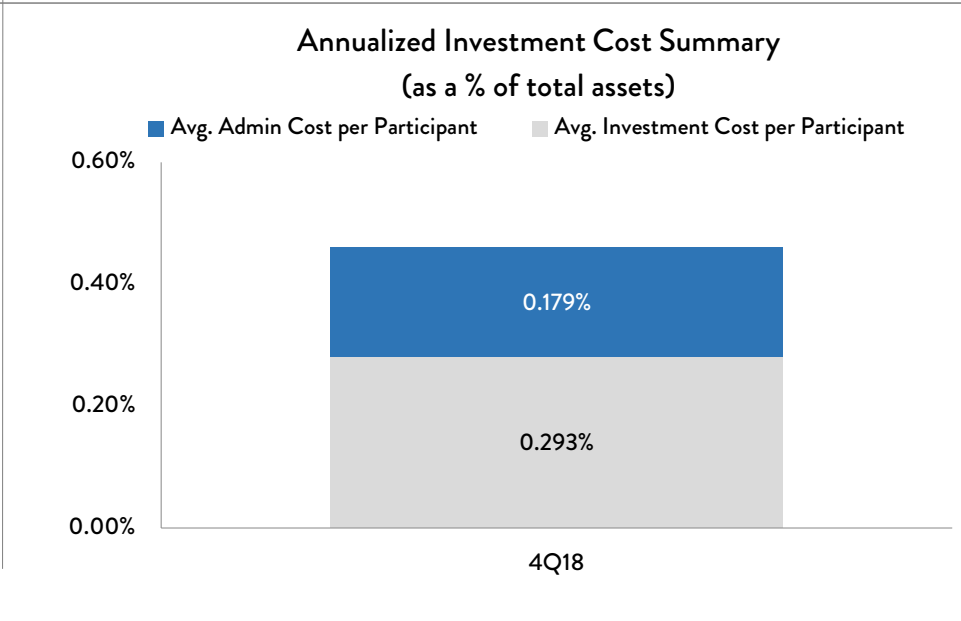
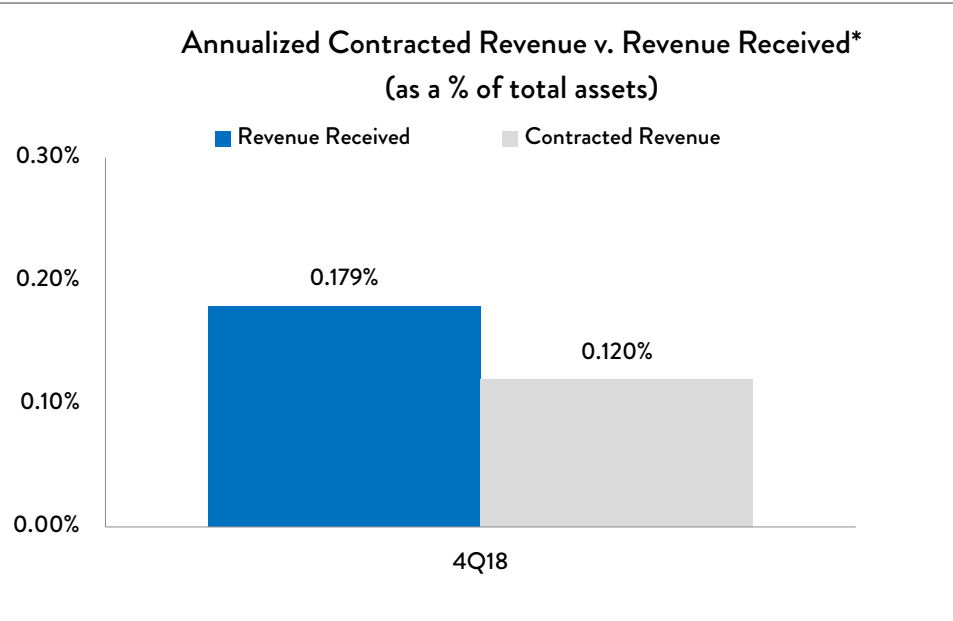
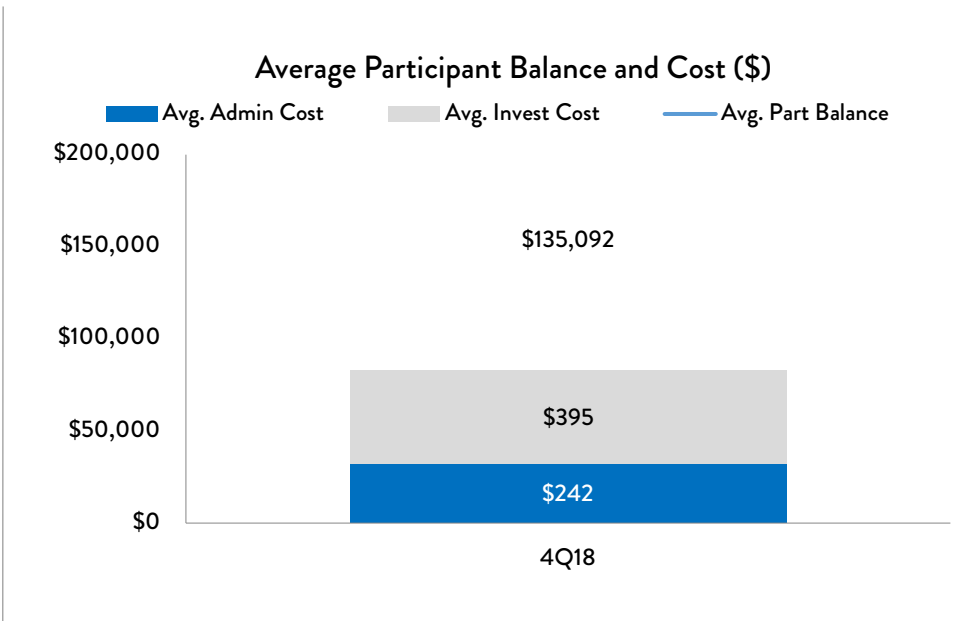
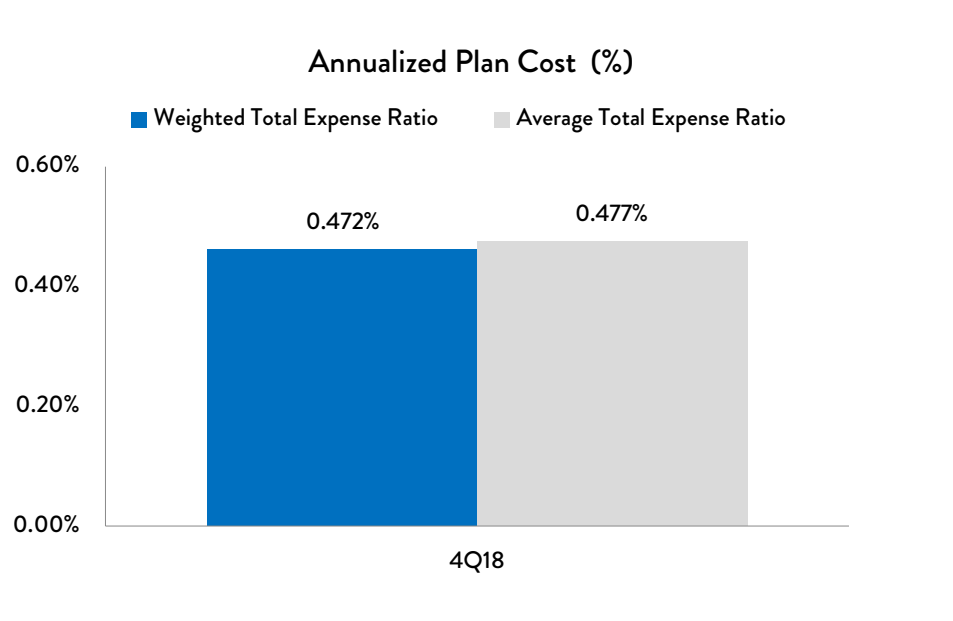
Fourth Quarter 2018

Annualized

Fund	Ticker	Quarter Average Assets	Net Expense Ratio	Admin Fee	Est. Total Invest. Cost	Est. Total Admin. Cost
Stabilizer	-	\$1,427,834	0.44%	0.18%	\$6,282	\$2,570
Loomis Sayles Investment Grade Bond Y*	LSIIX	\$109,938	0.38%	0.18%	\$418	\$198
Oppenheimer International Bond I	OIBIX	\$30,188	0.59%	0.18%	\$178	\$54
Pioneer Global High Yield Y*	GHYYX	\$28,838	0.66%	0.18%	\$190	\$52
Vanguard Institutional Index Instl Plus	VIIIX	\$518,790	0.02%	0.18%	\$104	\$934
American Funds Growth Fund of America R6	RGAGX	\$340,945	0.33%	0.18%	\$1,125	\$614
Vanguard Mid Cap Index Instl	VMCIX	\$274,508	0.04%	0.18%	\$110	\$494
Invesco Small Cap Value Y*	VSMIX	\$78,701	0.62%	0.18%	\$488	\$142
Vanguard Small Cap Index Instl	VSCIX	\$164,068	0.04%	0.18%	\$66	\$295
Baron Growth Instl*	BGRIX	\$146,585	0.89%	0.18%	\$1,305	\$264
Dodge & Cox International Stock*	DODFX	\$85,234	0.53%	0.18%	\$452	\$153
Vanguard Total Intl Stock Index I	VTSNX	\$161,909	0.09%	0.18%	\$146	\$291
American Funds Capital World Gr & Inc R6	RWIGX	\$93,572	0.45%	0.18%	\$421	\$168
Conservative Allocation Portfolio	-	\$532,717	0.33%	0.18%	\$1,758	\$959
Moderate Allocation Portfolio*	-	\$786,940	0.23%	0.18%	\$1,810	\$1,416
Aggressive Allocation Portfolio*	-	\$734,048	0.15%	0.18%	\$1,101	\$1,321
Vanguard Instl Target Retirement Income Instl	VITRX	\$542,528	0.09%	0.18%	\$488	\$977
Vanguard Instl Target Retirement 2020 Instl	VITWX	\$3,210,700	0.09%	0.18%	\$2,890	\$5,779
Vanguard Instl Target Retirement 2030 Instl	VTTWX	\$4,830,480	0.09%	0.18%	\$4,347	\$8,695
Vanguard Instl Target Retirement 2040 Instl	VIRSX	\$4,000,496	0.09%	0.18%	\$3,600	\$7,201
Vanguard Instl Target Retirement 2050 Instl	VTRLX	\$1,333,604	0.09%	0.18%	\$1,200	\$2,400
TOTAL		\$19,432,624			\$28,479	\$34,979

Plan Administration Cost	Quarter	Annualized
Plan Generated Revenue (est):	\$8,745	\$34,979
Contracted Revenue (est):	\$5,830	\$23,319
Net Excess/(Deficit) (est):	\$2,915	\$11,660

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COUNTY OF SAN BERNARDINO

401(k) Defined Contribution Plan

PLAN FEE ANALYSIS

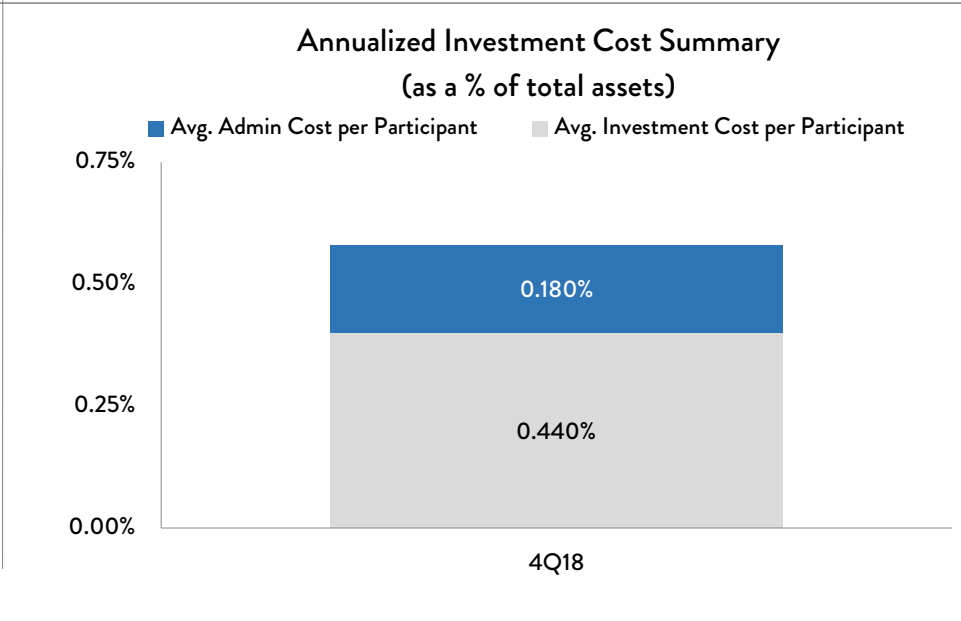
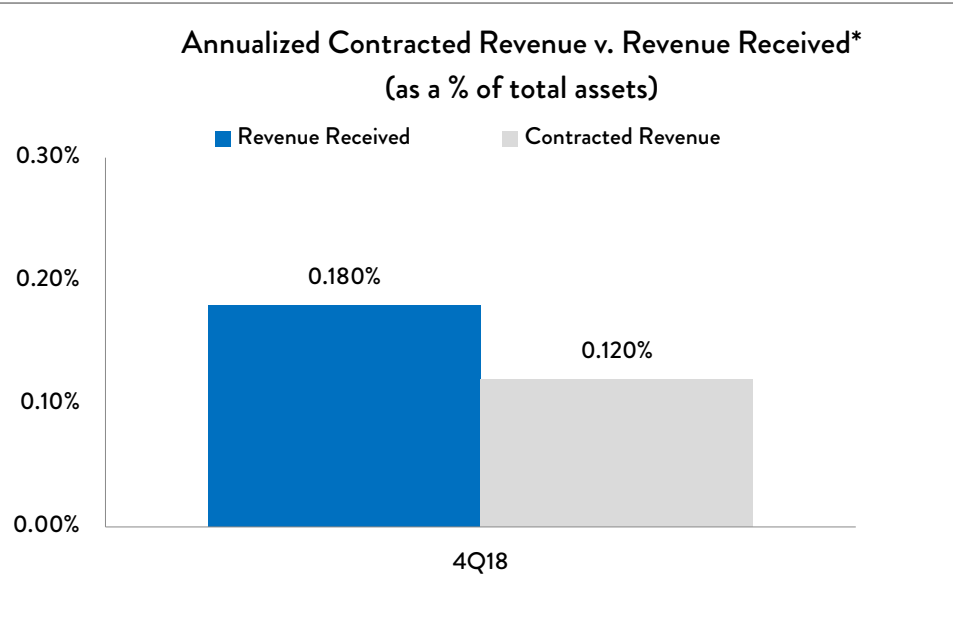
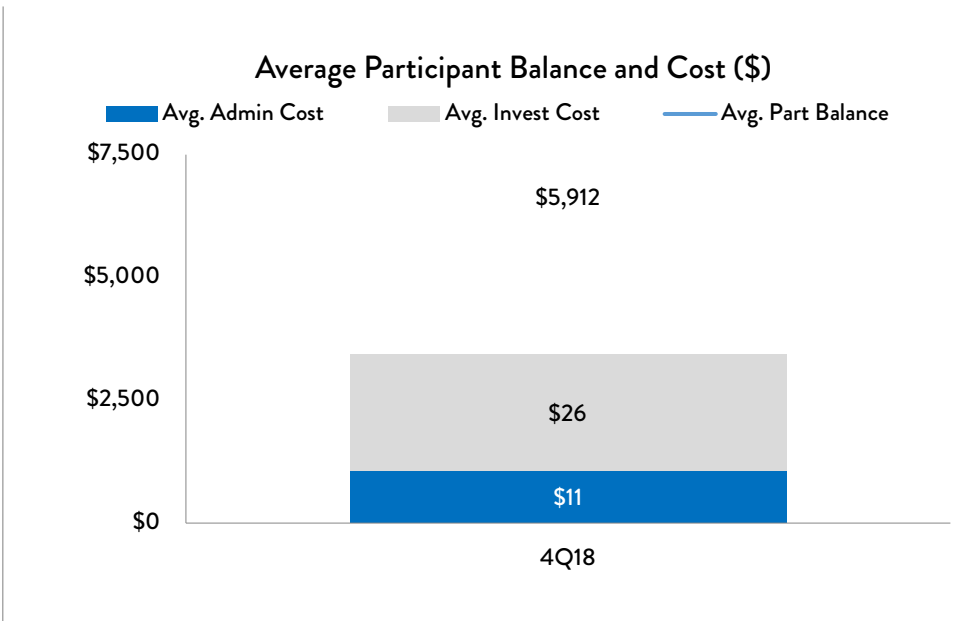
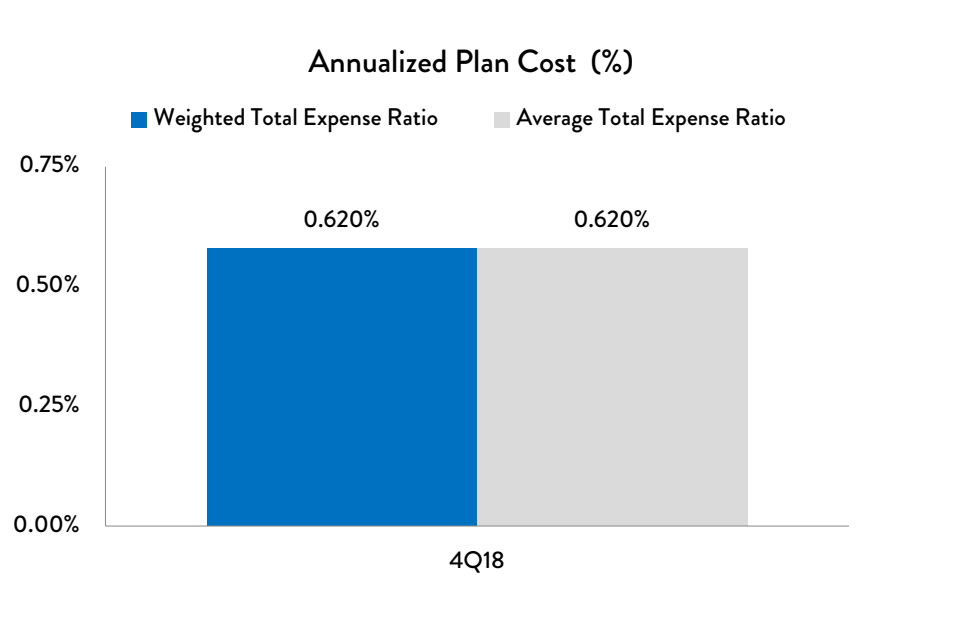
Fourth Quarter 2018

Annualized

Fund	Ticker	Quarter Average			Admin Fee	Est. Total Invest.	Est. Total Admin.
		Assets	Net Expense Ratio			Cost	Cost
Stabilizer	-	\$39,903,584	0.44%	0.18%	\$175,576	\$71,826	
Loomis Sayles Investment Grade Bond Y*	LSIIX	\$3,522,042	0.38%	0.18%	\$13,384	\$6,340	
Oppenheimer International Bond I	OIBIX	\$666,044	0.59%	0.18%	\$3,930	\$1,199	
Pioneer Global High Yield Y*	GHYYX	\$1,156,543	0.66%	0.18%	\$7,633	\$2,082	
Vanguard Institutional Index Instl Plus	VIIIIX	\$17,389,148	0.02%	0.18%	\$3,478	\$31,300	
American Funds Growth Fund of America R6	RGAGX	\$16,899,324	0.33%	0.18%	\$55,768	\$30,419	
Vanguard Mid Cap Index Instl	VMCIX	\$8,799,335	0.04%	0.18%	\$3,520	\$15,839	
Invesco Small Cap Value Y*	VSMIX	\$1,216,148	0.62%	0.18%	\$7,540	\$2,189	
Vanguard Small Cap Index Instl	VSCIX	\$5,777,414	0.04%	0.18%	\$2,311	\$10,399	
Baron Growth Instl*	BGRIX	\$4,322,592	0.89%	0.18%	\$38,471	\$7,781	
Dodge & Cox International Stock*	DODFX	\$1,567,765	0.53%	0.18%	\$8,309	\$2,822	
Vanguard Total Intl Stock Index I	VTSNX	\$2,944,513	0.09%	0.18%	\$2,650	\$5,300	
American Funds Capital World Gr & Inc R6	RWIGX	\$5,747,239	0.45%	0.18%	\$25,863	\$10,345	
Conservative Allocation Portfolio	-	\$6,284,266	0.33%	0.18%	\$20,738	\$11,312	
Moderate Allocation Portfolio*	-	\$14,031,102	0.23%	0.18%	\$32,272	\$25,256	
Aggressive Allocation Portfolio*	-	\$6,134,557	0.15%	0.18%	\$9,202	\$11,042	
Vanguard Instl Target Retirement Income Instl	VITRX	\$367,266	0.09%	0.18%	\$331	\$661	
Vanguard Instl Target Retirement 2020 Instl	VITWX	\$1,164,854	0.09%	0.18%	\$1,048	\$2,097	
Vanguard Instl Target Retirement 2030 Instl	VTTWX	\$1,790,785	0.09%	0.18%	\$1,612	\$3,223	
Vanguard Instl Target Retirement 2040 Instl	VIRSX	\$1,031,870	0.09%	0.18%	\$929	\$1,857	
Vanguard Instl Target Retirement 2050 Instl	VTRLX	\$1,098,115	0.09%	0.18%	\$988	\$1,977	
Self-Directed Brokerage Account	-	\$437,639	-	0.00%	-	\$0	
TOTAL		\$142,252,144			\$415,551	\$255,266	

Plan Administration Cost	Quarter	Annualized
Plan Generated Revenue (est):	\$63,817	\$255,266
Contracted Revenue (est):	\$42,544	\$170,177
Net Excess/(Deficit) (est):	\$21,272	\$85,089

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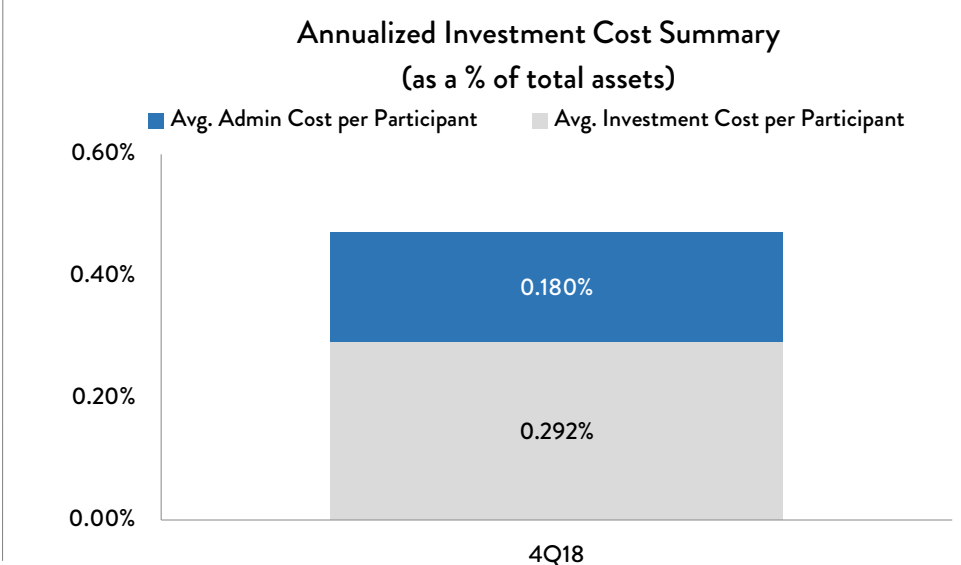
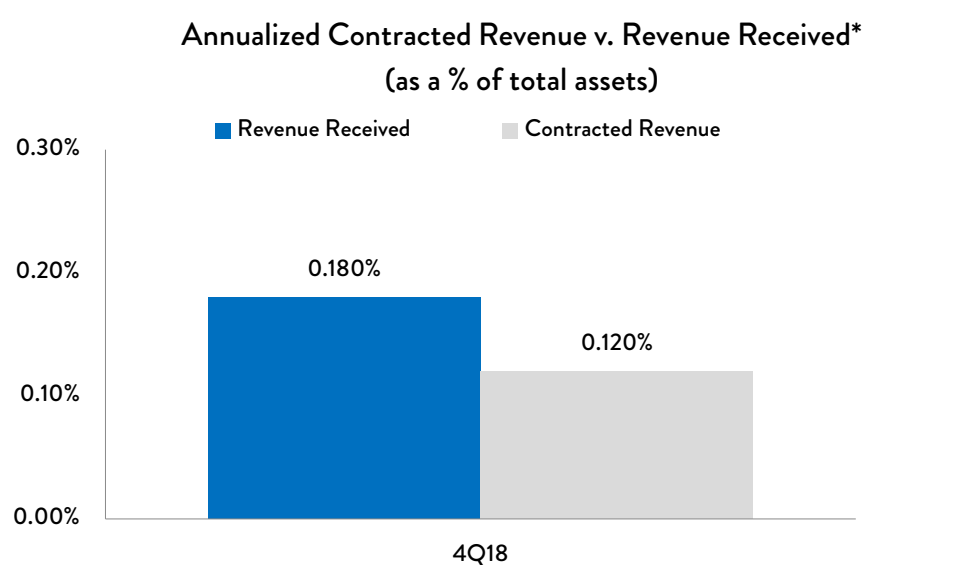
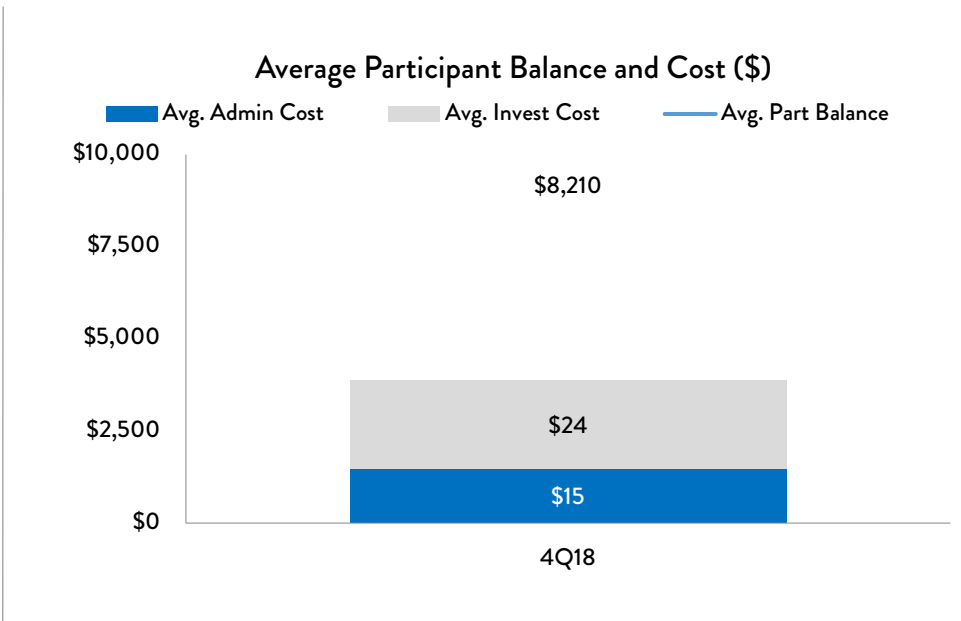
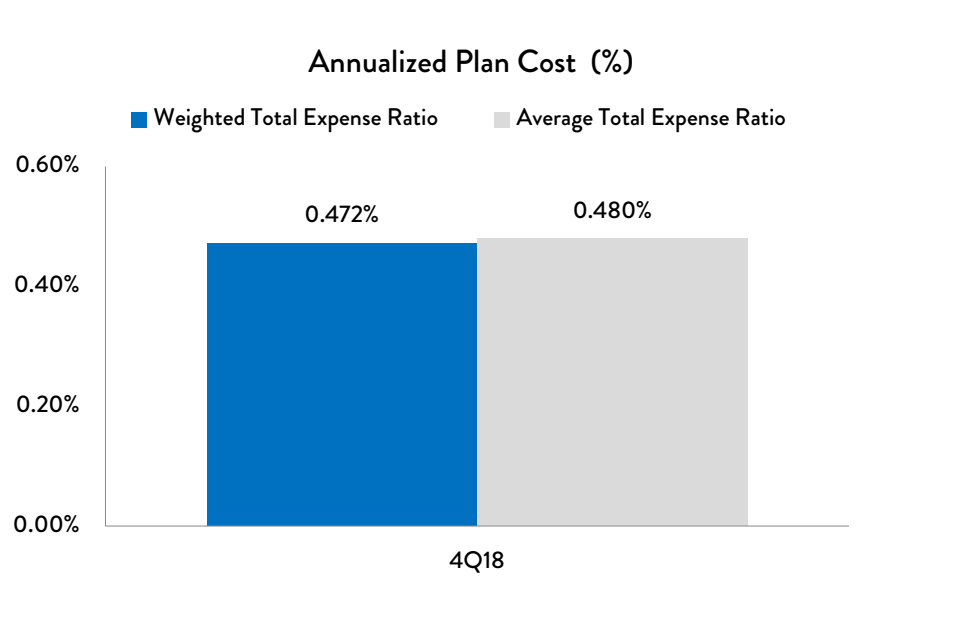
COUNTY OF SAN BERNARDINO
PST Deferred Compensation Retirement Plan

PLAN FEE ANALYSIS
Fourth Quarter 2018

Annualized

Fund	Ticker	Quarter Average Assets	Net Expense Ratio	Admin Fee	Est. Total Invest. Cost	Est. Total Admin. Cost
Stabilizer	-	\$36,478,780	0.44%	0.18%	\$160,507	\$65,662
TOTAL		\$36,478,780			\$160,507	\$65,662

Plan Administration Cost	Quarter	Annualized
Plan Generated Revenue (est):	\$16,415	\$65,662
Contracted Revenue (est):	\$10,944	\$43,775
Net Excess/(Deficit) (est):	\$5,472	\$21,887



*Revenue received is 0.18% annually on all assets excluding SDBA. Contracted revenue is 0.12% annually on all assets excluding SDBA.

COUNTY OF SAN BERNARDINO

Retirement Medical Trust

PLAN FEE ANALYSIS

Fourth Quarter 2018

Annualized

Fund	Ticker	Quarter Average			Est. Total Invest.	Est. Total Admin.
		Assets	Net Expense Ratio	Admin Fee	Cost	Cost
Voya Fixed Account**	-	\$73,223,755	0.40%	0.18%	\$292,895	\$131,803
Voya Government Money Market A	AEMXX	\$8,157	0.40%	0.18%	\$33	\$15
Loomis Sayles Investment Grade Bond Y*	LSIIX	\$260,495	0.38%	0.18%	\$990	\$469
Oppenheimer International Bond I	OIBIX	\$128,655	0.59%	0.18%	\$759	\$232
Pioneer Global High Yield Y*	GHYYX	\$184,663	0.66%	0.18%	\$1,219	\$332
Vanguard Institutional Index Instl Plus	VIIIX	\$1,761,320	0.02%	0.18%	\$352	\$3,170
American Funds Growth Fund of America R6	RGAGX	\$2,075,821	0.33%	0.18%	\$6,850	\$3,736
Vanguard Mid Cap Index Instl	VMCIX	\$1,749,756	0.04%	0.18%	\$700	\$3,150
Invesco Small Cap Value Y*	VSMIX	\$295,765	0.62%	0.18%	\$1,834	\$532
Vanguard Small Cap Index Instl	VSCIX	\$681,720	0.04%	0.18%	\$273	\$1,227
Baron Growth Instl*	BGRIX	\$907,292	0.89%	0.18%	\$8,075	\$1,633
Dodge & Cox International Stock*	DODFX	\$188,579	0.53%	0.18%	\$999	\$339
Vanguard Total Intl Stock Index I	VTSNX	\$253,498	0.09%	0.18%	\$228	\$456
American Funds Capital World Gr & Inc R6	RWIGX	\$290,076	0.45%	0.18%	\$1,305	\$522
Conservative Allocation Portfolio	-	\$1,388,299	0.33%	0.18%	\$4,581	\$2,499
Moderate Allocation Portfolio*	-	\$4,639,827	0.23%	0.18%	\$10,672	\$8,352
Aggressive Allocation Portfolio*	-	\$4,275,439	0.15%	0.18%	\$6,413	\$7,696
Vanguard Instl Target Retirement Income Instl	VITRX	\$1,382,673	0.09%	0.18%	\$1,244	\$2,489
Vanguard Instl Target Retirement 2020 Instl	VITWX	\$9,538,819	0.09%	0.18%	\$8,585	\$17,170
Vanguard Instl Target Retirement 2030 Instl	VTTWX	\$13,676,051	0.09%	0.18%	\$12,308	\$24,617
Vanguard Instl Target Retirement 2040 Instl	VIRSX	\$7,933,915	0.09%	0.18%	\$7,141	\$14,281
Vanguard Instl Target Retirement 2050 Instl	VTRLX	\$1,550,608	0.09%	0.18%	\$1,396	\$2,791
TOTAL		\$126,395,184			\$368,852	\$227,511

Plan Administration Cost	Quarter	Annualized
Plan Generated Revenue (est):	\$56,878	\$227,511
Contracted Revenue (est):	\$37,919	\$151,674
Net Excess/(Deficit) (est):	\$18,959	\$75,837

*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 0.40% is assumed for reporting purposes.

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Section 5

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

FUND FACTS

Inception Date: **October 1, 2004**

Investment advisory fee for period ended September 30, 2018: **0.15%**

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

Other expenses: **0.04%**

Total fund annual expenses without waivers or reductions for period ended September 30, 2018: **0.19%**

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

Net fund annual expenses after waivers or reductions for period ended September 30, 2018: **0.18%**

Turnover rate: **16%**

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.

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

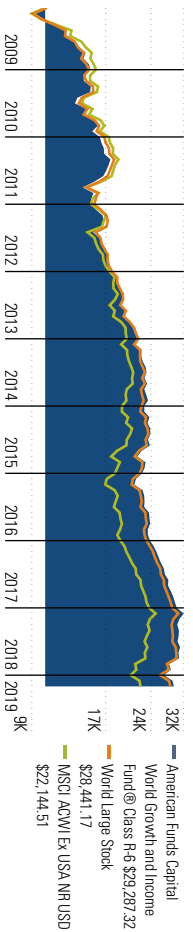
All equity (both U.S. and International) and fixed income investments exhibit certain risk characteristics that include the potential for loss of principal value. Generally, the probability of loss of principal is greater with investment funds that also provide the greatest potential for investment return. 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.

American Funds Capital World Growth and Income Fund® Class R-6 RWIGX

Morningstar Analyst Rating **Gold**

NAV \$ **46.40** NAV Day Change % **↑0.30 | 0.65** Yield TTM % **2.51** Total Assets \$ **93** Status **Open** Min. Inv. **\$250** Load **None** Expenses **0.45%** Morningstar Rating™ **★★★★** Category **World Large Stock** Investment Style **Large Blend**

Growth of 10,000 02-05-2009 - 02-05-2019



Investment Strategy

The investment seeks long-term growth of capital while providing current income. The fund invests primarily in common stocks of well-established companies located around the world, many of which have the potential to pay dividends. It invests, on a global basis, in common stocks that are denominated in U.S. dollars or other currencies. Under normal market circumstances, the fund will invest a significant portion of its assets in securities of issuers domiciled outside the United States, including those based in developing countries.

Performance 02-05-2019

	YTD	1 Mo	1 Yr	3Yr Ann	5Yr Ann	10Yr Ann
Growth of 10,000	10,841	10,756	9,715	14,106	14,040	—
Fund	8.41	7.56	-2.85	12.15	7.02	—
+/- MSCI ACWI Ex USA NR USD	0.10	0.12	6.09	1.89	3.43	—
+/- Category	-0.67	-0.15	-1.74	0.10	0.32	—
% Rank in Cat	71	58	69	48	46	—
# of Funds in Cat	957	957	900	723	617	356

* Currency is displayed in USD

Top Holdings 12-31-2018

	Weight %	Last Price	Day Chg %	52 Week Range
⊕ Boardcom Inc	2.77	276.49 USD	2.40 ↑	197.46 - 280.00
⊖ AbbVie Inc	2.48	79.03 USD	-0.80 ↓	75.77 - 122.00
⊕ Microsoft Corp	1.90	105.81 USD	-1.32 ↓	83.83 - 116.18
⊕ Novartis AG	1.44	89.28 USD	0.11 ↑	71.84 - 92.80
⊖ Samsung Electronics Co Ltd	1.41	— USD	0.00 ↓	36.850.00 - 53.900.00
% Assets in Top 5 Holdings	9.99			

⊕ Increase ⊖ Decrease * New to Portfolio

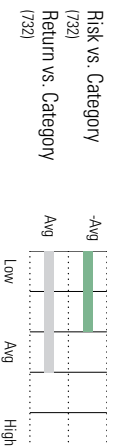
Top Sectors 12-31-2018

	Fund	3 Yr High	3 Yr Low	Cat Avg
📁 Technology	20.95	20.95	11.18	18.46
📁 Healthcare	14.11	14.11	11.70	12.73
📁 Financial Services	14.05	18.47	14.05	18.15
📁 Consumer Cyclical	12.03	13.00	11.18	12.73
📁 Consumer Defensive	7.79	9.34	7.79	8.70

Dividend and Capital Gains Distributions

Distribution Date	Distribution NAV	Long-Term Capital Gain	Short-Term Capital Gain	Return of Capital	Dividend Income	Distribution Total
12-18-2018	42.94	2.1155	0.0000	0.0000	0.3340	2.4495
09-12-2018	50.02	0.0000	0.0000	0.0000	0.2394	0.2394
06-13-2018	52.21	0.0000	0.0000	0.0000	0.3902	0.3902
03-14-2018	52.85	0.0000	0.0000	0.0000	0.2400	0.2400
12-20-2017	50.79	2.5090	0.0000	0.0000	0.2227	2.7317

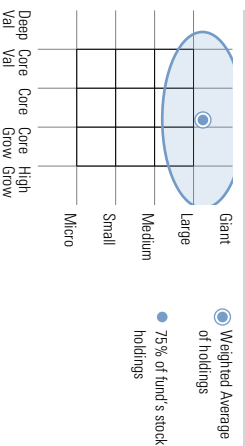
3 Year Average Morningstar Risk Measures



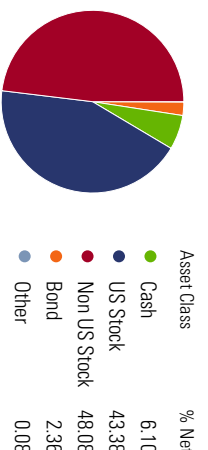
Pillars

Process	Positive
Performance	Positive
People	Positive
Parent	Positive
Price	Positive
Rating	Gold

Style Map



Asset Allocation



Management

Manager	Start Date
Mark E. Denning	03-26-1993
Sung Lee	02-01-2006
L. Alfonso Barroso	02-01-2007
David M. Riley	02-01-2007
Joyce E. Gordon	02-01-2008
Alex Sheynkman	02-01-2014
Michael Cohen	11-15-2014
Jin Lee	02-01-2019

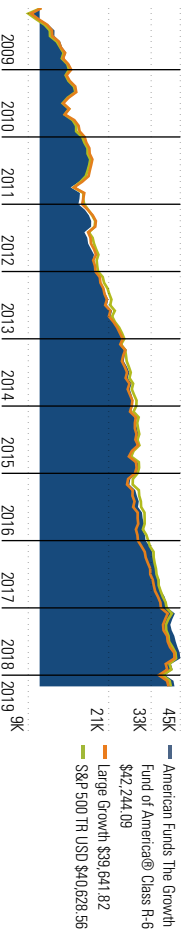
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American Funds The Growth Fund of America® Class R-6 RGAGX

Morningstar Analyst Rating
Bronze

NAV **NAV Day Change %** **Yield TTM %** **Total Assets \$** **Status** **Min. Inv.** **Load** **Expenses** **Morningstar Rating™** **Category** **Investment Style**
 47.28 ↔ 0.23 | 0.49 0.90 184 Open \$250 None 0.33% ★★★★ Large Growth Large Growth

Growth of 10,000 02-05-2009 - 02-05-2019



Investment Strategy

The investment seeks growth of capital. The fund invests primarily in common stocks and seeks to invest in companies that appear to offer superior opportunities for growth of capital. It may invest up to 25% of its assets in securities of issuers domiciled outside the United States. The investment adviser uses a system of multiple portfolio managers in managing the fund's assets. Under this approach, the portfolio of the fund is divided into segments managed by individual managers who decide how their respective segments will be invested.

Performance 02-04-2019

	YTD	1 Mo	1 Yr	3Yr Ann	5Yr Ann	10Yr Ann
Growth of 10,000	11,006	10,869	10,119	16,190	17,690	—
Fund	10.06	8.69	1.19	17.42	12.08	—
+/- S&P 500 TR USD	1.20	0.93	0.57	2.64	0.61	—
+/- Category	-0.03	-0.31	-1.42	1.44	0.90	—
% Rank in Cat	50	61	65	29	40	—
# of Funds in Cat	1,424	1,424	1,386	1,230	1,089	789

* Currency is displayed in USD

Top Holdings 12-31-2018

	Weight %	Last Price	Day Chg %	52 Week Range
Amazon.com Inc	4.40	— USD	-1.26 ↓	1,265.93 - 2,050.50
Facebook Inc A	4.30	169.89 USD	-0.74 ↓	123.02 - 218.62
Microsoft Corp	4.07	105.81 USD	-1.32 ↓	83.83 - 116.18
UnitedHealth Group Inc	3.07	266.87 USD	0.24 ↑	210.21 - 287.94
Netflix Inc	2.99	349.23 USD	-1.85 ↓	231.23 - 423.21

% Assets in Top 5 Holdings 18.83

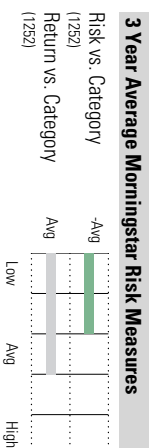
⊕ Increase ⊖ Decrease *New to Portfolio

Top Sectors 12-31-2018

Distribution Date	NAV	Long-Term Capital Gain	Short-Term Capital Gain	Return of Capital	Dividend Income	Distribution Total
12-21-2018	40.94	4,8200	0.0000	0.0000	0.4659	5.2859
12-20-2017	49.48	3,2340	0.0000	0.0000	0.4042	3.6382
12-21-2016	42.63	2,5292	0.0000	0.0000	0.3919	2.9211
12-22-2015	41.12	3,3910	0.0000	0.0000	0.4140	3.8050
12-17-2014	41.74	4,0570	0.0000	0.0000	0.3173	4.3743

Dividend and Capital Gains Distributions

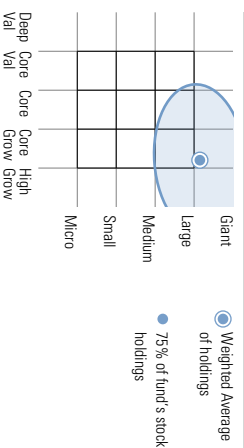
Distribution Date	NAV	Long-Term Capital Gain	Short-Term Capital Gain	Return of Capital	Dividend Income	Distribution Total
12-21-2018	40.94	4,8200	0.0000	0.0000	0.4659	5.2859
12-20-2017	49.48	3,2340	0.0000	0.0000	0.4042	3.6382
12-21-2016	42.63	2,5292	0.0000	0.0000	0.3919	2.9211
12-22-2015	41.12	3,3910	0.0000	0.0000	0.4140	3.8050
12-17-2014	41.74	4,0570	0.0000	0.0000	0.3173	4.3743



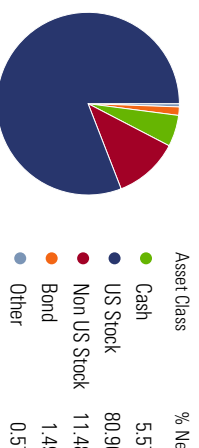
Pillars

- Process ⊕ Positive
- Performance ⊕ Positive
- People ⊕ Positive
- Parent ⊕ Positive
- Price ⊕ Positive
- Rating 🏆 Bronze

Style Map



Asset Allocation



Management

Management	Start Date
Donald D. O'Neal	11-01-1993
Michael T. Kerr	11-01-1998
J. Blair Frank	11-01-2001
Barry S. Crosthwaite	11-01-2007
James Terrile	11-01-2008
Lawrence R. Solomon	05-01-2010
Carl M. Kawaja	11-01-2010
Martin Romo	11-01-2010
Mark L. Casey	11-01-2012
Alan J. Wilson	11-01-2012
Anne-Marie Peterson	11-01-2012
Christopher D. Buchbinder	07-02-2013
Jody F. Jonsson	11-01-2013
	03-01-2016

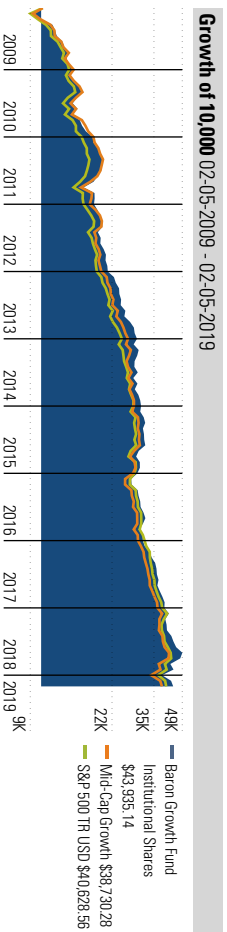
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Baron Growth Fund Institutional Shares BGRIX

Morningstar Analyst Rating
Bronze

NAVS **NAV Day Change %** **Yield TTM %** **Total Assets \$** **Status** **Min. Inv.** **Load** **Expenses** **Morningstar Rating™** **Category** **Investment Style**
 71.63 ↔ 0.69 | 0.97 0.00 6 Open \$1 None 1.03% **★★★★** Mid-Cap Growth Mid Growth



Investment Strategy

The investment seeks capital appreciation through long-term investments primarily in securities of small-sized growth companies. The fund invests for the long term primarily in equity securities in the form of common stock of U.S. small-sized growth companies. BAMCO, Inc. ("BAMCO" or the "Adviser") defines small-sized companies as those, at the time of purchase, with market capitalizations up to the largest market cap stock in the Russell 2000 Growth Index at reconstruction, or companies with market capitalizations up to \$2.5 billion, whichever is larger.

Performance 02-05-2019

	YTD	1 Mo	1 Yr	3Yr Ann	5Yr Ann	10Yr Ann
Growth of 10,000	11,339	11,211	11,010	16,794	16,009	—
Fund	13.39	12.11	10.10	18.86	9.87	—
+/- S&P 500 TR USD	4.02	3.85	4.68	3.18	-1.75	—
+/- Category	0.54	0.10	4.42	2.04	0.59	—
% Rank in Cat	40	47	19	28	39	—
# of Funds in Cat	620	620	602	538	483	341

* Currency is displayed in USD

Top Holdings 12-31-2018

	Weight %	Last Price	Day Chg %	52 Week Range
Vail Resorts Inc	8.09	200.69 USD	-0.08 ↓	179.60 - 302.76
CoStar Group Inc	5.27	397.50 USD	-0.79 ↓	315.85 - 448.35
Gartner Inc A	5.26	139.82 USD	-0.70 ↓	111.57 - 161.21
Arch Capital Group Ltd	5.06	30.04 USD	-0.79 ↓	24.79 - 31.32
MSCI Inc	4.86	173.33 USD	-0.65 ↓	131.26 - 184.22
% Assets in Top 5 Holdings	28.54			

⊕ Increase ⊖ Decrease *New to Portfolio

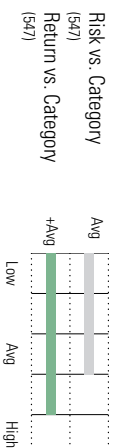
Top Sectors 12-31-2018

	Fund	3 Yr High	3 Yr Low	Cat Avg
Financial Services	23.46	23.52	13.81	10.35
Consumer Cyclical	23.40	26.19	23.40	16.33
Technology	19.64	19.64	14.90	25.54
Real Estate	13.30	13.30	11.83	3.88
Healthcare	9.57	9.57	8.62	16.08

Dividend and Capital Gains Distributions

Distribution Date	Distribution NAV	Long-Term Capital Gain	Short-Term Capital Gain	Return of Capital	Dividend Income	Distribution Total
11-29-2018	71.61	5.1285	0.0000	0.0000	0.0000	5.1285
11-28-2017	69.51	7.9018	0.0000	0.0000	0.0000	7.9018
11-29-2016	61.54	7.6377	0.0000	0.0000	0.0000	7.6377
12-03-2015	65.26	6.0253	0.0000	0.0000	0.0000	6.0253
06-25-2015	76.83	0.0000	0.0000	0.0000	0.0221	0.0221

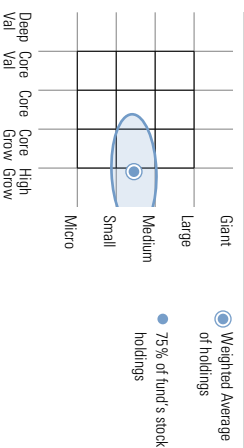
3 Year Average Morningstar Risk Measures



Pillars

- Process + Positive
- Performance + Positive
- People + Positive
- Parent + Positive
- Price - Negative
- Rating Bronze

Style Map



Asset Allocation

	% Net	% Short	% Long	Bench mark	Cat Avg
Cash	0.00	0.01	0.01	0.00	2.76
US Stock	96.82	0.00	96.82	99.42	93.12
Non US Stock	2.63	0.00	2.63	0.58	3.55
Bond	0.00	0.00	0.00	0.00	0.08
Other	0.55	0.00	0.55	0.00	0.48

Management

	Start Date
Ronald Baron	12-30-1994
Neal Rosenberg	05-27-2016

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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, 2018: **0.01%**

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

Other expenses: **0.32%**

Total fund annual expenses without waivers or reductions for period ended September 30, 2018: **0.33%**

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

Net fund annual expenses after waivers or reductions for period ended September 30, 2018: **0.33%**

Turnover rate: **2%**

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.

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. StabilizerSM 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.

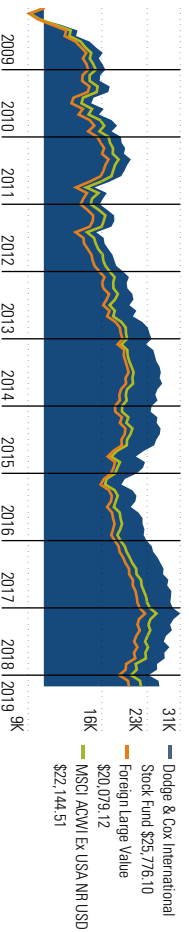
Principal Risks
All equity (both U.S. and International) and fixed income investments exhibit certain risk characteristics that include the potential for loss of principal value. Generally, the probability of loss of principal is greater with investment funds that also provide the greatest potential 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.

Dodge & Cox International Stock Fund DODFX

Morningstar Analyst Rating
 Gold

NAVS **NAV Day Change %** **Yield TTM %** **Total Assets \$** **Status** **Min. Inv.** **Load** **Expenses** **Morningstar Rating™** **Category** **Investment Style**
 40.33 ↑ 0.31 | 0.78 2.70 48 Limited \$2,500 None 0.65% ★★★★ Foreign Large Value Large Value

Growth of 10,000 02-05-2009 - 02-05-2019



Investment Strategy

The investment seeks long-term growth of principal and income. Under normal circumstances, the fund will invest at least 80% of its total assets in equity securities of non-U.S. companies, including common stocks, depositary receipts evidencing ownership of common stocks, preferred stocks, securities convertible into common stocks, and securities that carry the right to buy common stocks. The fund typically invests in medium-to-large well-established companies based on standards of the applicable market.

Performance 02-05-2019

	YTD	1 Mo	1 Yr	3Yr Ann	5Yr Ann	10Yr Ann
Growth of 10,000	10,927	10,655	8,956	13,816	11,329	25,658
Fund	9.27	6.55	-10.44	11.38	2.53	9.88
+/- MSCI ACWI Ex-USA NR USD	0.95	-0.89	-1.50	1.12	-1.07	1.57
+/- Category	0.99	0.16	-2.03	3.11	0.70	2.48
% Rank in Cat	17	34	70	6	35	9
# of Funds in Cat	336	336	319	276	229	150

* Currency is displayed in USD

Top Holdings 12-31-2018

	Weight %	Last Price	Day Chg %	52 Week Range
Sanofi SA	3.73	—	—	—
Roche Holding AG Dividend Right Cert.	3.18	268.45 USD	-0.02 ↓	206.35 - 269.25
ICICI Bank Ltd	3.15	359.30 USD	0.00 ↓	256.50 - 383.55
Itau Unibanco Holding SA Participating Preferred	2.98	37.22 USD	-2.05 ↓	33.26 - 106.68
Naspers Ltd Class N	2.96	— USD	1.86 ↑	236,266.00 - 361,394.00

% Assets in Top 5 Holdings

15.99

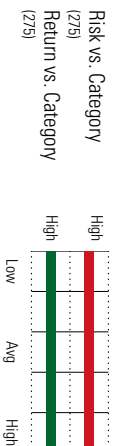
Top Sectors 12-31-2018

	Fund	3 Yr High	3 Yr Low	Cat Avg
Financial Services	30.25	30.25	24.52	24.11
Healthcare	17.81	17.81	13.88	9.15
Technology	15.98	24.84	15.98	6.94
Consumer Cyclical	8.04	8.04	6.29	11.28
Energy	7.16	8.56	7.16	9.48

Dividend and Capital Gains Distributions

Distribution Date	Distribution NAV	Long-Term Capital Gain	Short-Term Capital Gain	Return of Capital	Dividend Income	Distribution Total
12-19-2018	36.92	0.0000	0.0000	0.0000	1.0800	1.0800
12-19-2017	45.77	0.0000	0.0000	0.0000	0.8920	0.8920
12-20-2016	38.12	0.5434	0.0000	0.0000	0.8516	1.3950
12-21-2015	36.10	0.0000	0.0000	0.0000	0.8400	0.8400
12-19-2014	42.41	0.0000	0.0000	0.0000	0.9699	0.9699

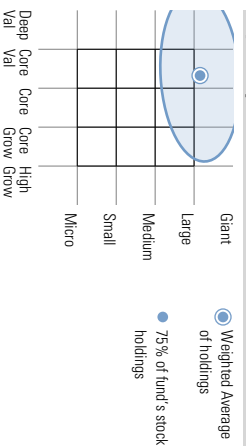
3 Year Average Morningstar Risk Measures



Pillars

Process	Positive
Performance	Positive
People	Positive
Parent	Positive
Price	Positive
Rating	Positive

Style Map



Asset Allocation

	% Net	% Short	% Long	Bench mark	Cat Avg
Cash	0.65	0.09	0.73	0.02	0.22
US Stock	8.11	0.00	8.11	0.31	2.75
Non US Stock	90.50	0.03	90.54	99.61	95.45
Bond	0.00	0.00	0.00	0.00	1.45
Other	0.75	0.00	0.75	0.07	0.13

Management

	Start Date
C. Bryan Cameron	05-01-2001
Diana S. Strandberg	05-01-2001
Mario C. DiPrisco	01-01-2004
Roger G. Kuo	05-01-2006
Keiko Horkan	05-01-2007
Charles F. Pohl	05-01-2007
Richard T. Callister	03-30-2012
Engelbert T. Bangayan	02-28-2015
Raymond J. Merrans	01-31-2018

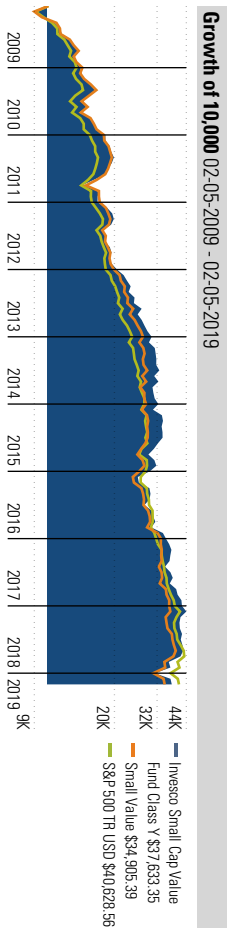
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Invesco Small Cap Value Fund Class Y VSMIX

Morningstar Analyst Rating
Bronze

NAVS **NAV Day Change %** **Yield TTM %** **Total Assets \$** **Status** **Min. Inv.** **Load** **Expenses** **Morningstar Rating™** **Category** **Investment Style**
 14.14 ↖0.01 | 0.07 0.00 2 Limited \$1,000 None 0.87% ★★ Small Value Small Value



Investment Strategy

The investment seeks long-term growth of capital. The fund invests, under normal circumstances, at least 80% of its net assets (plus any borrowings for investment purposes) in securities of small capitalization companies, and in derivatives and other instruments that have economic characteristics similar to such securities. It invests primarily in equity securities of small capitalization companies that Invesco Advisers, Inc. (Invesco or the Adviser), the fund's investment adviser, believes are undervalued. The principal type of equity security in which the fund invests is common stock.

Performance 02-05-2019

	YTD	1 Mo	1 Yr	3Yr Ann	5Yr Ann	10Yr Ann
Growth of 10,000	11,983	11,459	9,079	14,650	13,128	37,303
Fund	19.83	14.59	-9.21	13.57	5.59	14.07
+/- S&P 500 TR USD	10.46	6.33	-14.63	-2.11	-6.02	-0.79
+/- Category	7.03	5.26	-8.57	0.41	-0.16	0.61
% Rank in Cat	2	1	97	42	64	41
# of Funds in Cat	441	441	428	381	331	230

* Currency is displayed in USD

Top Holdings 12-31-2018

	Weight %	Last Price	Day Chg %	52 Week Range
⊖ AECOM	3.78	29.94 USD	-0.75 ↓	24.83 - 37.53
⊖ LPL Financial Holdings Inc	3.57	76.33 USD	-0.82 ↓	52.03 - 78.29
⊕ McKesson Corp	3.42	131.63 USD	-0.12 ↓	106.11 - 160.87
⊖ SLM Corp	3.30	10.79 USD	0.56 ↑	7.95 - 12.46
⊖ Belden Inc	3.10	55.46 USD	0.29 ↑	37.79 - 78.81
% Assets in Top 5 Holdings 17.17				

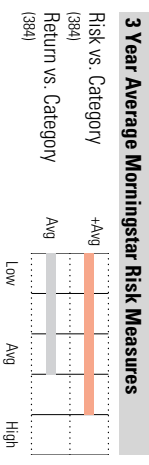
⊕ Increase ⊖ Decrease *New to Portfolio

Top Sectors 12-31-2018

	Fund	3 Yr High	3 Yr Low	Cat Avg
🏢 Financial Services	23.73	34.44	23.73	25.47
🏢 Industrials	19.89	22.03	19.89	16.52
🏢 Consumer Cyclical	17.13	17.13	12.59	13.52
🏢 Healthcare	14.68	14.73	10.60	3.81
🏢 Basic Materials	11.58	11.58	1.83	7.00

Dividend and Capital Gains Distributions

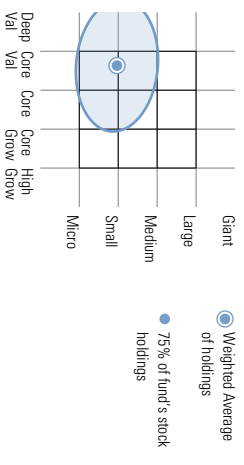
Distribution Date	Distribution NAV	Long-Term Capital Gain	Short-Term Capital Gain	Return of Capital	Dividend Income	Distribution Total
12-14-2018	12.31	2.9549	0.2112	0.0000	0.0000	3.1661
12-13-2017	19.65	3.0163	0.1411	0.0000	0.0000	3.1574
12-13-2016	19.81	0.3193	0.0000	0.0000	0.0830	0.4023
12-11-2015	16.67	1.7772	0.0000	0.0000	0.0430	1.8202
12-12-2014	19.10	3.2627	0.1023	0.0000	0.0000	3.3650



Pillars

Process	⊕ Positive
Performance	⊕ Neutral
People	⊕ Positive
Parent	⊕ Neutral
Price	⊕ Positive
Rating	🏆 Bronze

Style Map



Asset Allocation

	% Net	% Short	% Long	Bench mark	Cat Avg
● Cash	3.94	0.19	4.13	0.00	2.02
● US Stock	94.04	0.00	94.04	98.84	95.56
● Non US Stock	2.02	0.00	2.02	1.16	2.36
● Bond	0.00	0.00	0.00	0.00	-0.02
● Other	0.00	0.00	0.00	0.00	0.08

Management

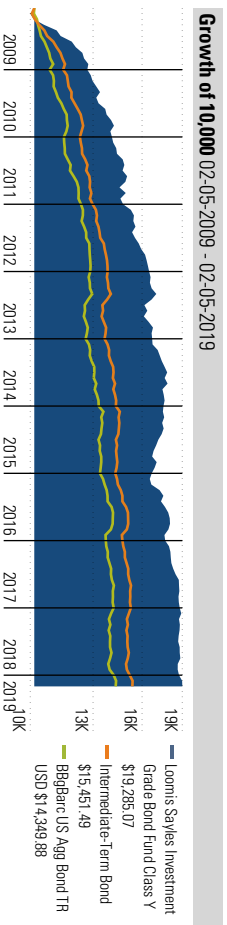
	Start Date
Jonathan Edwards	06-25-2010
Jonathan Mueller	06-25-2010

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Loomis Sayles Investment Grade Bond Fund Class Y LSIIX

Morningstar Analyst Rating **Gold**

NAV \$ **NAV Day Change %** **Yield TTM %** **Total Assets \$** **Status** **Min. Inv.** **Load** **Expenses** **Morningstar Rating™** **Category** **Investment Style**
 10.91 \uparrow 0.02 | 0.18 1.79 5 Open \$100,000 None 0.53% **★★★★★** Intermediate-Term Bond Low/Ltd



Investment Strategy

The investment seeks high total investment return through a combination of current income and capital appreciation. The fund invests at least 80% of its net assets (plus any borrowings made for investment purposes) in investment grade fixed-income securities. It may invest up to 15% of its assets in below investment grade fixed-income securities (also known as "junk bonds"). The fund may invest in fixed-income securities of any maturity. In connection with its principal investment strategies, it may invest up to 30% of its assets in U.S. dollar-denominated foreign securities, including emerging markets securities.

Performance 02-05-2019

	YTD	1 Mo	1 Yr	3Yr Ann	5Yr Ann	10Yr Ann
Growth of 10,000	10,149	10,130	10,103	11,564	11,371	19,206
Fund	1.49	1.30	1.03	4.96	2.60	6.74
+/- BbgBarc US Agg Bond TR USD	0.60	0.63	-1.43	3.16	0.20	3.07
+/- Category	0.30	0.35	-0.80	2.70	0.34	2.28
% Rank in Cat	26	21	88	3	27	6
# of Funds in Cat	1,072	1,072	1,011	859	751	548

* Currency is displayed in USD

Top Holdings 12-31-2018

	Weight %	Maturity Date	Amount Mil	Value Mil
United States Treasury Bonds 3%	3.98	08-15-2048	210.91	209.91
Textron Inc. 5.95%	1.58	09-21-2021	78.80	83.13
JPMorgan Chase & Co. 4.12%	1.30	12-15-2026	70.25	68.54
AT&T Inc 4.3%	1.10	02-15-2030	61.42	58.04
Microsoft Corporation 1.55%	1.04	08-08-2021	56.60	54.98
% Assets in Top 5 Holdings	8.99			

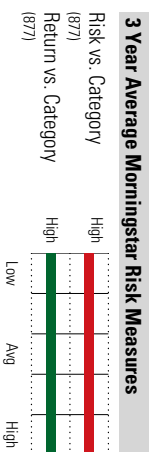
⊕ Increase ⊖ Decrease ✱ New to Portfolio

Top Sectors 12-31-2018

	Fund	BMark	Cat Avg
Corporate Bond	56.41	—	29.47
Asset-Backed	13.99	—	8.67
U.S. Treasury	10.18	—	18.51
Other Government Related	4.11	—	10.48
Convertible	1.41	—	0.39

Dividend and Capital Gains Distributions

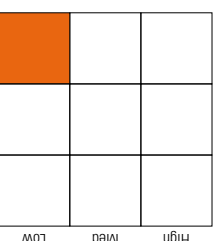
Distribution Date	Distribution NAV	Long-Term Capital Gain	Short-Term Capital Gain	Return of Capital	Dividend Income	Distribution Total
01-30-2019	10.86	0.0000	0.0000	0.0000	0.0301	0.0301
12-14-2018	10.76	0.0535	0.0002	0.0000	0.0286	0.0823
11-29-2018	10.80	0.0000	0.0000	0.0000	0.0274	0.0274
10-30-2018	10.84	0.0000	0.0000	0.0000	0.0351	0.0351
08-29-2018	10.98	0.0000	0.0000	0.0000	0.0025	0.0025



Pillars

Process	Positive
Performance	Positive
People	Positive
Parent	Neutral
Price	Neutral
Rating	Gold

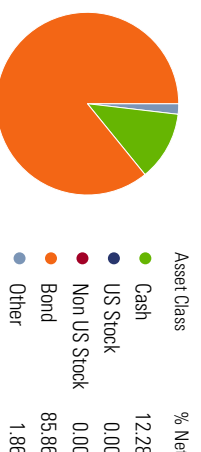
Style Map 12-31-2018



Bond Statistics

	Value
Average Effective Duration	3.50
Average Effective Maturity (Years)	5.17
Average Credit Quality	BB
Average Weighted Coupon	3.96
Average Weighted Price	99.82

Asset Allocation



Management

	Start Date
Matthew J. Eagan	09-30-2006
Elaine M. Stokes	09-30-2006
Brian P. Kennedy	02-01-2013

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

Information is included in the enrollment material.

FUND FACTS

Inception Date: **October 1, 2004**

Investment advisory fee for period ended September 30, 2018: **0.13%**

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

Other expenses: **0.13%**

Total fund annual expenses without waivers or reductions for period ended September 30, 2018: **0.26%**

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

Net fund annual expenses after waivers or reductions for period ended September 30, 2018: **0.26%**

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

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. StabilizerSM 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

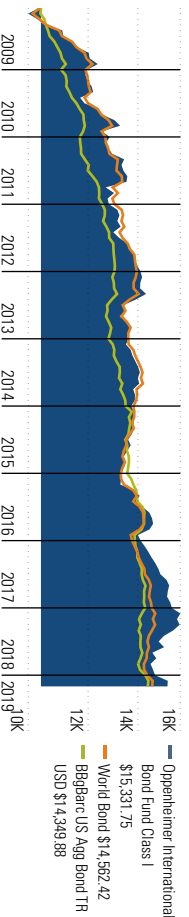
All equity (both U.S. and International) and fixed income investments exhibit certain risk characteristics that include the potential for loss of principal value. Generally, the probability of loss of principal is greater with investment funds that also provide the greatest potential for investment return. 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.

Openheimer International Bond Fund Class I OIBIX

Morningstar Analyst Rating

NAVS **NAV Day Change %** **Yield TTM %** **Total Assets \$** **Status** **Min. Inv.** **Load** **Expenses** **Morningstar Rating™** **Category** **Investment Style**
 5.55 ↓0.00 | 0.01 5.06 5 Open \$1 None 0.59% ★★★★★ World Bond Low/Ltd

Growth of 10,000 02-05-2009 - 02-05-2019



Investment Strategy

The investment seeks total return. The fund normally invests at least 80% of its net assets in debt securities in debt securities. It typically invests in at least three countries other than the United States. The fund invests in debt securities of issuers in both developed and emerging markets throughout the world. It invests mainly in debt securities of foreign government and corporate issuers. The fund may buy securities issued by companies of any size or market capitalization range and at times might emphasize securities of issuers in a particular capitalization range. It is non-diversified.

Performance 02-05-2019

	YTD	1 Mo	1 Yr	3Yr Ann	5Yr Ann	10Yr Ann
Growth of 10,000	10,430	10,322	9,632	11,666	11,464	15,439
Fund	4.30	3.22	-3.68	5.27	2.77	4.44
+/- BBgBarc US Agg Bond TR USD	3.42	2.56	-6.14	3.46	0.37	0.77
+/- Category	2.57	1.88	-3.32	2.23	1.46	0.55
% Rank in Cat	1	1	81	8	20	—
# of Funds in Cat	329	329	306	254	238	143

* Currency is displayed in USD

Top Holdings 12-31-2018

	Weight %	Maturity Date	Amount Mil	Value Mil
Portugal (Republic Of) 2.88%	3.52	10-15-2025	125.50	161.06
United Kingdom of Great Britain and Northern Ireland 3.25%	3.18	01-22-2044	88.00	145.56
Greece (Republic Of) 3.9%	2.42	01-30-2033	101.98	110.80
Mexico (United Mexican States) 8%	2.23	12-07-2023	2,050.00	102.33
Brazil (Federative Republic) 10%	2.01	01-01-2021	325.00	92.00

% Assets in Top 5 Holdings 13.35

⊕ Increase ⊖ Decrease * New to Portfolio

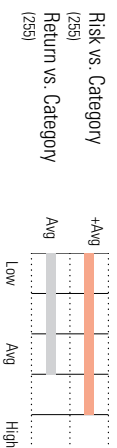
Top Sectors 12-31-2018

	Fund	BMark	Cat Avg
Government	59.01	—	50.62
Corporate Bond	18.45	—	23.68
Convertible	6.69	—	0.92
Agency/Quasi-Agency	4.10	—	5.62
Agency Mortgage-Backed	3.97	—	5.02

Dividend and Capital Gains Distributions

Distribution Date	Distribution NAV	Long-Term Capital Gain	Short-Term Capital Gain	Return of Capital	Dividend Income	Distribution Total
01-31-2019	5.56	0.0000	0.0000	0.0000	0.0260	0.0260
12-31-2018	5.35	0.0000	0.0000	0.0000	0.0259	0.0259
11-30-2018	5.34	0.0000	0.0000	0.0000	0.0249	0.0249
10-31-2018	5.32	0.0000	0.0000	0.0000	0.0247	0.0247
09-28-2018	5.45	0.0000	0.0000	0.0000	0.0218	0.0218

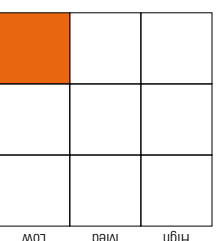
3 Year Average Morningstar Risk Measures



Pillars

Process	—
Performance	—
People	—
Parent	—
Price	—
Rating	—

Style Map 12-31-2018



Bond Statistics

Average Effective Duration	2.70
Average Effective Maturity (Years)	6.90
Average Credit Quality	BB
Average Weighted Coupon	6.21
Average Weighted Price	—

Asset Allocation

	% Net	% Short	% Long	% Bench mark	Cat Avg
Cash	6.06	4.64	10.70	0.00	-32.15
US Stock	0.00	0.00	0.00	0.00	-0.06
Non US Stock	-0.81	1.60	0.79	0.00	0.07
Bond	87.53	2.28	89.81	100.00	130.87
Other	7.22	0.14	7.36	0.00	1.27

Management

Management	Start Date
Hemant Bajjal	01-28-2013
Christopher (Chris) Kelly	03-31-2015
Wim Vandenhoeck	01-26-2018

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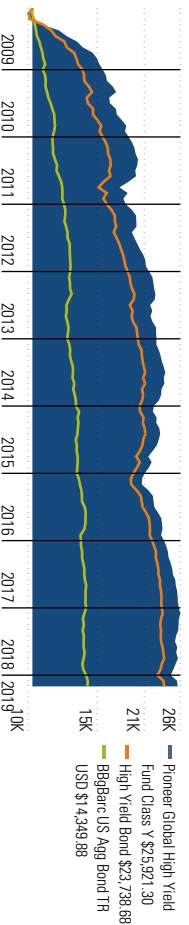


Pioneer Global High Yield Fund Class Y GHYXX

Morningstar Analyst Rating

NAV \$ **NAV Day Change %** **Yield TTM %** **Total Assets \$** **Status** **Min. Inv.** **Load** **Expenses** **Morningstar Rating™** **Category** **Investment Style**
 8.34 \uparrow 0.02 | 0.26 5.63 342 Open \$5 None 0.91% **★★★★** High Yield Bond

Growth of 10,000 02-05-2009 - 02-05-2019



Investment Strategy

The investment seeks to maximize total return through a combination of income and capital appreciation. Normally, the fund invests at least 80% of its total assets in below investment grade (high yield) debt securities and preferred stocks of U.S. and non-U.S. issuers, including governmental and corporate issuers in emerging markets. Debt securities rated below investment grade are commonly referred to as "junk bonds" and are considered speculative.

Performance 02-05-2019

	YTD	1 Mo	1 Yr	3Yr Ann	5Yr Ann	10Yr Ann
Growth of 10,000	10,457	10,385	9,891	12,696	11,507	25,909
Fund	4.57	3.85	-1.09	8.28	2.85	9.99
+/- BBGBarc US Agg Bond TR USD	3.68	3.18	-3.55	6.47	0.45	6.32
+/- Category	0.02	0.43	-2.97	0.30	-0.70	0.84
% Rank in Cat	59	33	96	46	82	26
# of Funds in Cat	726	726	701	606	512	330

* Currency is displayed in USD

Top Holdings 12-31-2018

	Weight %	Maturity Date	Amount Mil	Value Mil
⊕ Zerco% 31dec21	1.62	12-31-2021	5.66	5.37
Minerva Luxembourg S.A. 5.88%	1.24	01-19-2028	4.59	4.12
Petrobras Global Finance B.V. 5.3%	1.16	01-27-2025	3.93	3.84
⊖ Nationstar Mortgage LLC 6.5%	1.03	06-01-2022	3.47	3.42
Sprint Corporation 7.25%	1.02	09-15-2021	3.24	3.38
% Assets in Top 5 Holdings	6.06			

⊕ Increase ⊖ Decrease * New to Portfolio

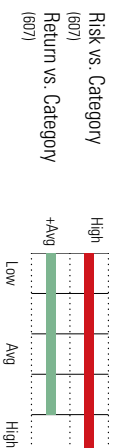
Top Sectors 12-31-2018

	Fund	BMark	Cat Avg
Corporate Bond	73.57	—	85.56
Convertible	5.73	—	1.19
Bank Loan	2.83	—	0.20
Preferred	1.30	—	0.21
Commercial MBS	1.28	—	0.11

Dividend and Capital Gains Distributions

Distribution Date	Distribution NAV	Long-Term Capital Gain	Short-Term Capital Gain	Return of Capital	Dividend Income	Distribution Total
01-31-2019	8.32	0.0000	0.0000	0.0000	0.0389	0.0389
12-31-2018	8.02	0.0000	0.0000	0.0000	0.0394	0.0394
11-30-2018	8.19	0.0000	0.0000	0.0000	0.0400	0.0400
10-31-2018	8.36	0.0000	0.0000	0.0000	0.0392	0.0392
09-28-2018	8.53	0.0000	0.0000	0.0000	0.0393	0.0393

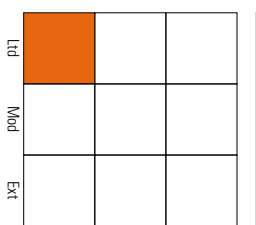
3 Year Average Morningstar Risk Measures



Pillars

Process	—
Performance	—
People	—
Parent	—
Price	—
Rating	—

Style Map 12-31-2018



Bond Statistics

Average Effective Duration	Value
Average Effective Maturity (Years)	3.80
Average Credit Quality	5.62
Average Weighted Coupon	B
Average Weighted Price	6.33
	91.23

Asset Allocation

	% Net	% Short	% Long	Bench mark	Cat Avg
Cash	3.05	1.61	4.66	—	4.96
US Stock	0.00	0.00	0.00	—	0.81
Non US Stock	0.24	0.00	0.24	—	0.06
Bond	88.66	0.03	88.69	—	92.22
Other	8.05	0.00	8.05	—	1.95

Management


Andrew Fellus	Start Date	08-27-2001
Kenneth J. Monaghan		10-01-2017

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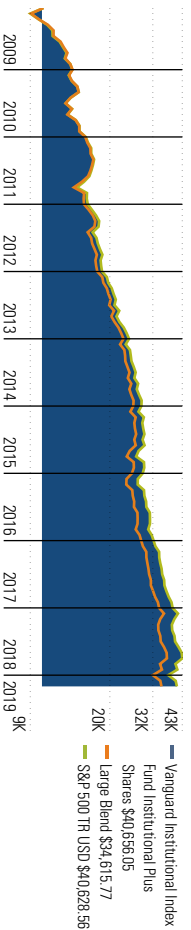


Vanguard Institutional Index Fund Institutional Plus Shares VIII

Morningstar Analyst Rating
 Gold

NAV \$ **NAV Day Change %** **Yield TTM %** **Total Assets \$** **Status** **Min. Inv.** **Load** **Expenses** **Morningstar Rating™** **Category** **Investment Style**
 248.89 ↘ 1.17 | 0.47 1.98 217 Open \$100 None 0.02% **★★★★** Large Blend  Large Blend

Growth of 10,000 02-05-2009 - 02-05-2019



Investment Strategy

The investment seeks to track the performance of a benchmark index that measures the investment return of large-capitalization stocks. The fund employs an indexing investment approach designed to track the performance of the Standard & Poor's 500 Index, a widely recognized benchmark of U.S. stock market performance that is dominated by the stocks of large U.S. companies. The advisor attempts to replicate the target index by investing all, or substantially all, of its assets in the stocks that make up the index, holding each stock in approximately the same proportion as its weighting in the index.

Performance 02-04-2019

	YTD	1 Mo	1 Yr	3Yr Ann	5Yr Ann	10Yr Ann
Growth of 10,000	10,885	10,775	10,060	15,115	17,205	40,465
Fund	8.85	7.75	0.60	14.76	11.46	15.00
+/- S&P 500 TR USD	-0.01	-0.01	-0.03	-0.02	-0.01	0.01
+/- Category	0.00	0.06	1.66	1.50	1.83	1.25
% Rank in Cat	52	50	28	22	10	17
# of Funds in Cat	1,466	1,467	1,394	1,201	1,062	799

* Currency is displayed in USD

Top Holdings 12-31-2018

	Weight %	Last Price	Day Chg %	52 Week Range
⊕ Microsoft Corp	3.72	105.83 USD	-1.30 ↓	83.83 - 116.18
⊖ Apple Inc	3.37	173.61 USD	-0.28 ↓	142.00 - 233.47
⊕ Amazon.com Inc	2.92	— USD	-1.24 ↓	1,265.93 - 2,050.50
⊕ Berkshire Hathaway Inc B	1.85	206.09 USD	-0.80 ↓	184.75 - 224.07
⊕ Johnson & Johnson	1.64	133.08 USD	0.18 ↑	118.62 - 148.99
% Assets in Top 5 Holdings 13.49				

⊕ Increase ⊖ Decrease *New to Portfolio

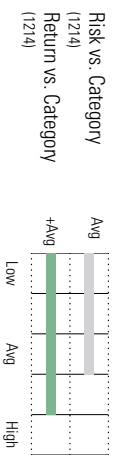
Top Sectors 12-31-2018

	Fund	3 Yr High	3 Yr Low	Cat Avg
📠 Technology	21.94	21.94	18.58	20.96
📠 Financial Services	15.87	16.80	15.87	16.73
📠 Healthcare	15.50	15.50	13.75	15.02
📠 Consumer Cyclical	11.82	11.82	10.97	11.65
📠 Industrials	9.75	11.03	9.75	11.02

Dividend and Capital Gains Distributions

Distribution Date	Distribution NAV	Long-Term Capital Gain	Short-Term Capital Gain	Return of Capital	Dividend Income	Distribution Total
12-18-2018	231.00	0.4958	0.2023	0.0000	1.3414	2.0395
09-21-2018	266.84	0.0000	0.0000	0.0000	1.3790	1.3790
06-15-2018	253.26	0.0000	0.0000	0.0000	1.1468	1.1468
03-15-2018	250.24	0.0000	0.0000	0.0000	1.0089	1.0089
12-22-2017	244.27	0.0000	0.0000	0.0000	1.2366	1.2366

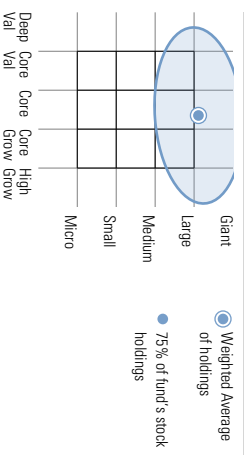
3 Year Average Morningstar Risk Measures



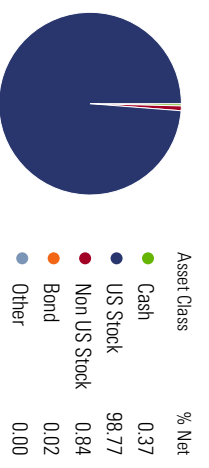
Pillars

Process	⊕ Positive
Performance	⊕ Positive
People	⊕ Positive
Parent	⊕ Positive
Price	⊕ Positive
Rating	📌 Gold

Style Map



Asset Allocation



Management

Manager	Start Date
Donald M. Butler	12-31-2000
Michelle Louie	11-30-2017

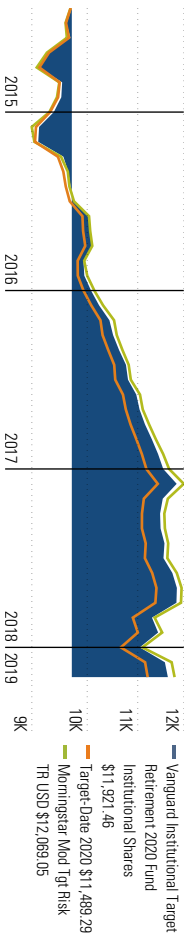
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Vanguard Institutional Target Retirement 2020 Fund Institutional Shares VITWX

Morningstar Analyst Rating **Gold**

NAV \$	NAV Day Change %	Yield TTM %	Total Assets \$	Status	Min. Inv.	Load	Expenses	Morningstar Rating™	Category	Investment Style
22.14	↔0.08 0.36	2.41	23	Open	\$100	None	0.09%	★★★★	Target-Date 2020	Large Blend

Growth of 10,000 06-26-2015 - 02-05-2019



Performance 02-05-2019

	YTD	1 Mo	1 Yr	3Yr Ann	5Yr Ann	10Yr Ann
Growth of 10,000	10,528	10,448	10,162	12,863	—	—
Fund	5.28	4.48	1.62	8.76	—	—
+/- Morningstar Mod Tgr Risk TR USD	-0.78	-0.87	0.12	-0.75	—	—
+/- Category	0.25	0.26	0.48	0.97	—	—
% Rank in Cat	39	39	31	23	—	—
# of Funds in Cat	257	257	250	206	166	109

* Currency is displayed in USD

Top Holdings 12-31-2018

	Weight %	Last Price	Day Chg %	52 Week Range
⊕ Vanguard Total Stock Market Icx I	31.80	68.34 USD	0.46 ↑	58.20 - 73.66
⊖ Vanguard Total Bond Market II Icx Inv	29.14	10.47 USD	0.10 ↑	10.19 - 10.52
⊕ Vanguard Total Intl Stock Index Inv	20.76	16.46 USD	0.80 ↑	14.72 - 18.77
⊖ Vanguard Total Intl Bd Icx Adminratl™	12.46	21.90 USD	0.09 ↑	21.52 - 22.09
⊕ Vanguard Shrt-Term Infl-Prot Sec Icx Adm	5.84	24.16 USD	0.04 ↑	23.92 - 24.59
% Assets in Top 5 Holdings	100.00			

⊕ Increase ⊖ Decrease *New to Portfolio

Top Sectors 12-31-2018

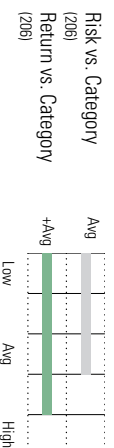
	Fund	3 Yr High	3 Yr Low	Cat Avg
🏢 Financial Services	17.88	18.42	17.88	17.90
💻 Technology	17.38	17.38	14.53	18.49
🏥 Healthcare	12.47	12.47	11.09	12.75
🔄 Consumer Cyclical	11.80	11.80	11.50	11.99
🏭 Industrials	11.28	11.96	11.28	10.91

	Fund	BMark	Cat Avg
Government	26.09	29.25	21.48
Agency Mortgage-Backed	6.61	8.92	9.48
Government-Related	3.16	0.55	2.09
Covered Bond	0.65	0.00	0.04
Commercial MBS	0.33	0.00	0.76

Dividend and Capital Gains Distributions

Distribution Date	Distribution NAV	Long-Term Capital Gain	Short-Term Capital Gain	Return of Capital	Dividend Income	Distribution Total
12-28-2018	20.93	0.0011	0.0175	0.0000	0.5310	0.5496
12-28-2017	22.56	0.0022	0.0054	0.0000	0.4484	0.4560
12-28-2016	20.11	0.0044	0.0054	0.0000	0.3910	0.4008
12-29-2015	19.36	0.0010	0.0010	0.0000	0.1620	0.1640

3 Year Average Morningstar Risk Measures



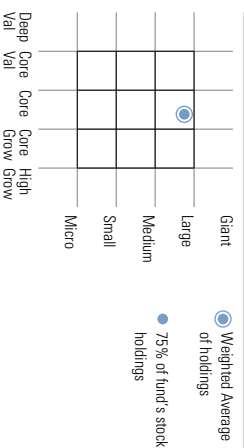
Pillars

Process	Positive
Performance	Positive
People	Positive
Parent	Positive
Price	Positive
Rating	Gold

Investment Strategy

The investment seeks to provide capital appreciation and current income consistent with its current asset allocation. The fund invests in other Vanguard mutual funds according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2020 (the target year). The fund's asset allocation will become more conservative over time, meaning that the percentage of assets allocated to stocks will decrease while the percentage of assets allocated to bonds and other fixed income investments will increase.

Style Map



Asset Allocation

	% Net	% Short	% Long	Bench mark	Cat Avg
Cash	1.41	0.00	1.41	2.40	4.40
US Stock	31.59	0.00	31.59	32.91	29.36
Non US Stock	19.96	0.00	19.96	15.10	13.09
Bond	46.84	0.10	46.94	47.32	49.37
Other	0.21	0.00	0.21	2.29	3.77

Management

	Start Date
William A. Coleman	06-26-2015
Walter Nejman	06-26-2015

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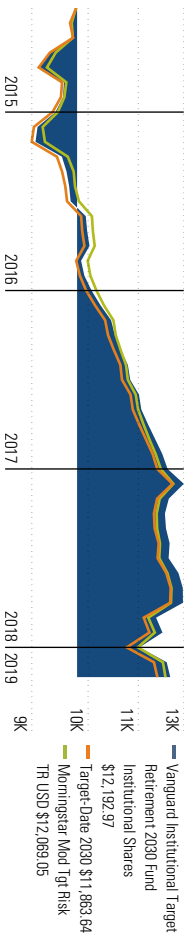


Vanguard Institutional Target Retirement 2030 Fund Institutional Shares VTTWXX

Morningstar Analyst Rating **Gold**

NAV \$	NAV Day Change %	Yield TTM %	Total Assets \$	Status	Min. Inv.	Load	Expenses	Morningstar Rating™	Category	Investment Style
22.68	↔ 0.10 0.44	2.35	27	Open	\$100	None	0.09%	★★★★	Target-Date 2030	Large Blend

Growth of 10,000 06-26-2015 - 02-05-2019



Performance 02-05-2019

	YTD	1 Mo	1 Yr	3Yr Ann	5Yr Ann	10Yr Ann
Growth of 10,000	10,678	10,573	10,131	13,538	—	—
Fund	6.78	5.73	1.31	10.62	—	—
+/- Morningstar Mod Tgt Risk TR USD	0.72	0.39	-0.18	1.12	—	—
+/- Category	0.05	0.03	0.40	0.59	—	—
% Rank in Cat	54	58	35	31	—	—
# of Funds in Cat	246	246	239	196	156	99

* Currency is displayed in USD

Top Holdings 12-31-2018

	Weight %	Last Price	Day Chg %	52 Week Range
⊕ Vanguard Total Stock Market Idx I	41.79	68.34 USD	0.46 ↑	58.20 - 73.66
⊕ Vanguard Total Intl Stock Index Inv	27.61	16.46 USD	0.80 ↑	14.72 - 18.77
⊖ Vanguard Total Bond Market II Idx Inv	21.46	10.47 USD	0.10 ↑	10.19 - 10.52
⊖ Vanguard Total Intl Bd Idx Adminrat™	9.15	21.90 USD	0.09 ↑	21.52 - 22.09
% Assets in Top 5 Holdings	100.00			

⊕ Increase ⊖ Decrease ✂ New to Portfolio

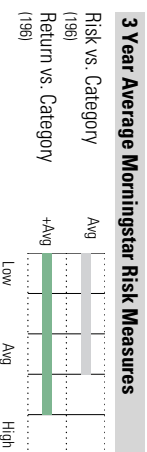
Top Sectors 12-31-2018

	Fund	3 Yr High	3 Yr Low	Cat Avg
🏢 Financial Services	17.90	18.42	17.90	17.29
🏢 Technology	17.35	17.35	14.54	17.87
🏢 Healthcare	12.46	12.46	11.10	12.44
🏢 Consumer Cyclical	11.80	11.80	11.50	11.69
🏢 Industrials	11.28	11.96	11.28	10.89

	Fund	BMark	Cat Avg
Government	15.01	17.54	10.81
Agency Mortgage-Backed	4.87	5.79	5.69
Government-Related	2.32	0.40	1.03
Covered Bond	0.48	0.00	0.02
Commercial MBS	0.24	0.00	0.49

Dividend and Capital Gains Distributions

Distribution Date	Distribution NAV	Long-Term Capital Gain	Short-Term Capital Gain	Return of Capital	Dividend Income	Distribution Total
12-28-2018	21.13	0.0006	0.0026	0.0000	0.5293	0.5325
12-28-2017	23.16	0.0008	0.0024	0.0000	0.4496	0.4528
12-28-2016	20.02	0.0028	0.0035	0.0000	0.3930	0.3993
12-29-2015	19.16	0.0000	0.0010	0.0000	0.1630	0.1640



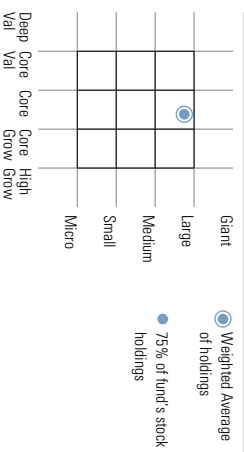
Pillars

Process	Positive
Performance	Positive
People	Positive
Parent	Positive
Price	Positive
Rating	Gold

Investment Strategy

The investment seeks to provide capital appreciation and current income consistent with its current asset allocation. The fund invests in other Vanguard mutual funds according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2030 (the target year). The fund's asset allocation will become more conservative over time, meaning that the percentage of assets allocated to stocks will decrease while the percentage of assets allocated to bonds and other fixed income investments will increase.

Style Map



Asset Allocation

	% Net	% Short	% Long	Bench mark	Cat Avg
Cash	1.43	0.00	1.43	0.96	3.31
US Stock	41.51	0.00	41.51	43.30	42.32
Non US Stock	26.53	0.00	26.53	22.62	21.10
Bond	30.30	0.07	30.37	30.69	28.10
Other	0.23	0.00	0.23	2.44	5.18

Management

	Start Date
William A. Coleman	06-26-2015
Walter Neiman	06-26-2015

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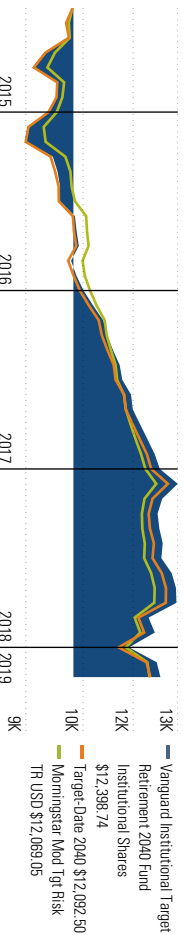


Vanguard Institutional Target Retirement 2040 Fund Institutional Shares VIRSX

Morningstar Analyst Rating **Gold**

NAV \$	NAV Day Change %	Yield TTM %	Total Assets \$	Status	Min. Inv.	Load	Expenses	Morningstar Rating™	Category	Investment Style
23.09	↔ 0.11 0.48	2.27	21	Open	\$100	None	0.09%	★★★★	Target-Date 2040	Large Blend

Growth of 10,000 06-26-2015 - 02-05-2019



Performance 02-05-2019

	YTD	1 Mo	1 Yr	3Yr Ann	5Yr Ann	10Yr Ann
Growth of 10,000	10,805	10,680	10,079	14,180	—	—
Fund	8.05	6.80	0.79	12.35	—	—
+/- Morningstar Mod Tgr Risk TR USD	1.99	1.45	-0.71	2.85	—	—
+/- Category	-0.08	-0.11	0.17	0.77	—	—
% Rank in Cat	56	63	42	26	—	—
# of Funds in Cat	246	246	239	196	156	99

* Currency is displayed in USD

Top Holdings 12-31-2018

	Weight %	Last Price	Day Chg %	52 Week Range
⊕ Vanguard Total Stock Market Ix I	50.71	68.34 USD	0.46 ↑	58.20 - 73.66
⊕ Vanguard Total Intl Stock Index Inv	33.66	16.46 USD	0.80 ↑	14.72 - 18.77
⊖ Vanguard Total Bond Market II Ix Inv	10.91	10.47 USD	0.10 ↑	10.19 - 10.52
⊕ Vanguard Total Intl Bd Ix Admiral™	4.72	21.90 USD	0.09 ↑	21.52 - 22.09
% Assets in Top 5 Holdings	99.99			

⊕ Increase ⊖ Decrease ✂ New to Portfolio

Top Sectors 12-31-2018

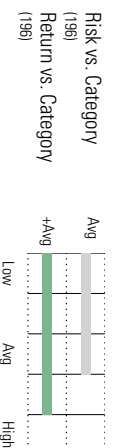
Fund	3 Yr High	3 Yr Low	Cat Avg
Financial Services	17.90	17.90	16.71
Technology	17.34	14.46	17.35
Healthcare	12.45	11.11	11.86
Consumer Cyclical	11.80	11.50	11.32
Industrials	11.29	11.29	10.48

Fund	BMark	Cat Avg
Government	7.68	6.67
Agency Mortgage-Backed	2.48	2.38
Government-Related	1.19	0.18
Covered Bond	0.25	0.00
Commercial MBS	0.12	0.00

Dividend and Capital Gains Distributions

Date	Distribution NAV	Long-Term Capital Gain	Short-Term Capital Gain	Return of Capital	Dividend Income	Distribution Total
12-28-2018	21.24	0.0000	0.0011	0.0000	0.5185	0.5196
12-28-2017	23.68	0.0005	0.0025	0.0000	0.4525	0.4555
12-28-2016	19.92	0.0011	0.0015	0.0000	0.3930	0.3956
12-29-2015	18.96	0.0000	0.0000	0.0000	0.1610	0.1610

3 Year Average Morningstar Risk Measures



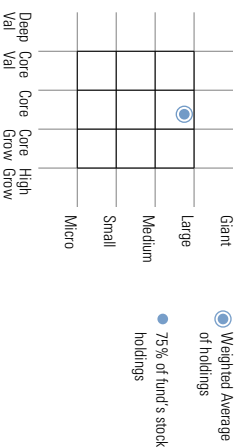
Pillars

Process	Positive
Performance	Positive
People	Positive
Parent	Positive
Price	Positive
Rating	Gold

Investment Strategy

The investment seeks to provide capital appreciation and current income consistent with its current asset allocation. The fund invests in other Vanguard mutual funds according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2040 (the target year). The fund's asset allocation will become more conservative over time, meaning that the percentage of assets allocated to stocks will decrease while the percentage of assets allocated to bonds and other fixed income investments will increase.

Style Map



Asset Allocation

	% Net	% Short	% Long	Bench mark	Cat Avg
Cash	1.54	0.00	1.54	0.17	3.25
US Stock	50.38	0.00	50.38	53.25	52.94
Non US Stock	32.34	0.00	32.34	31.38	27.45
Bond	15.49	0.04	15.53	12.63	12.24
Other	0.24	0.00	0.24	2.58	4.23

Management

Management	Start Date
William A. Coleman	06-26-2015
Walter Neiman	06-26-2015

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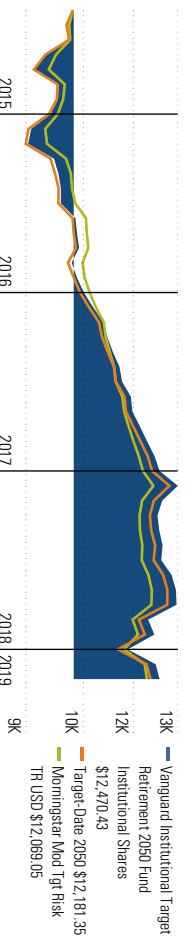


Vanguard Institutional Target Retirement 2050 Fund Institutional Shares VTRIX

Morningstar Analyst Rating **Gold**

NAV \$	NAV Day Change %	Yield TTM %	Total Assets \$	Status	Min. Inv.	Load	Expenses	Morningstar Rating™	Category	Investment Style
23.27	↔ 0.12 0.52	2.18	13	Open	\$100	None	0.09%	★★★★	Target-Date 2050	Large Blend

Growth of 10,000 06-26-2015 - 02-05-2019



Performance 02-05-2019

	YTD	1 Mo	1 Yr	3Yr Ann	5Yr Ann	10Yr Ann
Growth of 10,000	10,854	10,724	10,063	14,280	—	—
Fund	8.54	7.24	0.63	12.61	—	—
+/- Morningstar Mod Tgt Risk TR USD	2.48	1.89	-0.87	3.11	—	—
+/- Category	-0.18	-0.18	0.19	0.51	—	—
% Rank in Cat	71	69	44	37	—	—
# of Funds in Cat	246	246	239	196	155	81

* Currency is displayed in USD

Top Holdings 12-31-2018

	Weight %	Last Price	Day Chg %	52 Week Range
⊕ Vanguard Total Stock Market Ix I	54.03	68.34 USD	0.46 ↑	58.20 - 73.66
⊕ Vanguard Total Intl Stock Index Inv	35.73	16.46 USD	0.80 ↑	14.72 - 18.77
⊖ Vanguard Total Bond Market II Ix Inv	7.13	10.47 USD	0.10 ↑	10.19 - 10.52
⊖ Vanguard Total Intl Bd Ix Adminrat™	3.02	21.90 USD	0.09 ↑	21.52 - 22.09
% Assets in Top 5 Holdings	99.91			

⊕ Increase ⊖ Decrease ‡ New to Portfolio

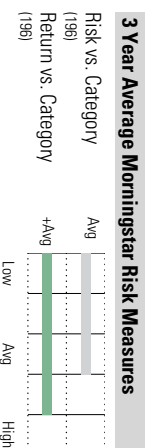
Top Sectors 12-31-2018

	Fund	3 Yr High	3 Yr Low	Cat Avg
🏢 Financial Services	17.90	18.42	17.90	16.67
🏢 Technology	17.35	17.35	14.54	17.48
🏢 Healthcare	12.45	12.45	11.10	12.32
🏢 Consumer Cyclical	11.80	11.80	11.50	11.67
🏢 Industrials	11.28	11.96	11.28	10.38

	Fund	BMark	Cat Avg
Government	5.75	3.83	3.17
Corporate	2.35	2.27	2.19
Securitized	1.91	1.29	1.61
Cash & Equivalents	1.66	0.00	3.56
Municipal	0.05	0.00	0.03

Dividend and Capital Gains Distributions

	Distribution Date	Distribution NAV	Long-Term Capital Gain	Short-Term Capital Gain	Return of Capital	Dividend Income	Distribution Total
	12-28-2018	21.30	0.0000	0.0006	0.0000	0.5016	0.5022
	12-28-2017	23.88	0.0003	0.0046	0.0000	0.4452	0.4501
	12-28-2016	19.96	0.0009	0.0012	0.0000	0.3800	0.3821
	12-29-2015	18.96	0.0000	0.0000	0.0000	0.1600	0.1600



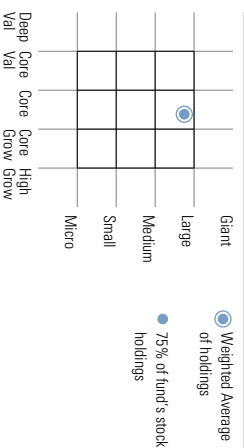
Pillars

Process	Positive
Performance	Positive
People	Positive
Parent	Positive
Price	Positive
Rating	Gold

Investment Strategy

The investment seeks to provide capital appreciation and current income consistent with its current asset allocation. The fund invests in other Vanguard mutual funds according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2050 (the target year). The fund's asset allocation will become more conservative over time, meaning that the percentage of assets allocated to stocks will decrease while the percentage of assets allocated to bonds and other fixed income investments will increase.

Style Map



Asset Allocation

	% Net	% Short	% Long	Bench mark	Cat Avg
Cash	1.67	0.00	1.67	0.00	3.56
US Stock	53.67	0.00	53.67	54.30	55.09
Non US Stock	34.34	0.00	34.34	35.59	30.72
Bond	10.07	0.02	10.10	7.38	6.89
Other	0.25	0.00	0.25	2.73	3.75

Management

	Start Date
William A. Coleman	06-26-2015
Walter Neiman	06-26-2015

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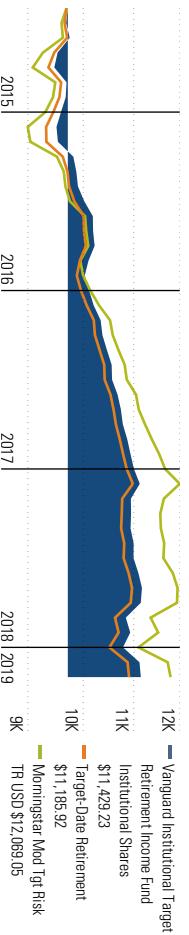


Vanguard Institutional Target Retirement Income Fund Institutional Shares VITRX

Morningstar Analyst Rating **Gold**

NAV \$	NAV Day Change %	Yield TTM %	Total Assets \$	Status	Min. Inv.	Load	Expenses	Morningstar Rating™	Category	Investment Style
21.19	↔0.05 0.24	2.59	6	Open	\$100	None	0.09%	★★★★	Target-Date Retirement	Large Blend

Growth of 10,000 06-26-2015 - 02-05-2019



Performance 02-05-2019

	YTD	1 Mo	1 Yr	3Yr Ann	5Yr Ann	10Yr Ann
Growth of 10,000	10,332	10,281	10,202	11,752	—	—
Fund	3.32	2.81	2.02	5.53	—	—
+/- Morningstar Mod Tgr Risk TR USD	-2.74	-2.53	0.53	-3.97	—	—
+/- Category	-0.37	-0.22	0.74	0.00	—	—
% Rank in Cat	65	63	21	50	—	—
# of Funds in Cat	191	191	188	164	129	94

* Currency is displayed in USD

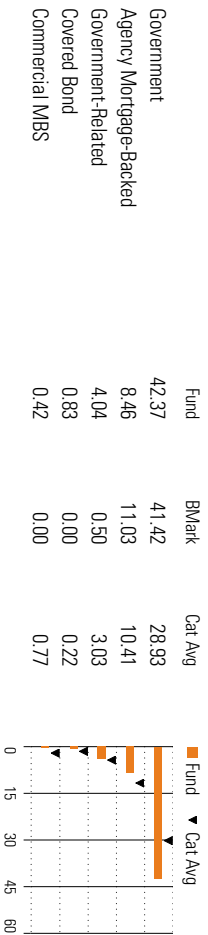
Top Holdings 12-31-2018

		Weight %	Last Price	Day Chg %	52 Week Range
⊖ Vanguard Total Bond Market II Idx Inv	37.29	10.47 USD	0.10 ↑	10.19 - 10.52	
⊕ Vanguard Total Stock Market Idx I	18.25	68.34 USD	0.46 ↑	58.20 - 73.66	
⊖ Vanguard Short-Term Intl-Prot Sec Idx Adm	16.74	24.16 USD	0.04 ↑	23.92 - 24.59	
⊖ Vanguard Total Intl Bd Idx Adminrat™	15.91	21.90 USD	0.09 ↑	21.52 - 22.09	
⊕ Vanguard Total Intl Stock Index Inv	11.81	16.46 USD	0.80 ↑	14.72 - 18.77	
% Assets in Top 5 Holdings		100.00			

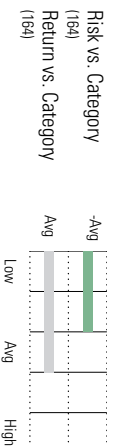
⊕ Increase ⊖ Decrease *New to Portfolio

Top Sectors 12-31-2018

	Fund	3 Yr High	3 Yr Low	Cat Avg
🏦 Financial Services	17.87	18.42	17.87	17.43
💻 Technology	17.40	17.40	14.53	17.84
🏥 Healthcare	12.49	12.49	11.09	12.44
🔄 Consumer Cyclical	11.80	11.80	11.50	11.71
🏭 Industrials	11.28	11.96	11.28	10.96



3 Year Average Morningstar Risk Measures



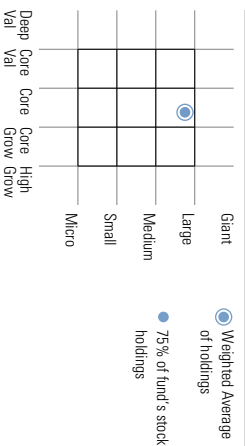
Pillars

Process	Positive
Performance	Positive
People	Positive
Parent	Positive
Price	Positive
Rating	Gold

Investment Strategy

The investment seeks to provide current income and some capital appreciation. The fund invests in other Vanguard mutual funds according to an asset allocation strategy designed for investors currently in retirement. Its indirect bond holdings are a diversified mix of short-, intermediate-, and long-term U.S. government, U.S. agency, and investment-grade U.S. corporate bonds; inflation-protected public obligations issued by the U.S. Treasury; mortgage-backed and asset-backed securities; and government, agency, corporate, and securitized investment-grade foreign bonds issued in currencies other than the U.S. dollar.

Style Map



Asset Allocation

	%	%	%	Bench	Cat
Cash	1.44	0.00	1.44	5.15	5.75
US Stock	18.13	0.00	18.13	25.03	20.09
Non US Stock	11.35	0.00	11.35	9.24	10.63
Bond	68.91	0.12	69.04	58.57	60.51
Other	0.17	0.00	0.17	2.01	3.01


Management

	Start Date
William A. Coleman	06-26-2015
Walter Nejman	06-26-2015

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Vanguard Institutional Target Retirement Income Fund Institutional Shares VITRX

NAV \$ NAV Day Change % **Yield TTM %** **Total Assets \$** **Status** **Min. Inv.** **Load** **Expenses** **Morningstar Rating™** **Category** **Investment Style**
 21.19 ↘0.05 | 0.24 2.59 6 Open \$100 None 0.09% ★★★ Target-Date Retirement  Large Blend

Dividend and Capital Gains Distributions

Distribution Date	Distribution NAV	Long-Term Capital Gain	Short-Term Capital Gain	Return of Capital	Dividend Income	Distribution Total
12-28-2018	20.44	0.0061	0.0166	0.0000	0.2287	0.2514
09-21-2018	21.48	0.0000	0.0000	0.0000	0.1250	0.1250
06-15-2018	21.38	0.0000	0.0000	0.0000	0.1267	0.1267
03-15-2018	21.45	0.0000	0.0000	0.0000	0.0680	0.0680
12-28-2017	21.51	0.0016	0.0022	0.0000	0.2018	0.2056

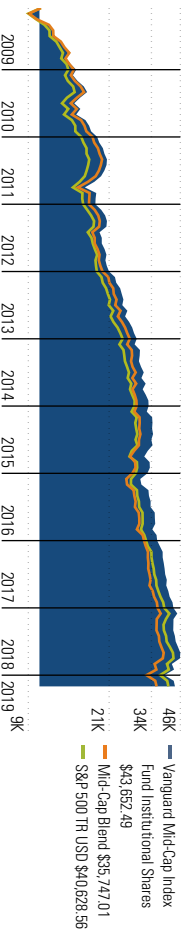
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Vanguard Mid-Cap Index Fund Institutional Shares VMCIIX

Morningstar Analyst Rating **Gold**

NAV \$ **NAV Day Change %** **Yield TTM %** **Total Assets \$** **Status** **Min. Inv.** **Load** **Expenses** **Morningstar Rating™** **Category** **Investment Style**
 42.35 **↑**0.17 | 0.40 1.65 96 Open \$5 None 0.04% **★★★★★** Mid-Cap Blend **Mid Blend**

Growth of 10,000 02-05-2009 - 02-05-2019



Investment Strategy

The investment seeks to track the performance of a benchmark index that measures the investment return of mid-capitalization stocks. The fund employs an indexing investment approach designed to track the performance of the CRSP US Mid Cap Index, a broadly diversified index of stocks of mid-size U.S. companies. The advisor attempts to replicate the target index by investing in all, or substantially all, of its assets in the stocks that make up the index, holding each stock in approximately the same proportion as its weighting in the index.

Performance 02-05-2019

	YTD	1 Mo	1 Yr	3Yr Ann	5Yr Ann	10Yr Ann
Growth of 10,000	11,210	11,098	10,327	15,022	15,807	42,883
Fund	12.10	10.98	3.27	14.53	9.59	15.67
+/- S&P 500 TR USD	2.72	2.72	-2.14	-1.15	-2.03	0.81
+/- Category	0.59	1.09	2.24	1.62	2.18	1.97
% Rank in Cat	50	29	28	40	13	13
# of Funds in Cat	465	465	456	373	331	233

* Currency is displayed in USD

Top Holdings 12-31-2018

	Weight %	Last Price	Day Chg %	52 Week Range
⊕ Edwards Lifesciences Corp	0.88	168.64 USD	-0.86 ↓	121.40 - 175.00
⊕ Red Hat Inc	0.85	178.78 USD	0.05 ↑	115.31 - 179.49
⊖ Fiserv Inc	0.80	84.46 USD	-0.75 ↓	62.76 - 85.65
⊕ Autodesk Inc	0.77	152.10 USD	-0.20 ↓	101.55 - 159.94
⊕ Roper Technologies Inc	0.76	297.71 USD	-0.04 ↓	245.59 - 312.65
% Assets in Top 5 Holdings	4.06			

⊕ Increase ⊖ Decrease *New to Portfolio

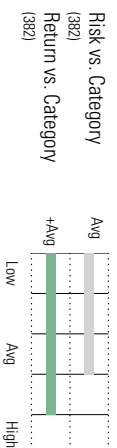
Top Sectors 12-31-2018

	Fund	3 Yr High	3 Yr Low	Cat Avg
📁 Technology	18.55	18.55	15.49	16.58
📁 Consumer Cyclical	14.76	17.16	14.76	14.44
📁 Industrials	14.18	14.25	13.70	15.23
📁 Financial Services	12.81	15.04	12.81	15.84
📁 Healthcare	10.10	10.10	8.22	10.24

Dividend and Capital Gains Distributions

Distribution Date	Distribution NAV	Long-Term Capital Gain	Short-Term Capital Gain	Return of Capital	Dividend Income	Distribution Total
12-21-2018	36.49	0.0000	0.0000	0.0000	0.1862	0.1862
09-27-2018	44.82	0.0000	0.0000	0.0000	0.2075	0.2075
06-21-2018	43.83	0.0000	0.0000	0.0000	0.1547	0.1547
03-21-2018	43.23	0.0000	0.0000	0.0000	0.1419	0.1419
12-20-2017	42.18	0.0000	0.0000	0.0000	0.1782	0.1782

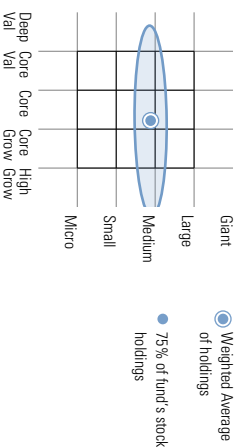
3 Year Average Morningstar Risk Measures



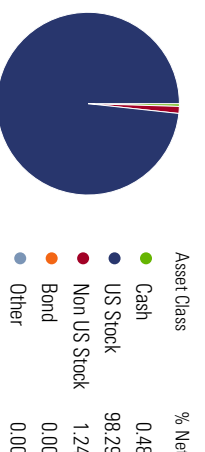
Pillars

Process	Positive
Performance	Positive
People	Positive
Parent	Positive
Price	Positive
Rating	Gold

Style Map



Asset Allocation



Management

Manager	Start Date
Donald M. Butler	05-21-1998
Michael A. Johnson	04-21-2016

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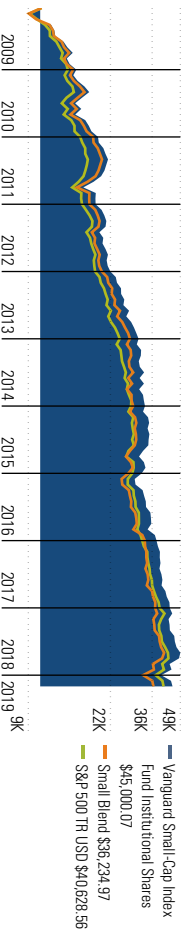


Vanguard Small-Cap Index Fund Institutional Shares VSCIX

Morningstar Analyst Rating **Gold**

NAV \$ **NAV Day Change %** **Yield TTM %** **Total Assets \$** **Status** **Min. Inv.** **Load** **Expenses** **Morningstar Rating™** **Category** **Investment Style**
 71.94 **↑**0.26 | 0.36 1.50 87 Open \$5 None 0.04% **★★★★★** Small Blend **Mid Blend**

Growth of 10,000 02-05-2009 - 02-05-2019



Investment Strategy

The investment seeks to track the performance of a benchmark index that measures the investment return of small-capitalization stocks. The fund employs an indexing investment approach designed to track the performance of the CRSP US Small Cap Index, a broadly diversified index of stocks of small U.S. companies. The advisor attempts to replicate the target index by investing all, or substantially all, of its assets in the stocks that make up the index, holding each stock in approximately the same proportion as its weighting in the index.

Performance 02-05-2019

	YTD	1 Mo	1 Yr	3Yr Ann	5Yr Ann	10Yr Ann
Growth of 10,000	11,379	11,185	10,587	15,941	15,445	44,328
Fund	13.79	11.85	5.87	16.82	9.08	16.06
+/- S&P 500 TR USD	4.42	3.59	0.45	1.14	-2.53	1.19
+/- Category	1.41	1.96	4.83	2.44	2.03	2.23
% Rank in Cat	15	6	9	20	14	8
# of Funds in Cat	766	766	746	630	521	382

* Currency is displayed in USD

Top Holdings 12-31-2018

	Weight %	Last Price	Day Chg %	52 Week Range
⊕ Burlington Stores Inc	0.36	170.85 USD	-2.59 ↓	109.62 - 180.27
⊖ NRG Energy Inc	0.36	40.65 USD	-0.10 ↓	23.75 - 43.08
⊕ W.P. Carey Inc	0.34	74.62 USD	-0.44 ↓	59.23 - 74.99
⊕ Ammos Energy Corp	0.34	95.60 USD	-1.02 ↓	76.46 - 100.76
⊕ IDEX Corp	0.32	138.47 USD	0.13 ↑	117.72 - 157.84
% Assets in Top 5 Holdings	1.71			

⊕ Increase ⊖ Decrease *New to Portfolio

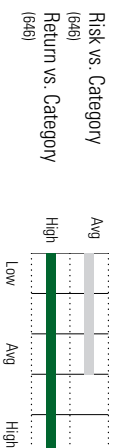
Top Sectors 12-31-2018

	Fund	3 Yr High	3 Yr Low	Cat Avg
🏠 Technology	17.11	17.11	14.84	14.95
🏭 Industrials	15.46	16.58	15.46	17.12
🏢 Financial Services	14.10	14.46	13.19	18.14
🔄 Consumer Cyclical	12.86	13.38	12.86	13.87
🏡 Real Estate	12.07	12.58	11.26	7.46

Dividend and Capital Gains Distributions

Distribution Date	Distribution NAV	Long-Term Capital Gain	Short-Term Capital Gain	Return of Capital	Dividend Income	Distribution Total
12-21-2018	60.72	0.0000	0.0000	0.0000	0.3447	0.3447
09-27-2018	77.54	0.0000	0.0000	0.0000	0.3117	0.3117
06-21-2018	76.15	0.0000	0.0000	0.0000	0.1849	0.1849
03-21-2018	72.18	0.0000	0.0000	0.0000	0.2198	0.2198
12-20-2017	70.59	0.0000	0.0000	0.0000	0.3736	0.3736

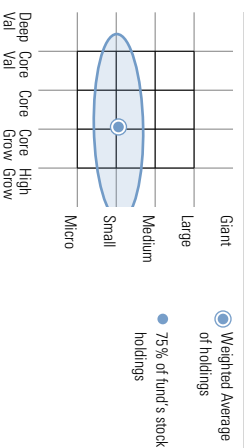
3 Year Average Morningstar Risk Measures



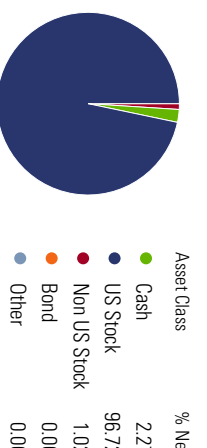
Pillars

Process	Positive
Performance	Positive
People	Positive
Parent	Positive
Price	Positive
Rating	★★★★★

Style Map



Asset Allocation



Management

Management	Start Date
William A. Coleman	04-27-2016
Gerard C. O'Reilly	04-27-2016

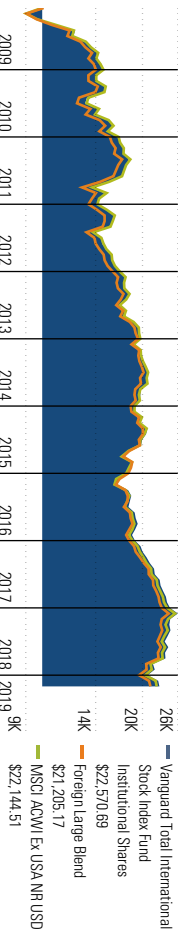
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Vanguard Total International Stock Index Fund Institutional Shares

Morningstar Analyst Rating **Gold**

NAV \$	NAV Day Change %	Yield TTM %	Total Assets \$	Status	Min. Inv.	Load	Expenses	Morningstar Rating™	Category	Investment Style
110.13	↔0.88 0.81	2.97	354	Open	\$5	None	0.09%	★★★★	Foreign Large Blend	Large Blend

Growth of 10,000 02-05-2009 - 02-05-2019



Investment Strategy

The investment 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. The fund employs an indexing investment approach designed to track the performance of the FTSE Global All Cap ex US Index, a float-adjusted market-capitalization-weighted index designed to measure equity market performance of companies located in developed and emerging markets, excluding the United States. The index includes approximately 5,800 stocks of companies located in over 45 countries.

Performance 02-05-2019

	YTD	1 Mo	1 Yr	3Yr Ann	5Yr Ann	10Yr Ann
Growth of 10,000	10,855	10,675	9,296	13,476	12,094	22,293
Fund	8.55	6.75	-7.04	10.46	3.88	8.35
+/- MSCI ACWI Ex USA NR USD	0.23	-0.69	1.90	0.19	0.28	0.03
+/- Category	0.35	0.15	0.47	2.03	0.92	0.60
% Rank in Cat	33	41	43	10	18	—
# of Funds in Cat	777	777	729	626	497	373

* Currency is displayed in USD

Top Holdings 12-31-2018

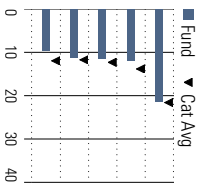
	Weight %	Last Price	Day Chg %	52 Week Range
⊕ Nestle SA	1.12	87.14 USD	-0.30 ↓	72.92 - 87.72
⊕ Tencent Holdings Ltd	1.05	347.60 USD	-0.12 ↓	251.40 - 475.50
⊕ Novartis AG	0.85	89.28 USD	0.11 ↑	71.84 - 92.80
⊕ Roche Holding AG Dividend Right Cert.	0.79	288.50 USD	0.00 ↓	206.35 - 289.25
⊕ Taiwan Semiconductor Manufacturing Co Ltd	0.79	221.00 USD	-0.67 ↓	206.50 - 288.00

% Assets in Top 5 Holdings

⊕ Increase ⊖ Decrease * New to Portfolio

Top Sectors 12-31-2018

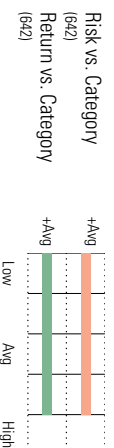
Fund	3 Yr High	3 Yr Low	Cat Avg
Financial Services	21.35	21.42	21.18
Industrials	11.97	12.23	11.97
Consumer Cyclical	11.34	11.62	11.34
Technology	11.24	11.49	9.36
Consumer Defensive	9.62	9.68	11.04



Dividend and Capital Gains Distributions

Distribution Date	Distribution NAV	Long-Term Capital Gain	Short-Term Capital Gain	Return of Capital	Dividend Income	Distribution Total
12-21-2018	99.08	0.0000	0.0000	0.0000	1.0630	1.0630
09-25-2018	116.87	0.0000	0.0000	0.0000	0.5829	0.5829
06-21-2018	116.26	0.0000	0.0000	0.0000	1.2805	1.2805
03-23-2018	118.62	0.0000	0.0000	0.0000	0.3123	0.3123
12-20-2017	120.20	0.0000	0.0000	0.0000	1.1649	1.1649

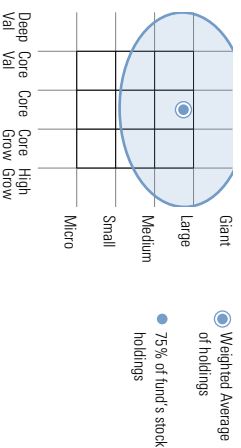
3 Year Average Morningstar Risk Measures



Pillars

Process	Positive
Performance	Neutral
People	Positive
Parent	Positive
Price	Positive
Rating	Gold

Style Map



Asset Allocation

	% Net	% Short	% Long	Bench mark	Cat Avg
Cash	2.18	0.00	2.18	0.01	2.13
US Stock	0.92	0.00	0.92	0.82	3.58
Non US Stock	96.42	0.00	96.42	99.13	93.21
Bond	0.03	0.00	0.03	0.00	0.15
Other	0.45	0.00	0.45	0.04	0.93

Management

	Start Date
Michael Perre	08-05-2008
Christine D. Franquin	11-30-2017

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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.