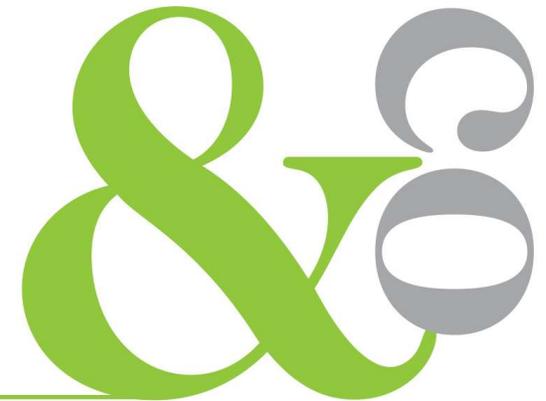


Investment Performance Review  
Period Ending September 30, 2017

## Washoe County 457 & 401a Plans

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# Table Of Contents

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Market Environment	Page 1
457 Fund Asset Allocation	Page 14
457 Fund Asset Allocation by Asset Class	Page 16
457 Fund Asset Allocation by Manager	Page 17
401(a) Fund Asset Allocation	Page 18
401(a) Fund Asset Allocation by Asset Class	Page 20
401(a) Fund Asset Allocation by Manager	Page 21
401(a) Risk Reward Graph	Page 28
Lazard Emerging Markets Equity	Page 39
Hotchkis & Wiley Mid Cap Value	Page 41
Historical Activity	Page 43
Definitions & Disclosure Pages	Page 46
DFA International Small Cap Value	Page 49
American Funds EuroPacific Growth	Page 51
Vanguard Small Cap Index	Page 55
AMG Skyline Special Equities	Page 57
Hartford Mid Cap	Page 59
Vanguard Mid Cap Index	Page 61
American Funds Growth Fund of America	Page 63
Wells Fargo Disciplined US Core	Page 65
Vanguard Institutional Index	Page 67
American Balanced Fund	Page 69
WCAB 2060 Retirement Portfolios	Page 71
PIMCO High Yield	Page 93
PIMCO Foreign Bond	Page 95
Hartford Total Return Bond	Page 97

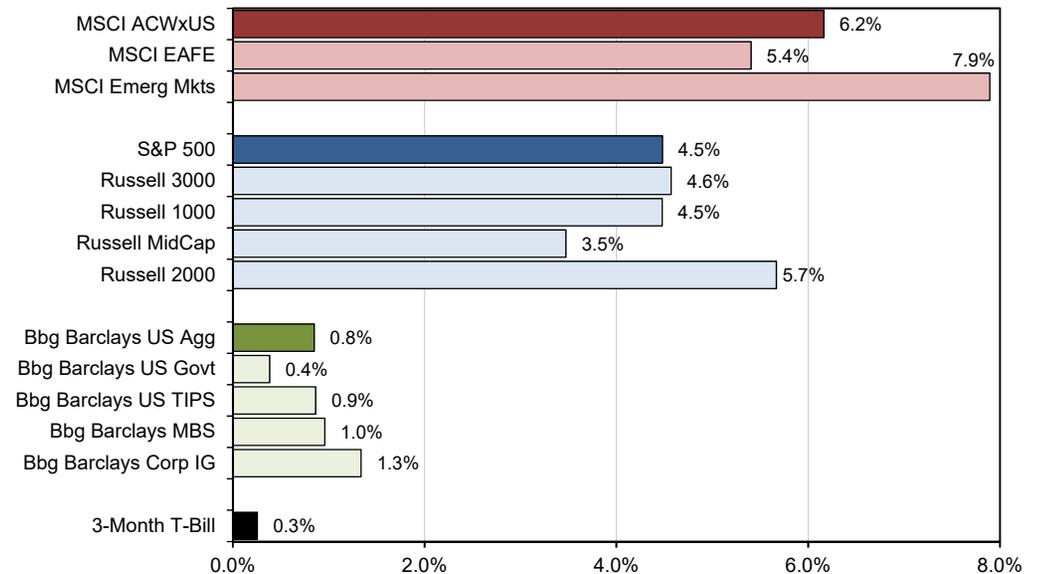


# 3rd Quarter 2017 Market Environment

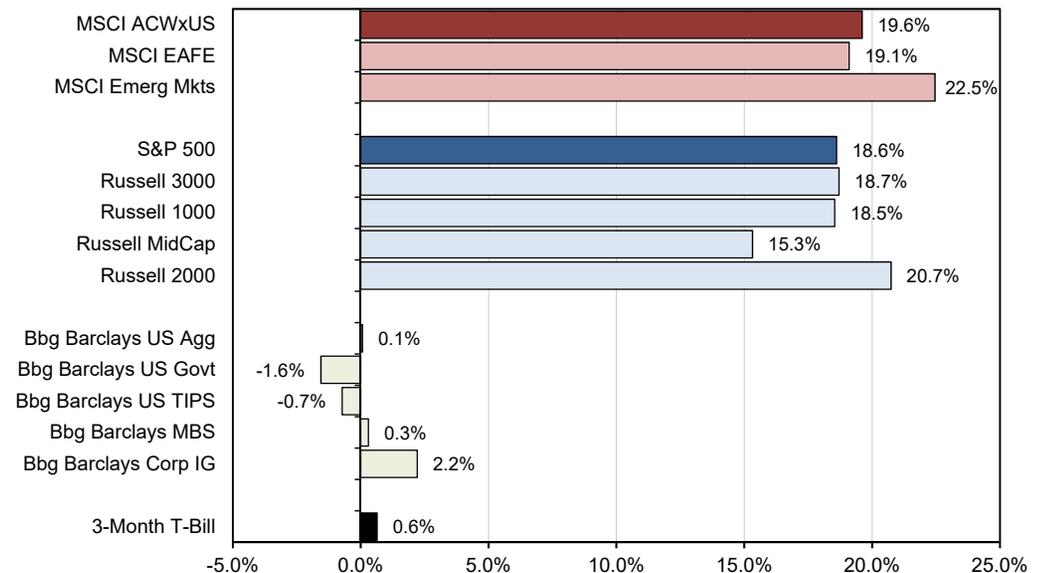


- Returns were positive for major equity and fixed income indices for the 3<sup>rd</sup> quarter of 2017. Broad domestic and international equity market performance was largely fueled by continued improvement in corporate earnings and macroeconomic data worldwide. Domestic equities trailed international indices during the quarter. While U.S. economic fundamentals and corporate earnings growth were viewed positively, market participants faced headwinds from increasing tension between the U.S. and North Korea, several major weather events and ongoing political concerns surrounding the pace of implementation of Trump administration expansive fiscal policy reforms. Despite these concerns, investor optimism remained high and many major domestic equity indices hit record levels during the quarter. Small cap equities outperformed large cap stocks for the quarter with the Russell 2000 Index returning 5.7% versus a 4.5% return for the S&P 500 Index. Small cap companies have also been the best performers domestically over the last 12 months, returning over 20%. While small cap equities lead the charge, all U.S. core market capitalization indices returned over 15% over the last year.
- International equity market benchmarks continued to outpace U.S. markets through the 3<sup>rd</sup> quarter of 2017 as both developed and emerging market international equities saw benefits from continued strength in global macroeconomic data, a weakening U.S. Dollar (USD) and ongoing accommodative global central bank policies. The improving economic fundamentals worldwide have led many international central banks to begin telegraphing an eventual reduction in stimulus going forward, with both the European Central Bank and the Bank of England expected to announce plans to reduce stimulus before year end. Emerging markets, which benefitted from a weakening USD and rising commodity prices during the period, continued their trend of outperformance relative to developed markets. The MSCI Emerging Market Index returned 7.9% for the quarter and a solid 22.5% for the 1-year period. While weaker by comparison, the developed market MSCI EAFE Index also posted robust performance, returning 5.4% for the quarter and 19.1% for the year.
- The yield curve continued to flatten through the 3<sup>rd</sup> quarter of 2017 as interest rates rose slightly from the prior quarter, but with greater magnitude in short-term maturities. The Federal Reserve announced that its plan to systematically shrink the size of its balance sheet would begin in October. Broad fixed income indices posted positive results with the bellwether Bloomberg Barclays U.S. Aggregate Index returning 0.8% for the quarter. Benefitting from tightening credit spreads, corporate credit has been the best performer among the investment grade sectors with the Bloomberg Barclays U.S. Corporate Investment Grade Index returning 1.3% and 2.2% over the quarter and 1-year period respectively.

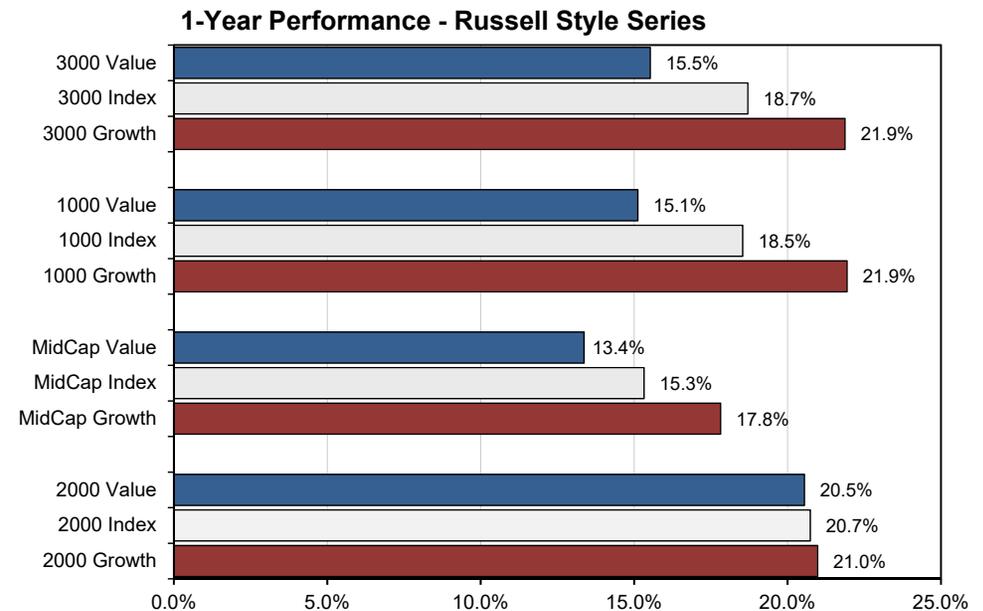
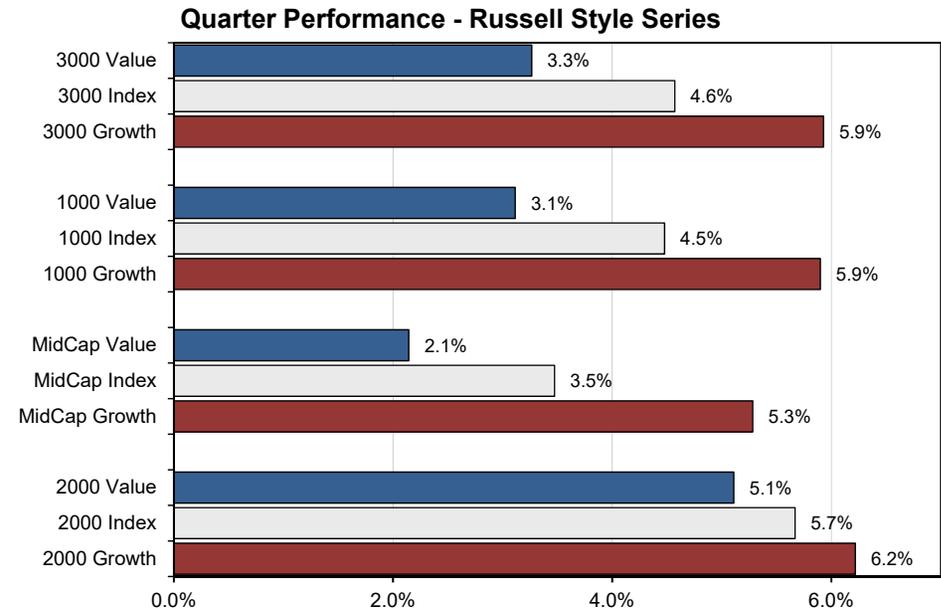
### Quarter Performance



### 1-Year Performance



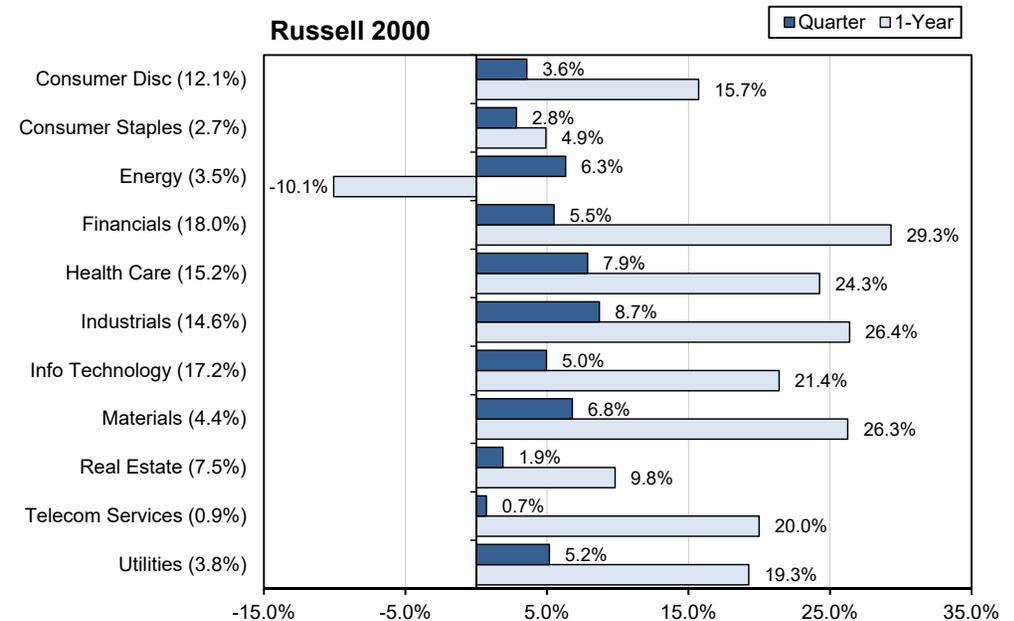
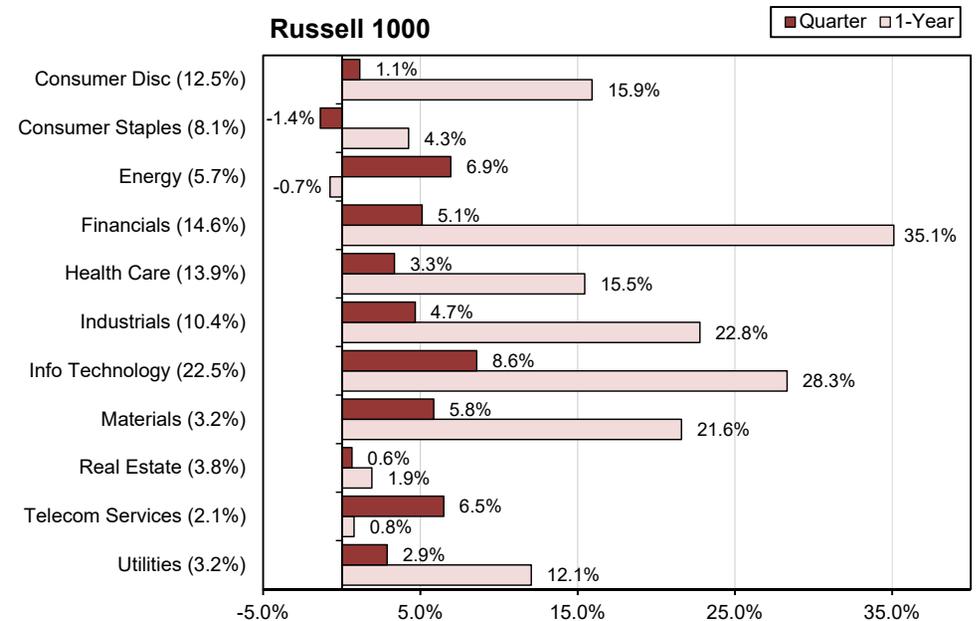
- Despite political gridlock in Washington, increased aggression between the U.S. and North Korea and several major weather events, including three hurricanes that caused catastrophic damage to Texas, Florida and Puerto Rico, domestic equity prices pushed higher during the 3<sup>rd</sup> quarter. U.S. equity index returns were positive across the style and capitalization spectrum for the 3<sup>rd</sup> quarter and trailing 1-year period. Encouraging economic data continued to facilitate gains in U.S. equity markets as positive trends in GDP, consumer and business sentiment, corporate earnings and employment continued throughout the period. Over the past twelve months, there has only been one instance of a negative quarterly return being posted by the Russell market cap and style indices, which was a -0.13% return by the Russell 2000 Value Index during 1Q 2017.
- Small cap stocks were the best performing capitalization segment across the spectrum for the 3<sup>rd</sup> quarter, bucking a year-to-date trend of large cap outperformance. The small cap Russell 2000 Index posted a 5.7% return for the period. While small cap stocks were the best performers, large and mid cap indices also posted solid returns. Interestingly, the returns for the large cap Russell 1000 Index outperformed the Russell MidCap Index, which is somewhat unusual during a period of small cap outperformance. Small cap stocks also outperform larger companies over the 1-year period, with the Russell 2000 returning 20.7% versus a return of 18.5% for the Russell 1000.
- The 3<sup>rd</sup> quarter built on year-to-date trends as growth style indices outperformed their value counterparts. Growth indices benefitted from significant overweight's to the information technology sector, which was the best performing sector during the 3<sup>rd</sup> quarter. Growth benchmarks also benefitted from their exposures to more cyclical names within the information technology, health care and industrials sectors. The Russell Midcap Value Index's return of 2.1% was the worst performing style index for the period. Over the 1-year period, growth indices outperform value indices across the market cap spectrum with the Russell 1000 Growth Index returning an impressive 21.9%. However, all market cap and style indices have returns in the double digits with most returning greater than 15% for the year.
- Domestic equity valuations appear stretched relative to historical levels based on Forward Price/Earnings ratios (P/E), with even the most reasonably valued indices trading well above their historical P/E valuations. Index P/E valuations range from 115% to 138% of their respective 15-year P/E averages. The mid cap core and small cap value indices appear the most inexpensive and the small cap growth and small cap core segments look the most overvalued.



- Sector performance within the Russell 1000 Index was largely positive for the 3<sup>rd</sup> quarter. Six of eleven economic sectors outpaced the Russell 1000 Index return, and ten of eleven sectors posted gains during the period. Technology stocks were the best performers, returning 8.6% for the quarter on the back of another strong earnings season. Energy and materials stocks also performed well relative to other sectors, rising 6.9% and 5.8% respectively, benefitting from increased commodity prices. Brent crude prices rose over 20% through the quarter as U.S. inventories fell faster than expected, there were concerns of potential supply disruptions in U.S. oil refining operations in Texas due to flooding caused by Hurricane Harvey, OPEC remained committed to limiting production overseas and the USD weakened. Industrial metal prices also rose on positive economic news out of China. Other cyclical sectors such as industrials and financials also posted strong results. Telecommunication services returned a notable 6.5% due to strong performance of the sector's largest weighted companies, Verizon and AT&T. Over the trailing 1-year period, financials and technology were the best performing sectors in the Russell 1000, returning 35.1% and 28.3% respectively. Ten of eleven large cap economic sectors posted positive returns for the year with seven posting double digit returns. Energy was the only large cap sector to post a negative return over the last year, returning -0.7%.

- Small cap sector results generally outperformed their large capitalization counterparts for the quarter. Four of eleven economic sectors outpaced the Russell 2000 Index return for the quarter, and all eleven sectors posted positive results for the period. Most of the sector trends observable in large cap index sector performance also impacted small cap sectors. However, small cap telecom services underperformed large cap telecom stocks meaningfully. Over the 1-year period, six of eleven sectors have returns greater than 20% and eight have posted double digit returns. Energy was the only Russell 2000 sector to post a negative return over last year, falling -10.1%.

- Using S&P 500 sector valuations as a proxy for the market, Forward P/E ratios for eight of the GICS sectors were higher than their long-term averages at quarter-end. Using these historical P/E measures, the energy, materials and utilities sectors appear the most extended. In contrast the technology, health care and telecommunications sectors were trading at a discount to their long-term average P/E ratios.



**The Market Environment**  
**Top 10 Index Weights & Quarterly Performance for the Russell 1000 & 2000**  
As of September 30, 2017

Top 10 Weighted Stocks				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Apple Inc	3.35%	7.4%	38.8%	Information Technology
Microsoft Corp	2.33%	8.6%	32.4%	Information Technology
Facebook Inc A	1.66%	13.2%	33.2%	Information Technology
Amazon.com Inc	1.59%	-0.7%	14.8%	Consumer Discretionary
Berkshire Hathaway Inc B	1.47%	8.2%	26.9%	Financials
Johnson & Johnson	1.46%	-1.1%	13.0%	Health Care
Exxon Mobil Corp	1.45%	2.5%	-2.5%	Energy
JPMorgan Chase & Co	1.41%	5.1%	46.9%	Financials
Alphabet Inc C	1.21%	5.5%	23.4%	Information Technology
Alphabet Inc A	1.21%	4.7%	21.1%	Information Technology

Top 10 Weighted Stocks				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Kite Pharma Inc	0.43%	73.4%	221.9%	Health Care
bluebird bio Inc	0.31%	30.7%	102.6%	Health Care
Exact Sciences Corp	0.27%	33.2%	153.7%	Health Care
Knight-Swift Transportation Hldgs A	0.25%	12.3%	45.8%	Industrials
MKS Instruments Inc	0.25%	40.6%	91.8%	Information Technology
Catalent Inc	0.24%	13.7%	54.5%	Health Care
Aspen Technology Inc	0.23%	13.7%	34.2%	Information Technology
Starwood Waypoint Homes	0.23%	6.7%	30.2%	Real Estate
MGIC Investment Corp	0.23%	11.9%	56.6%	Financials
Curtiss-Wright Corp	0.23%	13.9%	15.4%	Industrials

Top 10 Performing Stocks (by Quarter)				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Juno Therapeutics Inc	0.01%	50.1%	49.5%	Health Care
NRG Energy Inc	0.03%	48.8%	130.0%	Utilities
Alnylam Pharmaceuticals Inc	0.04%	47.3%	73.3%	Health Care
Alcoa Corp	0.04%	42.8%	N/A	Materials
Take-Two Interactive Software Inc	0.04%	39.3%	126.8%	Information Technology
Orbital ATK Inc	0.03%	35.8%	77.0%	Industrials
International Game Technology PLC	0.01%	35.5%	4.5%	Consumer Discretionary
ACADIA Pharmaceuticals Inc	0.02%	35.1%	18.4%	Health Care
Spirit AeroSystems Holdings Inc	0.04%	34.3%	75.6%	Industrials
Gap Inc	0.03%	34.3%	38.3%	Consumer Discretionary

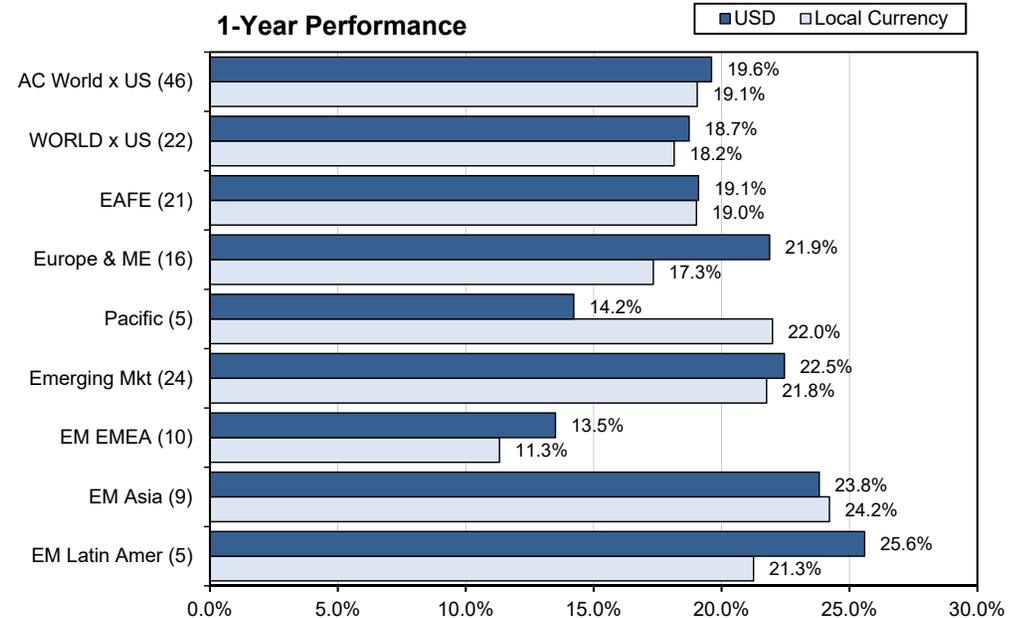
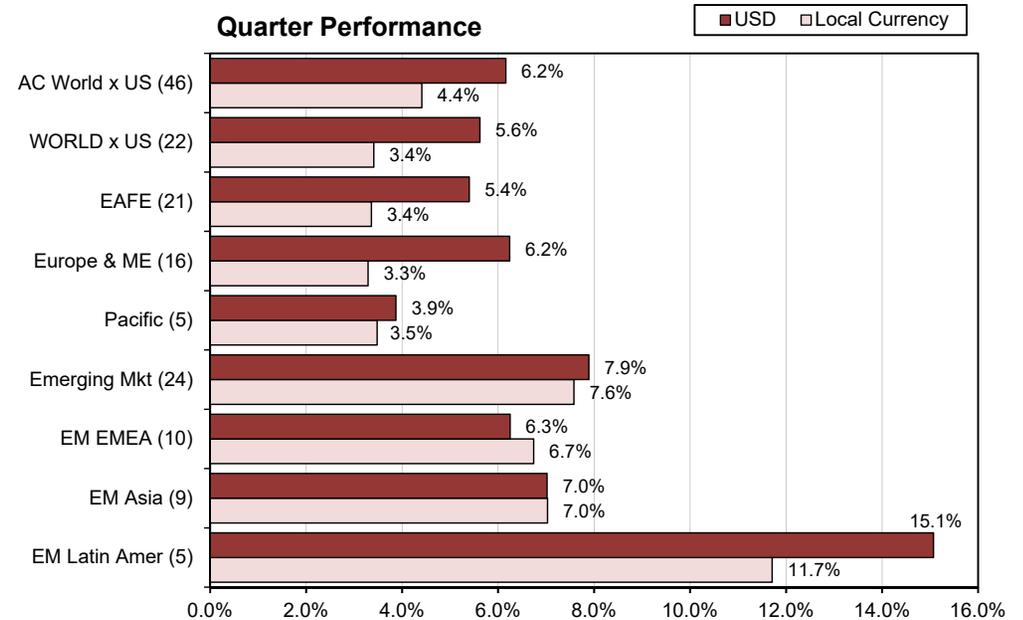
Top 10 Performing Stocks (by Quarter)				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Veritone Inc	0.01%	288.1%	N/A	Information Technology
MyoKardia Inc	0.04%	227.1%	162.2%	Health Care
Madriral Pharmaceuticals Inc	0.01%	176.6%	254.7%	Health Care
Abeona Therapeutics Inc	0.02%	166.4%	184.2%	Health Care
Zogenix Inc	0.04%	141.7%	206.6%	Health Care
Voyager Therapeutics Inc	0.01%	129.8%	71.4%	Health Care
Dynavax Technologies Corp	0.06%	122.8%	105.0%	Health Care
Hertz Global Holdings Inc	0.06%	94.4%	-44.3%	Industrials
Intrepid Potash Inc	0.02%	92.9%	285.8%	Materials
Spectrum Pharmaceuticals Inc	0.05%	88.9%	201.3%	Health Care

Bottom 10 Performing Stocks (by Quarter)				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Intercept Pharmaceuticals Inc	0.00%	-52.1%	-64.7%	Health Care
Uniti Group Inc	0.01%	-39.3%	-47.9%	Real Estate
Tahoe Resources Inc	0.01%	-38.8%	-58.1%	Materials
Spirit Airlines Inc	0.01%	-35.3%	-21.4%	Industrials
Rite Aid Corp	0.01%	-33.6%	-74.5%	Consumer Staples
DexCom Inc	0.02%	-33.1%	-44.2%	Health Care
Dick's Sporting Goods Inc	0.01%	-31.8%	-51.6%	Consumer Discretionary
Mednax Inc	0.02%	-28.6%	-34.9%	Health Care
Envision Healthcare Corp	0.02%	-28.3%	-33.0%	Health Care
Foot Locker Inc	0.02%	-28.1%	-47.0%	Consumer Discretionary

Bottom 10 Performing Stocks (by Quarter)				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Versartis Inc	0.00%	-86.0%	-80.0%	Health Care
Otonomy Inc	0.00%	-82.8%	-82.1%	Health Care
Genocea Biosciences Inc	0.00%	-72.0%	-71.5%	Health Care
Babcock & Wilcox Enterprises Inc	0.01%	-71.7%	-79.8%	Industrials
Ominto Inc	0.00%	-70.5%	38.0%	Information Technology
Axovant Sciences Ltd	0.01%	-70.3%	-50.9%	Health Care
RAIT Financial Trust	0.00%	-64.9%	-75.1%	Real Estate
Radisys Corp	0.00%	-63.6%	-74.4%	Information Technology
CPI Card Group Inc	0.00%	-58.6%	-79.7%	Information Technology
Tintrix Inc	0.00%	-56.8%	N/A	Information Technology



- International equity returns for the 3<sup>rd</sup> quarter were largely driven by ongoing improvement in the global economy and continued weakness in the USD. These trends, in tandem with rising commodity prices, helped emerging markets continue their 2017 outperformance relative to developed market equities. While USD strength remains on the high side of its 10-year range, the USD continued its year-to-date decline against most major currencies through the period. This provided additional tailwinds to international index returns denominated in USD. The recent weakness in USD is also visible in the 1-year performance for broad international indices, with most indices showing stronger returns in terms of USD. However, Asian-Pacific markets stand out as an exception.
- Returns for broad developed market international indices were broadly positive for the 3<sup>rd</sup> quarter in both USD and local currency terms with the MSCI EAFE Index returning 5.4% and 3.4% respectively. Eurozone, U.K. and Japanese markets advanced on the back of positive macroeconomic data and improvement in corporate earnings. As economic data has continued to stabilize, many developed market central banks have started to take a less accommodative stance toward monetary policy and economic stimulus. In Europe, European Central Bank (ECB) President Mario Draghi acknowledged that the ECB has been discussing plans to begin the wind down of their quantitative easing program. Investors are expecting a formal announcement in October. In the U.K., the Bank of England telegraphed that an interest rate hike was likely before the end of the year, and in Canada, the Bank of Canada raised interest rates twice this quarter. Despite increased tensions with North Korea and the early dissolution of the lower house of parliament by Prime Minister Abe leading to snap elections in October, Japanese equities rose over the quarter. Performance for the past year has been strong on an absolute basis with the MSCI EAFE Index returning 19.1% and 19.0% in USD and local currency terms respectively.
- A supportive global economic environment, increasing commodity prices and a weakening USD led to continued growth in emerging market equity prices. The MSCI Emerging Market Index outperformed developed markets during the 3<sup>rd</sup> quarter, returning 7.9% and 7.6% in USD and local currency terms respectively. Returns in China, Brazil and Russia were particularly strong as China advanced on an improving growth outlook, Brazil on improving political stability and progress on social and economic reform initiatives, and Russia largely on improvement in oil prices. One year returns on the MSCI Emerging Market Index are an impressive 22.5% in USD terms and 21.8% in terms of local currency.



**The Market Environment**  
**U.S. Dollar International Index Attribution & Country Detail**  
As of September 30, 2017

MSCI - EAFE	Sector Weight	Quarter Return	1-Year Return
Consumer Discretionary	12.2%	7.4%	20.3%
Consumer Staples	11.2%	0.8%	6.2%
Energy	5.1%	13.4%	22.1%
Financials	21.5%	5.2%	32.5%
Health Care	10.6%	0.7%	7.8%
Industrials	14.4%	6.3%	21.8%
Information Technology	6.3%	8.6%	28.5%
Materials	7.9%	11.0%	27.6%
Real Estate	3.5%	3.2%	5.9%
Telecommunication Services	4.1%	1.7%	4.4%
Utilities	3.4%	4.3%	11.6%
<b>Total</b>	<b>100.0%</b>	<b>5.4%</b>	<b>19.1%</b>

MSCI - ACWxUS	Sector Weight	Quarter Return	1-Year Return
Consumer Discretionary	11.3%	7.0%	19.7%
Consumer Staples	9.6%	1.1%	5.7%
Energy	6.6%	12.7%	17.5%
Financials	23.3%	6.1%	28.8%
Health Care	7.9%	0.8%	7.2%
Industrials	11.8%	5.6%	20.7%
Information Technology	11.2%	10.0%	35.1%
Materials	7.9%	10.7%	25.0%
Real Estate	3.2%	6.1%	10.3%
Telecommunication Services	4.2%	2.4%	5.4%
Utilities	3.1%	4.6%	10.5%
<b>Total</b>	<b>100.0%</b>	<b>6.2%</b>	<b>19.6%</b>

MSCI - Emerging Mkt	Sector Weight	Quarter Return	1-Year Return
Consumer Discretionary	10.3%	5.0%	16.3%
Consumer Staples	6.5%	2.5%	3.8%
Energy	6.8%	12.9%	21.2%
Financials	23.4%	7.2%	21.7%
Health Care	2.3%	3.3%	2.9%
Industrials	5.4%	1.7%	12.6%
Information Technology	27.6%	11.0%	40.5%
Materials	7.2%	10.1%	28.0%
Real Estate	2.9%	17.9%	29.9%
Telecommunication Services	5.1%	3.3%	6.3%
Utilities	2.6%	6.4%	7.2%
<b>Total</b>	<b>100.0%</b>	<b>7.9%</b>	<b>22.5%</b>

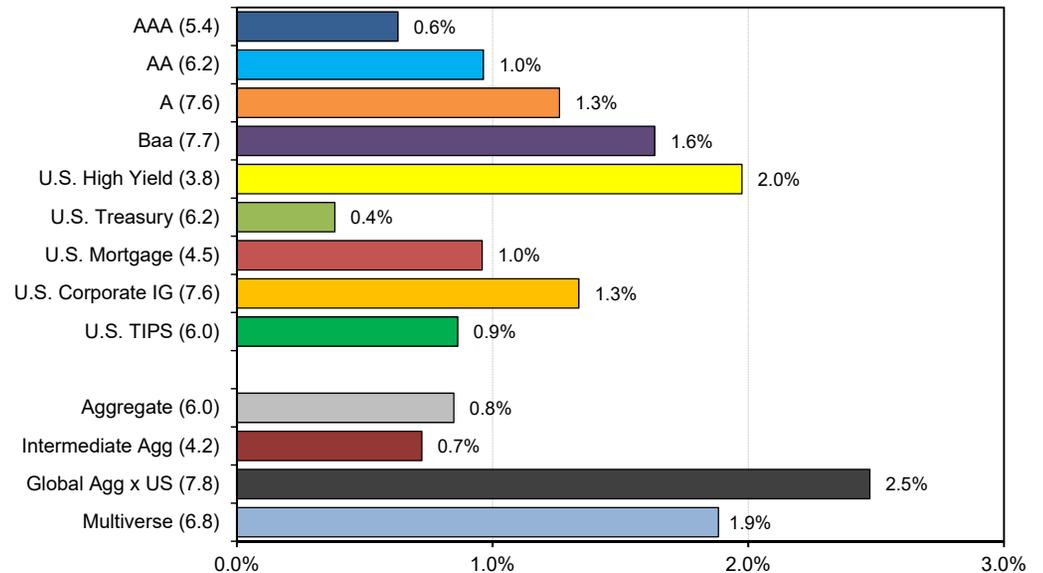
Country	MSCI-EAFE Weight	MSCI-ACWxUS Weight	Quarter Return	1-Year Return
Japan	23.0%	15.9%	4.0%	14.1%
United Kingdom	17.8%	12.3%	5.2%	14.6%
France	10.8%	7.5%	8.4%	30.6%
Germany	9.8%	6.8%	7.7%	26.1%
Switzerland	8.2%	5.7%	2.0%	15.7%
Australia	6.8%	4.7%	3.1%	13.1%
Netherlands	3.7%	2.6%	9.3%	28.4%
Spain	3.5%	2.4%	4.3%	32.0%
Hong Kong	3.5%	2.4%	5.1%	16.3%
Sweden	2.9%	2.0%	5.5%	24.3%
Italy	2.5%	1.7%	13.7%	45.6%
Denmark	1.9%	1.3%	7.7%	20.3%
Singapore	1.3%	0.9%	3.1%	18.7%
Belgium	1.2%	0.8%	9.2%	6.2%
Finland	1.0%	0.7%	3.3%	20.2%
Norway	0.7%	0.5%	19.2%	28.9%
Israel	0.5%	0.3%	-12.7%	-13.0%
Ireland	0.5%	0.3%	6.1%	14.4%
Austria	0.3%	0.2%	12.7%	59.3%
Portugal	0.2%	0.1%	13.2%	22.6%
New Zealand	0.2%	0.1%	-0.1%	-2.0%
<b>Total EAFE Countries</b>	<b>100.0%</b>	<b>69.2%</b>	<b>5.4%</b>	<b>19.1%</b>
Canada		6.7%	7.9%	15.0%
<b>Total Developed Countries</b>		<b>75.9%</b>	<b>5.6%</b>	<b>18.7%</b>
China		7.1%	14.7%	33.0%
Korea		3.6%	2.7%	24.8%
Taiwan		2.8%	0.8%	19.9%
India		2.0%	3.0%	14.2%
Brazil		1.8%	23.0%	29.2%
South Africa		1.5%	3.8%	7.6%
Mexico		0.8%	1.5%	16.2%
Russia		0.8%	17.6%	19.6%
Indonesia		0.6%	-1.1%	5.9%
Malaysia		0.6%	1.8%	6.2%
Thailand		0.5%	10.5%	20.7%
Poland		0.3%	9.3%	51.2%
Chile		0.3%	16.9%	35.6%
Philippines		0.3%	3.0%	2.1%
Turkey		0.3%	0.3%	14.5%
United Arab Emirates		0.2%	4.1%	6.4%
Qatar		0.1%	-6.9%	-14.9%
Colombia		0.1%	6.5%	12.7%
Peru		0.1%	14.1%	32.3%
Greece		0.1%	-12.2%	30.9%
Hungary		0.1%	9.6%	42.8%
Czech Republic		0.0%	10.0%	21.5%
Egypt		0.0%	2.2%	-17.7%
Pakistan		0.0%	-16.5%	-7.1%
<b>Total Emerging Countries</b>		<b>24.1%</b>	<b>7.9%</b>	<b>22.5%</b>
<b>Total ACWxUS Countries</b>		<b>100.0%</b>	<b>6.2%</b>	<b>19.6%</b>

Source: MSCI Global Index Monitor (Returns are Net in USD)

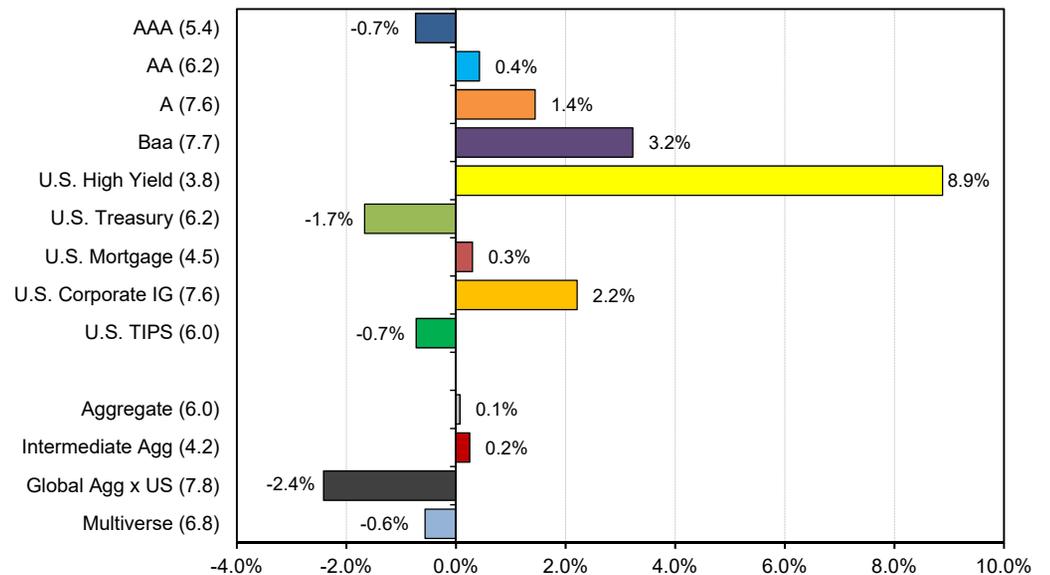


- Broad fixed income benchmarks gained ground during the 3<sup>rd</sup> quarter. The Bloomberg Barclays U.S. Aggregate Index ended the quarter with a 0.8% gain despite modestly rising interest rates. Interest rates fell during the first half of the quarter when investors looked to safe-haven assets as international relations between the U.S. and North Korea began to deteriorate and extreme weather created anxiety in markets. However, rates reversed course in the beginning of September, ending slightly higher than where they began the period. The Federal Open Market Committee (FOMC) voted not to increase short-term interest rates during the third quarter, but market expectations are for one additional increase prior to year end. While inflation remains subdued, the Fed feels the economy is tracking to be healthy enough to warrant continued tightening. This caused a flattening of the yield curve as short-term market yields rose more aggressively than rates on long-term maturities. The Fed also announced that its plan to gradually reduce its balance sheet by slowing the rate of reinvestment of the Treasury and mortgage backed securities (MBS) it holds on its books as the securities mature would begin in October. The amount reinvested each month will fall systematically, reducing the size of the Fed's balance sheet over time. This can be viewed as further tightening of monetary policy. This put additional upward pressure on interest rates as the quarter came to a close. The Bloomberg Barclays U.S. Aggregate Index stayed slightly positive over the 1-year period returning 0.1%, with the various investment grade sectors posting mixed results.
- Lower quality bonds outperformed higher quality issues for both the quarter and 1-year period as contracting credit spreads from improvements in economic fundamentals acted as a tailwind to these issues. During the 3<sup>rd</sup> quarter, credit spreads for high yield debt decreased by 17 bps versus only 8 bps for investment grade (IG) corporate issues. BAA issues more than doubled the return of AAA securities for the second straight quarter, returning 1.6% versus a 0.6% return for AAA debt. High yield debt continues to be the largest beneficiary of the strengthening economy, returning 2.0% for the quarter and 8.9% for the 1-year period.
- A review of sector performance shows that IG credit has continued its 2017 trend of outperformance versus Treasuries and MBS securities. As previously mentioned, corporate issues benefited from tightening credit spreads throughout the period. Treasuries were the worst performer due to their higher duration and expectations for additional tightening of monetary policy. MBS also benefitted from some spread compression through the quarter, but enthusiasm for these securities was dimmed by the Fed's planned balance sheet reduction strategy. Treasury securities posted the worst returns for the quarter, appreciating 0.4%. U.S. IG corporate bonds were the best performing IG sector over the 1-year period, returning 2.2%.

**Quarter Performance**

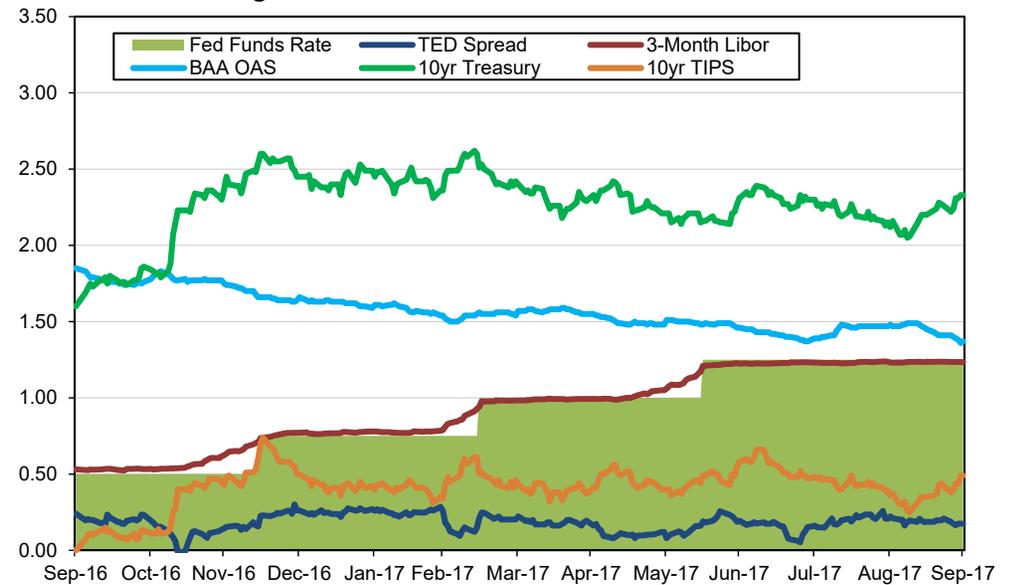


**1-Year Performance**

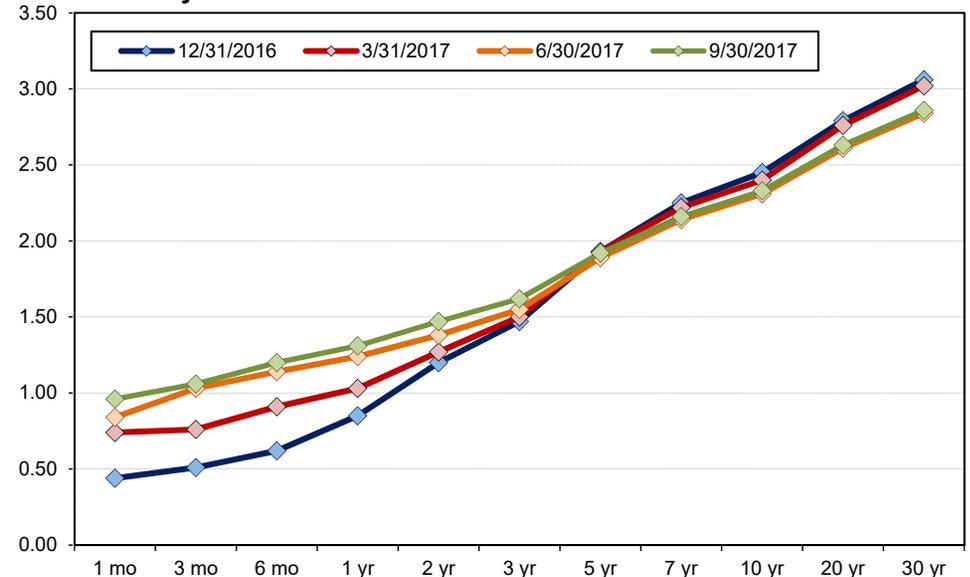


- Global fixed income indices also posted strong results for the quarter. Global benchmarks are impacted by the same local yield and duration factors as domestic benchmarks. While these indices have relatively high durations, the returns of these indices are also significantly influenced by fluctuations in their currency denomination relative to the USD. This currency effect can either be an offsetting benefit to negative yield and duration factors in a rising rate environment as it has been year-to-date, or it can further exacerbate negative performance as it did in 2016. Led by a weakening USD, global bond indices outperformed domestic issues for the for the quarter. However, hawkish comments from several global central banks muted returns during the final month of the period. Global bonds have had a currency effect tailwind so far in 2017, but global bond returns still trail domestic indices over the 1-year period, primarily due to their relative underperformance in the 4<sup>th</sup> quarter of 2016. The Bloomberg Barclays Aggregate ex U.S. posted a -2.4% return for the period.
- Much of the index performance detailed in the bar graphs on the previous page is visible on a time series basis by reviewing the line graphs to the right. The '1-Year Trailing Market Rates' chart illustrates that the 10-year Treasury yield (green line) rose dramatically in the 4<sup>th</sup> quarter of 2016, held largely steady during the 1<sup>st</sup> quarter of 2017 and then gradually fell through most of 2<sup>nd</sup> quarter before spiking at the end of June. As described on the last page, rates then fell through the first half of quarter before rising to the levels where they began the quarter. The yield on the 10-year Treasury has fallen to 2.33% from 2.45% at the start of the year. The blue line illustrates changes in the BAA OAS (Option Adjusted Spread). This measure quantifies the additional yield premium that investors require to purchase and hold non-Treasury issues. This line illustrates a steady decline in credit spreads throughout 2016 and 2017. This decline is equivalent to an interest rate decrease on corporate bonds, which produces a tailwind for corporate bond index returns. These credit spreads have tightened by about 48 bps over the last 12-months. The green shading at the bottom of the graph illustrates the gradual increase in the Federal Funds Rate due to a less accommodative Fed monetary policy.
- The lower graph provides a snapshot of the U.S. Treasury yield curve at each of the last four calendar quarters. As mentioned, the yield curve continues to flatten as yields on shorter-term maturities have risen, while interest rates on the long end of the curve (5-years and beyond) have generally declined. Interest rate movement during the quarter was relatively muted, especially at the long end of the curve. However, the significant upward shift in short-term interest rates and decline of long-term interest rates since the end of 2016 is clearly visible.

1-Year Trailing Market Rates



Treasury Yield Curve



**Evaluation Process**

This section presents charts and graphs that highlight the investment character of each portfolio analyzed. The performance, portfolio characteristics, risk profile, and style traits of each portfolio are compared against those of its benchmark(s) and other funds with similar objectives. Eight criteria-specific rankings are developed, and then combined, to establish each portfolio's overall status.

The table below describes the evaluation standards used. Significant changes in portfolio characteristics compared to historical positioning, large performance deficits, and risk or style shortcomings are fundamental factors in concluding if remedial action is advisable. However, a violation of one of more of the standards does not automatically require remedial action.

Investment Policy Criteria	Weighting	Summary of Evaluation
<b>Manager Performance</b>		
Investment Returns vs. Peer Group	20%	A fund is evaluated relative to where its 1, 3 and 5-year returns fall within its peer group. The results for each period are combined to determine total ranking (satisfactory, modest breach, significant concern). A similar process is used to evaluate the fund's performance relative to its benchmark(s).
Historical Performance vs. Benchmark	20%	
<b>Portfolio Characteristics</b>		
Adherence to Standards	10%	These criteria compare portfolio characteristics such as market capitalization, number of holdings, cash, and concentration of holdings against objective standards and benchmarks. For example, a fund with a high allocation to cash or with a high/low average market capitalization relative to its benchmark will receive a lower grade. Additionally, funds having less than three years of performance history or having manager tenure of less than three years will receive a lower grade.
Inception & Manager Tenure	10%	
<b>Risk Profile</b>		
Sharpe Ratio & Standard Deviation Relative to Peer Group	10%	A fund is evaluated relative to where its 3- and 5-year Sharpe ratio and standard deviation fall within its peer group. The results for each period are combined to determine total ranking. A similar process is used to evaluate the fund's Sharpe ratio and standard deviation relative to its benchmark(s).
Sharpe Ratio & Standard Deviation Relative to Benchmark	10%	
<b>Style Traits</b>		
Adherence to Investment Objectives	10%	A fund's style is evaluated based upon how closely it adheres to its stated investment objective and how stable its style has been historically. Criteria used to evaluate a fund's style traits include returns-based style analysis, statistics such as r-squared, and portfolio characteristics such as price/earnings ratio. Funds with style traits that are inconsistent with their stated objective or historically unstable receive lower grades.
Historical Style Stability	10%	
<b>Status</b>		
Overall Status		The results for all criteria are combined to determine an overall ranking for the fund. Rankings include Satisfactory, Modest Breach ("Guarded" status) and Significant Concern ("Watch List" status).

Note: Grades are based on AndCo's Proprietary scale



**Portfolio Evaluation Summary**

This report provides opinions, analysis, and supporting statistical information concerning:

- the performance, volatility, and characteristics of each designated Plan fund
- the continuing suitability of each fund as a Plan investment option

**Portfolio Performance and Suitability of Plan Funds**

Our overall evaluation of the Plan's investment funds may be summarized as follows:

Summary Evaluation	Number of Funds
Pass (Satisfactory)	16
Guarded	2
Watch	0

See the Plan Funds Observations and Comments, below, for further explanation.

**Plan Fund Observations and Comments**

The majority of Plan funds have substantially achieved their category-specific standards for performance, controlled volatility, and portfolio characteristics. The charts in the following pages reveal some modest breaches compared to established

evaluation standards; however, we do not find divergences from the funds' stated objectives or styles that are worrisome except as discussed below.

**Fund Commentary**

**Lazard Emerging Markets Fund** has been placed on **GUARDED** status due to near term underperformance relative to its benchmark and peers. The fund has underperformed the benchmark index over the three and five years periods, while outperforming during the latest ten years. Relative peer group rankings have disappointed in the near term, and have deteriorated over the longer term periods. The fund significantly underperformed during the second quarter at both the benchmark and peer group level, but the latest quarter performance did show improvement. The fund was last placed on Watch and then Guarded status back in 2015 after suffering from relative peer and benchmark underperformance. The fund did have strong return in 2016, and the manager and strategy remain in tact.

**Hotchkis & Wiley Mid Cap Value** remains on **GUARDED** status due to continued lagging returns relative to its benchmark and peers. The fund has underperformed the benchmark index over the three and five years periods, while outperforming during the latest twelve months. Relative peer group rankings are mixed in the near term, but remain strong over the longer term periods. The fund outperformed during the quarter at both the benchmark and peer group level. The fund has been fluctuating between guarded and watch status for the last six quarters. We will continue to monitor the fund at this time.



**Portfolio Evaluation Summary**

- 1 Trailing 1, 3 and 5-year portfolio returns versus peer group
- 2 Historic performance relative to benchmark
- 3 Portfolio characteristics compared to established standards
- 4 At least 3 years of investment performance/At least 3 years with current fund manager
- 5 Sharpe ratio and standard deviation of fund relative to peer group
- 6 Sharpe ratio and standard deviation of fund relative to benchmark
- 7 Style consistent with fund objective
- 8 Style historically stable
- 9 Summary Evaluation

Pass (Satisfactory)
Guarded
Watch

Investment Funds	1	2	3	4	5	6	7	8	9
Lazard Emerging Markets Equity (LZOEX)	Guarded	Guarded	Pass	Pass	Guarded	Guarded	Pass	Pass	Guarded
DFA International Small Cap Value (DISVX)	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
American Funds EuroPacific Growth (REMGX)	Pass	Pass	Pass	Pass	Pass	Pass	Guarded	Pass	Pass
Wells Fargo Small Co Growth R6 (WSCRX)	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Vanguard Small Cap Index Adm (VSMAX)	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
AMG Managers Skyline Special Equities (SKSEX)	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Hartford Mid Cap (HIMCX)	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Vanguard Mid Cap Index Adm (VIMAX)	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Hotchkis & Wiley Mid Cap Value (HWMIX)	Guarded	Guarded	Pass	Pass	Guarded	Guarded	Pass	Pass	Guarded
American Funds Growth Fund of America (RGAGX)	Pass	Guarded	Pass	Pass	Guarded	Pass	Pass	Pass	Pass
Wells Fargo Disciplined US Core (EVSIX)	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Vanguard Institutional Index (VINIX)	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
American Century Equity Income (AEUDX)	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
American Funds American Balanced (RLBGX)	Pass	Pass	Pass	Pass	Pass	Guarded	Pass	Pass	Pass
PIMCO High Yield (PHIYX)	Pass	Pass	Pass	Pass	Pass	Guarded	Pass	Pass	Pass
PIMCO Foreign Bond USD-Hedged (PFORX)	Pass	Pass	Pass	Pass	Pass	Guarded	Pass	Pass	Pass
Hartford Total Return Bond (HIABX)	Pass	Pass	Pass	Pass	Pass	Guarded	Pass	Pass	Pass
MassMutual Guaranteed Interest Account	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass



**Historical Summary Evaluation**

Pass (Satisfactory)
Guarded
Watch

Investment Funds	2Q17	1Q17	4Q16	3Q16	2Q16	1Q16	4Q15	3Q15	2Q15
Lazard Emerging Markets Equity (LZOEX)	Guarded	Pass	Pass	Pass	Pass	Pass	Watch	Watch	Guarded
DFA International Small Cap Value (DISVX)	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
American Funds EuroPacific Growth (RERGX)	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Wells Fargo Small Co Growth R6 (WSCRX)									
Vanguard Small Cap Index Adm (VSMAX)	Pass	Pass	Pass	Pass	Pass	Pass	Pass		
AMG Managers Skyline Special Equities (SKSEX)	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Hartford Mid Cap (HIMCX)	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Vanguard Mid Cap Index Adm (VIMAX)	Pass	Pass	Pass	Pass	Pass	Pass	Pass		
Hotchkis & Wiley Mid Cap Value (HWMIX)	Guarded	Guarded	Guarded	Watch	Watch	Watch	Guarded	Pass	Pass
American Funds Growth Fund of America (RGAGX)	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Wells Fargo Disciplined US Core (EVSIX)	Pass	Pass	Pass						
Vanguard Institutional Index (VINIX)	Pass	Pass	Pass	Pass	Pass	Pass	Pass		
American Century Equity Income (AEUDX)	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Guarded
American Funds American Balanced (RLBGX)	Pass	Pass	Pass	Pass	Pass	Pass	Pass		
PIMCO High Yield (PHIYX)	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
PIMCO Foreign Bond USD-Hedged (PFORX)	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Hartford Total Return Bond (HIABX)	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
MassMutual Guaranteed Interest Account	Pass	Pass	Pass	Pass	Pass	Pass	Pass		



Asset Allocation Attributes	Sep-2017		Jun-2017		Mar-2017	
	(\$)	%	(\$)	%	(\$)	%
<b>Total 457 Fund</b>	<b>157,212,835</b>	<b>100.00</b>	<b>152,298,111</b>	<b>100.00</b>	<b>149,717,242</b>	<b>100.00</b>
<b>International Equity</b>						
Lazard Emerging Markets Equity (LZOEX)	1,406,099	0.89	1,313,040	0.86	1,261,686	0.84
DFA International Small Cap Value (DISVX)	1,637,677	1.04	1,541,638	1.01	1,462,847	0.98
American Funds EuroPacific Growth (RERGX)	4,838,153	3.08	4,555,752	2.99	4,357,033	2.91
<b>Domestic Equity</b>						
Wells Fargo Small Co Growth (WSCRX)	2,389,612	1.52	2,278,493	1.50	2,135,867	1.43
Vanguard Small Cap Index (VSMAX)	2,609,379	1.66	2,480,986	1.63	2,265,051	1.51
AMG Managers Skyline Special Equities (SKSEX)	3,035,210	1.93	3,077,748	2.02	3,226,715	2.16
Hartford Mid Cap (HIMCX)	8,133,099	5.17	7,855,268	5.16	7,343,763	4.91
Vanguard Mid Cap Index (VIMAX)	2,318,482	1.47	2,110,294	1.39	1,923,922	1.29
Hotchkis & Wiley Mid Cap Value (HWMIX)	3,376,473	2.15	3,572,742	2.35	3,896,459	2.60
AF Growth Fund of America (RGAGX)	12,501,592	7.95	12,119,491	7.96	11,838,458	7.91
Wells Fargo Disciplined US Core (EVSIX)	12,599,739	8.01	12,245,347	8.04	11,981,256	8.00
Vanguard Institutional Index (VINIX)	10,755,229	6.84	9,873,167	6.48	9,064,965	6.05
American Century Equity Income (AEUDX)	7,709,826	4.90	7,445,564	4.89	7,639,060	5.10
<b>Balanced Fund</b>						
American Funds American Balanced (RLBGX)	5,243,713	3.34	5,073,638	3.33	4,880,419	3.26
<b>Fixed Income</b>						
PIMCO High Yield (PHIYX)	2,322,803	1.48	2,242,401	1.47	2,169,303	1.45
PIMCO Foreign Bond USD-Hedged (PFORX)	836,515	0.53	833,069	0.55	945,759	0.63
Hartford Total Return Bond (HIABX)	3,695,720	2.35	3,607,391	2.37	3,706,341	2.48
<b>Cash</b>						
MassMutual Guaranteed Interest Account	69,535,947	44.23	67,804,514	44.52	67,326,796	44.97
Loan Account	2,267,568	1.44	2,267,568	1.49	2,291,541	1.53



**Asset Allocation**  
**457 Retirement Models**  
As of September 30, 2017

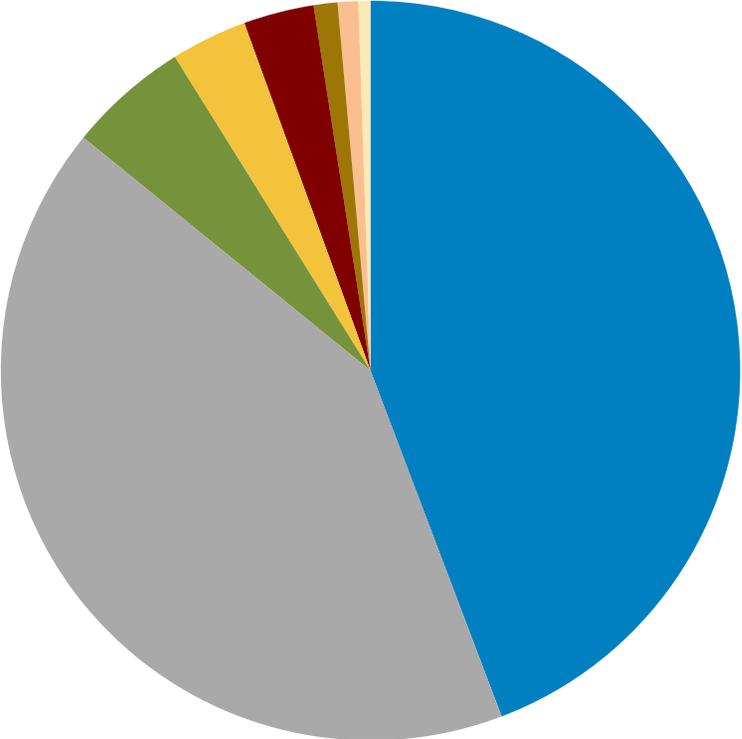
Asset Allocation Attributes	Sep-2017		Jun-2017		Mar-2017	
	(\$)	%	(\$)	%	(\$)	%
WCAB 2060 Retirement	-	0.00	-	0.00	-	0.00
WCAB 2055 Retirement	453	0.01	453	0.01	-	0.00
WCAB 2050 Retirement	751,112	9.93	751,112	9.93	760,443	10.68
WCAB 2045 Retirement	400	0.01	400	0.01	-	0.00
WCAB 2040 Retirement	2,004,742	26.51	2,004,742	26.51	1,497,721	21.04
WCAB 2035 Retirement	183,443	2.43	183,443	2.43	175,005	2.46
WCAB 2030 Retirement	2,226,289	29.44	2,226,289	29.44	2,298,758	32.29
WCAB 2025 Retirement	615,143	8.13	615,143	8.13	592,803	8.33
WCAB 2020 Retirement	1,503,464	19.88	1,503,464	19.88	1,514,707	21.28
WCAB 2015 Retirement	-	0.00	-	0.00	-	0.00
WCAB 2010 Retirement	277,600	3.67	277,600	3.67	279,612	3.93
<b>Model Portfolios Total</b>	<b>7,562,646</b>	<b>100.00</b>	<b>7,562,646</b>	<b>100.00</b>	<b>7,119,048</b>	<b>100.00</b>



September 30, 2017 : \$157,212,835

Allocation

	Market Value	Allocation
Cash	69,535,947	44.2
US Equity	65,428,640	41.6
US Fixed Income	8,286,091	5.3
US Balanced	5,243,713	3.3
International Equity	4,838,153	3.1
International-Developed Equity	1,637,677	1.0
International-Emerging Equity	1,406,099	0.9
International Fixed Income	836,515	0.5

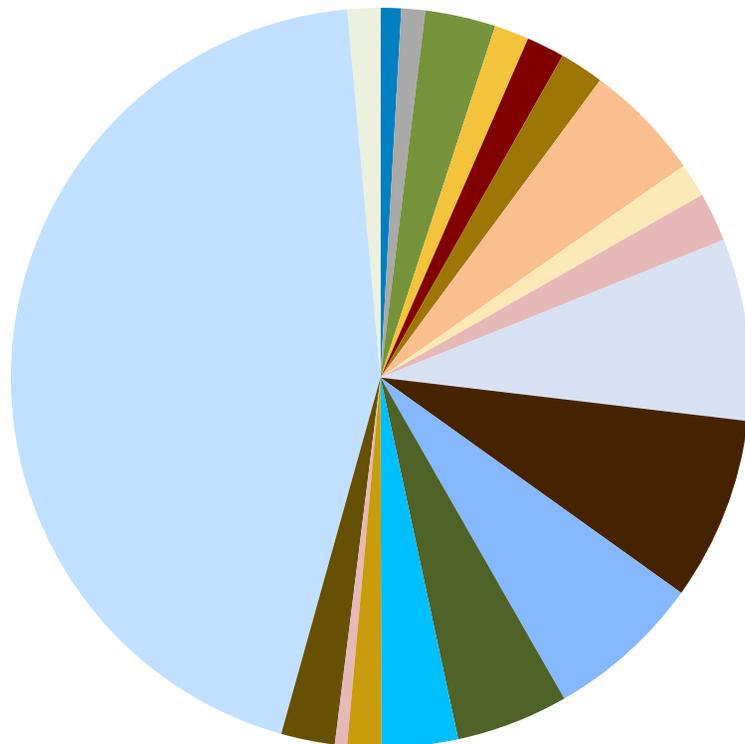


**Asset Allocation By Manager**

**457 Total Plan**

As of September 30, 2017

September 30, 2017 : \$157,212,835



**Allocation**

	Market Value	Allocation
Lazard Emerging Markets Equity (LZOEX)	1,406,099	0.9
DFA International Small Cap Value (DISVX)	1,637,677	1.0
American Funds EuroPacific Growth (RERGX)	4,838,153	3.1
Wells Fargo Small Co Growth (WSCRX)	2,389,612	1.5
Vanguard Small Cap Index (VSMAX)	2,609,379	1.7
AMG Managers Skyline Special Equities (SKSEX)	3,035,210	1.9
Hartford Mid Cap (HIMCX)	8,133,099	5.2
Vanguard Mid Cap Index (VIMAX)	2,318,482	1.5
Hotchkis & Wiley Mid Cap Value (HWMIX)	3,376,473	2.1
AF Growth Fund of America (RGAGX)	12,501,592	8.0
Wells Fargo Disciplined US Core (EVSIX)	12,599,739	8.0
Vanguard Institutional Index (VINIX)	10,755,229	6.8
American Century Equity Income (AEUDX)	7,709,826	4.9
American Funds American Balanced (RLBGX)	5,243,713	3.3
PIMCO High Yield (PHIYX)	2,322,803	1.5
PIMCO Foreign Bond USD-Hedged (PFORX)	836,515	0.5
Hartford Total Return Bond (HIABX)	3,695,720	2.4
MassMutual Guaranteed Interest Account	69,535,947	44.2
Loan Account	2,267,568	1.4



Asset Allocation Attributes	Sep-2017		Jun-2017		Mar-2017	
	(\$)	%	(\$)	%	(\$)	%
<b>Total 401(a) Fund</b>	<b>11,040,375</b>	<b>100.00</b>	<b>10,578,402</b>	<b>100.00</b>	<b>10,230,688</b>	<b>100.00</b>
<b>International Equity</b>						
Lazard Emerging Markets Equity (LZOEX)	161,575	1.46	142,890	1.35	132,498	1.30
DFA International Small Cap Value (DISVX)	182,981	1.66	163,280	1.54	149,272	1.46
American Funds EuroPacific Growth (RERGX)	429,328	3.89	391,480	3.70	354,563	3.47
<b>Domestic Equity</b>						
Wells Fargo Small Co Growth (WSCRX)	303,337	2.75	279,474	2.64	237,747	2.32
Vanguard Small Cap Index (VSMAX)	215,967	1.96	191,752	1.81	174,346	1.70
AMG Managers Skyline Special Equities (SKSEX)	346,943	3.14	319,917	3.02	307,174	3.00
Hartford Mid Cap (HIMCX)	689,215	6.24	651,719	6.16	600,429	5.87
Vanguard Mid Cap Index (VIMAX)	226,649	2.05	199,751	1.89	178,644	1.75
Hotchkis & Wiley Mid Cap Value (HWMIX)	328,387	2.97	325,507	3.08	318,121	3.11
American Funds Growth Fund of America (RGAGX)	680,592	6.16	665,465	6.29	621,280	6.07
Wells Fargo Disciplined US Core (EVSIX)	864,681	7.83	813,156	7.69	779,667	7.62
Vanguard Institutional Index (VINIX)	951,925	8.62	829,754	7.84	752,287	7.35
American Century Equity Income (AEUDX)	798,930	7.24	757,368	7.16	733,965	7.17
<b>Balanced Fund</b>						
American Funds American Balanced (RLBGX)	450,274	4.08	425,310	4.02	401,704	3.93
<b>Fixed Income</b>						
PIMCO High Yield (PHIYX)	186,909	1.69	171,705	1.62	152,606	1.49
PIMCO Foreign Bond USD-Hedged (PFORX)	118,242	1.07	105,586	1.00	91,592	0.90
Hartford Total Return Bond (HIABX)	451,283	4.09	462,200	4.37	458,296	4.48
<b>Cash</b>						
MassMutual Guaranteed Interest Account	3,436,987	31.13	3,465,917	32.76	3,562,287	34.82
Loan Account	216,171	1.96	216,171	2.04	224,212	2.19



**Asset Allocation**  
**401(a) Retirement Models**  
As of September 30, 2017

Asset Allocation Attributes	Sep-2017		Jun-2017		Mar-2017	
	(\$)	%	(\$)	%	(\$)	%
WCAB 2060 Retirement	-	0.00	-	0.00	-	0.00
WCAB 2055 Retirement	-	0.00	-	0.00	-	0.00
WCAB 2050 Retirement	39,025	3.56	39,025	3.56	35,774	3.03
WCAB 2045 Retirement	-	0.00	-	0.00	-	0.00
WCAB 2040 Retirement	115,659	10.56	115,659	10.56	109,663	9.27
WCAB 2035 Retirement	50,656	4.63	50,656	4.63	25,281	2.14
WCAB 2030 Retirement	165,627	15.12	165,627	15.12	309,663	26.19
WCAB 2025 Retirement	398,983	36.44	398,983	36.44	384,411	32.51
WCAB 2020 Retirement	5,811	0.53	5,811	0.53	5,035	0.43
WCAB 2015 Retirement	38,657	3.53	38,657	3.53	37,834	3.20
WCAB 2010 Retirement	280,634	25.63	280,634	25.63	274,913	23.25
<b>Total Model Portfolios</b>	<b>1,095,052</b>	<b>100.00</b>	<b>1,095,052</b>	<b>100.00</b>	<b>1,182,574</b>	<b>100.00</b>

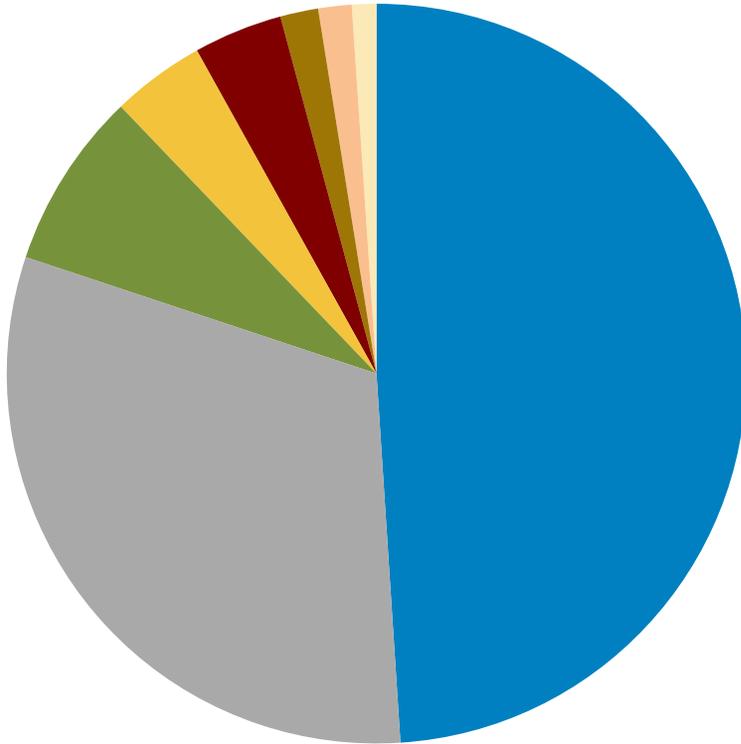


**Asset Allocation By Asset Class**  
**401(a) Total Plan**  
**As of September 30, 2017**

September 30, 2017 : \$11,040,375

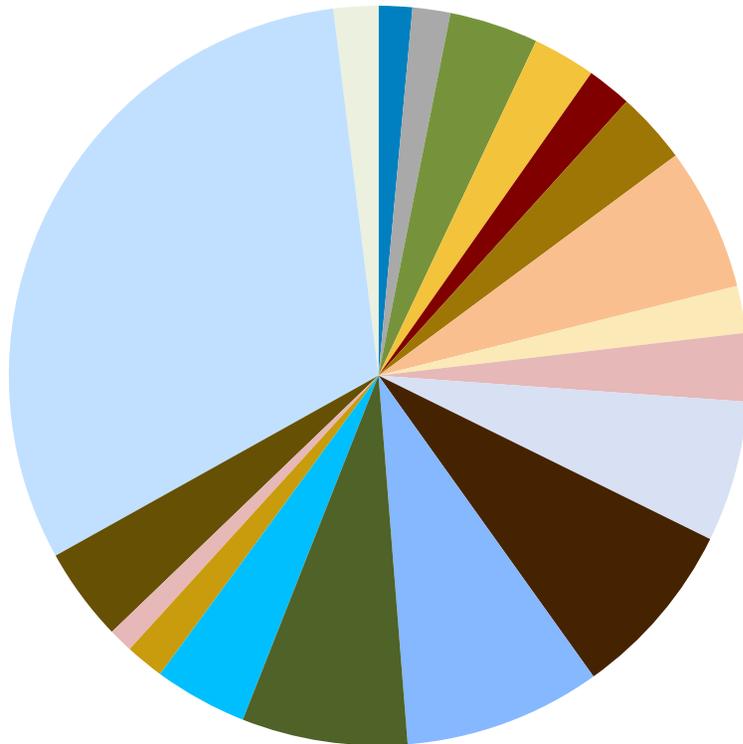
**Allocation**

	<b>Market Value</b>	<b>Allocation</b>
■ US Equity	5,406,625	49.0
■ Cash	3,436,987	31.1
■ US Fixed Income	854,363	7.7
■ US Balanced	450,274	4.1
■ International Equity	429,328	3.9
■ International-Developed Equity	182,981	1.7
■ International-Emerging Equity	161,575	1.5
■ International Fixed Income	118,242	1.1



**Asset Allocation By Manager**  
**401(a) Total Plan**  
As of September 30, 2017

September 30, 2017 : \$11,040,375



**Allocation**

	Market Value	Allocation
Lazard Emerging Markets Equity (LZOEX)	161,575	1.5
DFA International Small Cap Value (DISVX)	182,981	1.7
American Funds EuroPacific Growth (RERGX)	429,328	3.9
Wells Fargo Small Co Growth (WSCRX)	303,337	2.7
Vanguard Small Cap Index (VSMAX)	215,967	2.0
AMG Managers Skyline Special Equities (SKSEX)	346,943	3.1
Hartford Mid Cap (HIMCX)	689,215	6.2
Vanguard Mid Cap Index (VIMAX)	226,649	2.1
Hotchkis & Wiley Mid Cap Value (HWMIX)	328,387	3.0
American Funds Growth Fund of America (RGAGX)	680,592	6.2
Wells Fargo Disciplined US Core (EVSIX)	864,681	7.8
Vanguard Institutional Index (VINIX)	951,925	8.6
American Century Equity Income (AEUDX)	798,930	7.2
American Funds American Balanced (RLBGX)	450,274	4.1
PIMCO High Yield (PHIYX)	186,909	1.7
PIMCO Foreign Bond USD-Hedged (PFORX)	118,242	1.1
Hartford Total Return Bond (HIABX)	451,283	4.1
MassMutual Guaranteed Interest Account	3,436,987	31.1
Loan Account	216,171	2.0



**Comparative Performance**  
**401(a) Trailing Returns**  
As of September 30, 2017

Comparative Performance	QTR		YTD		1 YR		3 YR		5 YR		7 YR		10 YR	
<b>International Equity</b>														
Lazard Emerging Markets Equity (LZOEX)	6.80	(65)	20.27	(83)	16.84	(74)	2.39	(76)	2.81	(77)	1.96	(66)	1.94	(32)
MSCI Emerging Markets (Net) Index	7.89	(48)	27.78	(49)	22.46	(38)	4.90	(44)	3.99	(54)	2.54	(51)	1.32	(45)
IM Emerging Markets Equity (MF) Median	7.79		27.57		21.05		4.65		4.10		2.57		1.05	
DFA International Small Cap Value (DISVX)	7.60	(48)	23.25	(82)	25.37	(12)	9.96	(32)	13.61	(11)	10.23	(21)	4.56	(32)
MSCI AC World ex USA Small Cap (Net)	6.90	(62)	23.54	(79)	19.19	(70)	8.14	(56)	9.68	(63)	7.25	(79)	3.58	(59)
IM International SMID Cap Equity (MF) Median	7.53		26.36		21.33		8.61		10.96		8.98		3.91	
American Funds EuroPacific Growth (RERGX)	6.86	(13)	25.85	(7)	20.63	(19)	7.56	(1)	9.51	(5)	7.28	(2)	N/A	
MSCI EAFE (Net) Index	5.40	(55)	19.96	(54)	19.10	(46)	5.04	(39)	8.38	(27)	6.38	(22)	1.34	(40)
IM International Large Cap Core Equity (MF) Median	5.61		20.15		18.94		4.55		7.30		5.39		0.94	
<b>Domestic Equity</b>														
Wells Fargo Small Co Growth (WSCRX)	4.97	(70)	14.86	(42)	16.79	(72)	N/A		N/A		N/A		N/A	
Russell 2000 Growth Index	6.22	(42)	16.81	(38)	20.98	(31)	12.17	(40)	14.28	(32)	14.17	(40)	8.47	(24)
IM U.S. Small Cap Growth Equity (MF) Median	5.61		13.96		19.79		11.44		12.49		13.76		7.65	
Vanguard Small Cap Index (VSMAX)	4.57	(67)	10.60	(29)	17.35	(79)	10.44	(62)	13.94	(41)	13.88	(37)	8.58	(23)
Vanguard Spliced Small Cap Index	4.58	(67)	10.59	(29)	17.33	(79)	10.41	(63)	13.91	(41)	13.85	(38)	8.51	(27)
IM U.S. Small Cap Core Equity (MF) Median	5.68		8.60		20.02		11.25		13.67		13.14		7.42	
AMG Managers Skyline Special Equities (SKSEX)	5.78	(33)	7.41	(25)	23.40	(22)	10.18	(47)	15.54	(2)	14.95	(2)	8.90	(3)
Russell 2000 Value Index	5.11	(48)	5.68	(40)	20.55	(32)	12.12	(19)	13.27	(43)	12.80	(38)	7.14	(49)
IM U.S. Small Cap Value Equity (MF) Median	4.98		4.55		18.61		9.98		12.54		12.49		7.08	
Hartford Mid Cap (HIMCX)	3.40	(81)	15.87	(69)	20.64	(26)	11.48	(15)	15.98	(10)	14.31	(14)	8.74	(12)
Russell Midcap Growth Index	5.28	(21)	17.29	(53)	17.82	(55)	9.96	(36)	14.18	(25)	13.84	(23)	8.20	(20)
IM U.S. Mid Cap Growth Equity (MF) Median	4.40		17.44		18.23		9.15		12.37		12.47		6.93	
Vanguard Mid Cap Index (VIMAX)	3.43	(54)	12.88	(17)	15.30	(50)	9.72	(24)	14.39	(16)	13.72	(17)	7.95	(20)
Vanguard Spliced Mid Cap Index	3.43	(54)	12.92	(16)	15.33	(49)	9.77	(23)	14.44	(13)	13.77	(14)	7.99	(18)
IM U.S. Mid Cap Core Equity (MF) Median	3.50		9.66		15.29		8.64		12.92		12.05		6.73	
Hotchkis & Wiley Mid Cap Value (HWMIX)	3.53	(30)	3.06	(95)	15.48	(43)	4.55	(95)	12.95	(53)	13.66	(14)	8.40	(14)
Russell Midcap Value Index	2.14	(66)	7.43	(48)	13.37	(69)	9.19	(27)	14.33	(17)	13.76	(11)	7.85	(30)
IM U.S. Mid Cap Value Equity (MF) Median	2.90		7.21		14.79		8.15		13.06		12.53		7.11	
American Funds Growth Fund of America (RGAGX)	5.09	(61)	18.24	(82)	20.22	(47)	11.82	(34)	15.44	(17)	14.32	(37)	N/A	
Russell 1000 Growth Index	5.90	(35)	20.72	(58)	21.94	(26)	12.69	(19)	15.26	(21)	15.41	(13)	9.08	(17)
IM U.S. Large Cap Growth Equity (MF) Median	5.48		21.71		20.04		11.11		13.93		13.84		7.92	

Returns for periods greater than one year are annualized.  
Returns are expressed as percentages.



**Comparative Performance**  
**401(a) Trailing Returns**  
As of September 30, 2017

	QTR		YTD		1 YR		3 YR		5 YR		7 YR		10 YR	
Wells Fargo Disciplined US Core (EVSIX)	4.93	(27)	13.54	(50)	18.96	(37)	11.11	(11)	15.05	(4)	15.10	(3)	N/A	
S&P 500 Index	4.48	(46)	14.24	(37)	18.61	(43)	10.81	(16)	14.22	(16)	14.38	(13)	7.44	(20)
IM U.S. Large Cap Core Equity (MF) Median	4.40		13.50		18.25		9.40		13.11		13.06		6.60	
Vanguard Institutional Index (VINIX)	4.48	(46)	14.21	(37)	18.57	(44)	10.79	(17)	14.19	(16)	14.35	(13)	7.44	(20)
S&P 500 Index	4.48	(46)	14.24	(37)	18.61	(43)	10.81	(16)	14.22	(16)	14.38	(13)	7.44	(20)
IM U.S. Large Cap Core Equity (MF) Median	4.40		13.50		18.25		9.40		13.11		13.06		6.60	
American Century Equity Income (AEUDX)	3.53	(60)	9.56	(49)	14.21	(86)	11.39	(2)	N/A		N/A		N/A	
Russell 1000 Value Index	3.11	(71)	7.92	(77)	15.12	(75)	8.53	(30)	13.20	(24)	13.24	(22)	5.92	(39)
IM U.S. Large Cap Value Equity (MF) Median	3.72		9.47		16.87		7.87		12.36		12.18		5.47	
<b>Balanced Fund</b>														
American Funds American Balanced (RLBGX)	3.67	(40)	10.76	(48)	12.78	(39)	8.31	(5)	10.72	(6)	11.10	(2)	N/A	
American Balanced Fund Hybrid	2.66	(69)	8.58	(67)	9.04	(64)	6.84	(27)	8.12	(40)	8.71	(32)	6.16	(7)
IM All Balanced (MF) Median	3.30		10.46		11.00		5.61		7.42		7.57		4.48	
WCAB 2060 Retirement	4.56	(61)	13.61	(91)	N/A									
The WCAB 2060 Retirement Portfolio Policy	4.38	(75)	13.89	(86)	N/A									
IM Mixed-Asset Target 2055+ (MF) Median	4.65		15.26		16.85		7.85		10.34		9.98		6.06	
WCAB 2055 Retirement	4.56	(61)	13.61	(91)	N/A									
The WCAB 2055 Retirement Portfolio Policy	4.38	(75)	13.89	(86)	N/A									
IM Mixed-Asset Target 2055+ (MF) Median	4.65		15.26		16.85		7.85		10.34		9.98		6.06	
WCAB 2050 Retirement	4.53	(53)	13.53	(86)	17.02	(31)	8.73	(6)	11.27	(8)	10.68	(13)	6.39	(1)
The WCAB 2050 Retirement Portfolio Policy	4.34	(68)	13.78	(82)	16.17	(57)	8.68	(8)	11.31	(7)	11.13	(3)	6.17	(7)
IM Mixed-Asset Target 2050 (MF) Median	4.58		15.04		16.50		7.57		10.02		9.69		4.64	
WCAB 2045 Retirement	4.49	(54)	13.42	(87)	N/A									
The WCAB 2045 Retirement Portfolio Policy	4.30	(72)	13.64	(83)	N/A									
IM Mixed-Asset Target 2045 (MF) Median	4.52		14.99		16.11		7.59		9.91		9.72		4.92	
WCAB 2040 Retirement	4.38	(47)	13.09	(78)	16.35	(30)	8.50	(7)	10.61	(17)	10.14	(19)	6.48	(1)
The WCAB 2040 Retirement Portfolio Policy	4.13	(68)	13.08	(79)	15.26	(58)	8.21	(13)	10.45	(19)	10.30	(15)	5.94	(9)
IM Mixed-Asset Target 2040 (MF) Median	4.33		14.39		15.49		7.16		9.45		9.25		4.46	
WCAB 2035 Retirement	4.19	(41)	12.58	(73)	N/A									
The WCAB 2035 Retirement Portfolio Policy	3.92	(68)	12.40	(74)	N/A									
IM Mixed-Asset Target 2035 (MF) Median	4.11		13.72		14.46		7.04		9.08		9.12		4.75	
WCAB 2030 Retirement	3.86	(40)	11.55	(66)	14.46	(16)	7.85	(3)	9.68	(12)	9.40	(20)	6.28	(1)
The WCAB 2030 Retirement Portfolio Policy	3.57	(57)	11.21	(68)	12.86	(52)	7.38	(13)	9.42	(19)	9.39	(20)	5.65	(8)
IM Mixed-Asset Target 2030 (MF) Median	3.70		12.43		12.92		6.30		8.34		8.35		4.21	

Returns for periods greater than one year are annualized.  
Returns are expressed as percentages.



**Comparative Performance**  
**401(a) Trailing Returns**  
As of September 30, 2017

	QTR		YTD		1 YR		3 YR		5 YR		7 YR		10 YR	
WCAB 2025 Retirement	3.58	(28)	10.73	(58)	N/A		N/A		N/A		N/A		N/A	
The WCAB 2025 Retirement Portfolio Policy	3.23	(59)	10.10	(68)	N/A		N/A		N/A		N/A		N/A	
IM Mixed-Asset Target 2025 (MF) Median	3.37		11.05		11.24		5.81		7.59		8.01		4.48	
WCAB 2020 Retirement	3.29	(17)	9.94	(36)	11.74	(5)	6.93	(1)	8.28	(5)	8.20	(11)	5.94	(1)
The WCAB 2020 Retirement Portfolio Policy	2.89	(51)	9.00	(60)	9.79	(37)	6.13	(12)	7.71	(13)	7.79	(20)	5.09	(6)
IM Mixed-Asset Target 2020 (MF) Median	2.90		9.48		9.22		5.02		6.19		6.75		3.92	
WCAB 2015 Retirement	2.90	(27)	8.67	(49)	N/A		N/A		N/A		N/A		N/A	
The WCAB 2015 Retirement Portfolio Policy	2.50	(71)	7.67	(82)	N/A		N/A		N/A		N/A		N/A	
IM Mixed-Asset Target 2015 (MF) Median	2.69		8.66		8.56		5.01		6.53		6.97		4.05	
WCAB 2010 Retirement	2.50	(18)	7.65	(32)	8.38	(7)	5.81	(1)	6.88	(1)	7.06	(1)	N/A	
The WCAB Income Retirement Portfolio Policy	2.09	(55)	6.44	(66)	6.26	(43)	4.64	(19)	5.78	(7)	6.02	(16)	4.35	(32)
IM Mixed-Asset Target Today (MF) Median	2.12		6.94		6.04		3.88		4.09		4.78		4.07	
<b>Fixed Income</b>														
PIMCO High Yield (PHIYX)	1.93	(39)	6.85	(25)	8.06	(43)	5.86	(9)	5.90	(22)	6.72	(30)	6.85	(27)
BofA Merrill Lynch High Yield Master II	2.03	(32)	7.05	(19)	9.06	(22)	5.87	(9)	6.38	(11)	7.34	(11)	7.72	(6)
IM U.S. High Yield Bonds (MF) Median	1.82		6.14		7.75		4.44		5.27		6.35		6.28	
PIMCO Foreign Bond USD-Hedged (PFORX)	1.36	(64)	2.50	(84)	1.62	(47)	4.40	(3)	4.71	(1)	5.36	(1)	6.65	(1)
Bloomberg Barclays Global Aggregate	1.76	(55)	6.25	(58)	-1.26	(79)	1.30	(48)	0.48	(66)	1.62	(64)	3.31	(70)
IM International Fixed Income (MF) Median	2.09		8.71		1.28		1.26		1.16		2.04		4.35	
Hartford Total Return Bond (HIABX)	1.13	(7)	4.51	(3)	2.20	(4)	3.31	(5)	2.74	(11)	3.77	(9)	4.23	(45)
Bloomberg Barclays U.S. Aggregate Index	0.85	(42)	3.14	(57)	0.07	(62)	2.71	(30)	2.06	(44)	2.95	(52)	4.27	(42)
IM U.S. Broad Market Core Fixed Income (MF) Median	0.81		3.25		0.47		2.49		1.99		2.99		4.17	
<b>Cash</b>														
MassMutual Guaranteed Interest Account	0.92	(1)	2.80	(1)	3.75	(1)	3.92	(1)	3.95	(1)	N/A		N/A	
Ryan 3 Yr GIC Master Index	0.41	(96)	1.18	(95)	1.54	(92)	1.33	(100)	1.23	(100)	1.50	(100)	2.36	(75)
IM U.S. GIC/Stable Value (SA+CF) Median	0.47		1.38		1.81		1.84		1.79		2.11		2.59	

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Returns are expressed as percentages.



**Comparative Performance**  
**401(a) Calendar Returns**  
As of September 30, 2017

Comparative Performance	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
<b>International Equity</b>										
Lazard Emerging Markets Equity (LZOEX)	20.17 (6)	-20.33 (90)	-4.39 (69)	-1.14 (48)	22.03 (18)	-18.02 (32)	22.43 (22)	69.14 (63)	-48.09 (17)	32.71 (74)
MSCI Emerging Markets (Net) Index	11.19 (30)	-14.92 (58)	-2.19 (43)	-2.60 (58)	18.23 (56)	-18.42 (36)	18.88 (44)	78.51 (26)	-53.33 (42)	39.38 (39)
IM Emerging Markets Equity (MF) Median	8.26	-14.07	-2.95	-1.42	18.78	-19.51	18.32	72.67	-54.63	36.70
DFA International Small Cap Value (DISVX)	8.00 (20)	3.99 (44)	-4.99 (27)	32.39 (12)	22.26 (22)	-17.46 (56)	18.10 (85)	39.51 (92)	-41.68 (8)	2.95 (70)
MSCI AC World ex USA Small Cap (Net)	3.91 (34)	2.60 (47)	-4.03 (18)	19.73 (77)	18.52 (69)	-18.50 (68)	25.21 (19)	62.91 (29)	-50.23 (49)	10.76 (24)
IM International SMID Cap Core Equity (MF) Median	2.09	2.20	-5.95	24.09	20.17	-16.35	23.96	54.26	-50.73	8.21
American Funds EuroPacific Growth (RERGX)	1.01 (64)	-0.48 (21)	-2.29 (23)	20.58 (43)	19.64 (29)	-13.31 (50)	9.76 (20)	N/A	N/A	N/A
MSCI EAFE (Net) Index	1.00 (65)	-0.81 (25)	-4.90 (30)	22.78 (12)	17.32 (57)	-12.14 (34)	7.75 (39)	31.78 (33)	-43.38 (58)	11.17 (49)
IM International Large Cap Core Equity (MF) Median	1.62	-2.34	-6.02	20.22	17.94	-13.32	7.14	29.91	-42.29	11.15
<b>Domestic Equity</b>										
Wells Fargo Small Co Growth (WSCRX)	7.76 (59)	-4.33 (58)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Russell 2000 Growth Index	11.32 (46)	-1.38 (41)	5.60 (16)	43.30 (45)	14.59 (29)	-2.91 (33)	29.09 (32)	34.47 (48)	-38.54 (16)	7.05 (53)
IM U.S. Small Cap Growth Equity (MF) Median	8.60	-3.29	1.39	42.53	12.00	-4.35	27.20	33.52	-42.79	7.82
Vanguard Small Cap Index (VSMAX)	18.30 (73)	-3.64 (42)	7.50 (12)	37.81 (45)	18.24 (21)	-2.69 (39)	27.89 (23)	36.33 (26)	-36.00 (47)	1.24 (29)
Vanguard Spliced Small Cap Index	18.26 (73)	-3.68 (43)	7.54 (12)	37.77 (46)	18.20 (22)	-2.75 (41)	27.82 (23)	36.15 (27)	-36.20 (48)	1.20 (29)
IM U.S. Small Cap Core Equity (MF) Median	21.70	-3.95	3.98	37.04	14.92	-3.84	25.36	27.89	-36.41	-2.44
AMG Managers Skyline Special Equities (SKSEX)	21.32 (86)	-6.05 (31)	4.02 (35)	51.59 (5)	19.34 (23)	-2.05 (37)	26.07 (40)	52.79 (12)	-40.15 (80)	-9.91 (71)
Russell 2000 Value Index	31.74 (22)	-7.47 (52)	4.22 (33)	34.52 (55)	18.05 (32)	-5.50 (61)	24.50 (59)	20.58 (83)	-28.92 (25)	-9.78 (70)
IM U.S. Small Cap Value Equity (MF) Median	27.66	-7.34	3.09	35.16	15.43	-3.22	24.93	28.41	-32.09	-5.71
Hartford Mid Cap (HIMCX)	11.98 (6)	1.60 (31)	11.37 (12)	39.82 (15)	19.44 (8)	-7.92 (74)	23.45 (67)	30.96 (78)	-35.32 (5)	15.30 (51)
Russell Midcap Growth Index	7.33 (25)	-0.20 (48)	11.90 (9)	35.74 (44)	15.81 (31)	-1.65 (31)	26.38 (46)	46.29 (24)	-44.32 (46)	11.43 (73)
IM U.S. Mid Cap Growth Equity (MF) Median	4.74	-0.49	7.13	35.22	14.25	-4.54	25.54	40.53	-45.00	15.43
Vanguard Mid Cap Index (VIMAX)	11.22 (78)	-1.34 (26)	13.76 (9)	35.15 (47)	15.99 (50)	-1.97 (31)	25.59 (21)	40.48 (15)	-41.78 (73)	6.17 (44)
Vanguard Spliced Mid Cap Index	11.25 (77)	-1.28 (24)	13.83 (8)	35.21 (45)	16.04 (48)	-1.91 (30)	25.69 (20)	40.49 (15)	-41.80 (73)	6.19 (44)
IM U.S. Mid Cap Core Equity (MF) Median	14.50	-3.23	8.91	34.76	15.92	-3.29	23.14	33.22	-38.86	4.93
Hotchkis & Wiley Mid Cap Value (HWMIX)	21.00 (19)	-12.53 (95)	12.18 (25)	42.55 (4)	31.09 (1)	-8.60 (96)	34.41 (1)	56.49 (4)	-43.05 (87)	-16.96 (99)
Russell Midcap Value Index	20.00 (34)	-4.78 (47)	14.75 (9)	33.46 (74)	18.51 (20)	-1.38 (35)	24.75 (29)	34.21 (54)	-38.44 (55)	-1.42 (71)
IM U.S. Mid Cap Value Equity (MF) Median	17.42	-5.61	10.33	35.91	16.45	-3.67	21.98	36.41	-37.97	0.96
American Funds Growth Fund of America (RGAGX)	8.82 (2)	5.70 (49)	9.63 (61)	34.29 (47)	20.98 (3)	-4.53 (76)	12.67 (70)	N/A	N/A	N/A
Russell 1000 Growth Index	7.08 (7)	5.67 (50)	13.05 (22)	33.48 (56)	15.26 (46)	2.64 (10)	16.71 (32)	37.21 (41)	-38.44 (38)	11.81 (67)
IM U.S. Large Cap Growth Equity (MF) Median	1.91	5.62	10.48	33.97	14.82	-1.79	15.13	35.10	-39.81	13.73

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**Comparative Performance**  
**401(a) Calendar Returns**  
As of September 30, 2017

	2016		2015		2014		2013		2012		2011		2010		2009		2008		2007	
Wells Fargo Disciplined US Core (EVSIX)	12.09	(24)	2.53	(17)	15.69	(3)	33.97	(21)	14.90	(57)	4.12	(14)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S&P 500 Index	11.96	(26)	1.38	(28)	13.69	(15)	32.39	(39)	16.00	(40)	2.11	(24)	15.06	(26)	26.46	(51)	-37.00	(49)	5.49	(55)
IM U.S. Large Cap Core Equity (MF) Median	10.02		-0.27		11.39		31.80		15.41		-0.55		13.18		26.64		-37.16		5.82	
Vanguard Institutional Index (VINIX)	11.93	(26)	1.37	(28)	13.65	(15)	32.35	(40)	15.98	(40)	2.09	(24)	15.05	(26)	26.63	(51)	-36.95	(48)	5.47	(55)
S&P 500 Index	11.96	(26)	1.38	(28)	13.69	(15)	32.39	(39)	16.00	(40)	2.11	(24)	15.06	(26)	26.46	(51)	-37.00	(49)	5.49	(55)
IM U.S. Large Cap Core Equity (MF) Median	10.02		-0.27		11.39		31.80		15.41		-0.55		13.18		26.64		-37.16		5.82	
American Century Equity Income (AEUDX)	19.88	(8)	0.94	(4)	12.84	(14)	N/A		N/A		N/A									
Russell 1000 Value Index	17.34	(22)	-3.83	(51)	13.45	(8)	32.53	(48)	17.51	(26)	0.39	(23)	15.51	(19)	19.69	(71)	-36.85	(51)	-0.17	(64)
IM U.S. Large Cap Value Equity (MF) Median	14.03		-3.82		10.90		32.35		15.64		-2.31		12.65		23.69		-36.81		1.67	
<b>Balanced Fund</b>																				
American Funds American Balanced (RLBGX)	8.90	(18)	2.03	(3)	9.22	(5)	22.12	(19)	14.57	(23)	4.16	(6)	13.39	(34)	N/A		N/A		N/A	
American Balanced Fund Hybrid	7.38	(39)	1.21	(4)	9.85	(4)	14.08	(55)	10.13	(73)	5.28	(4)	11.29	(65)	16.34	(91)	-17.94	(13)	6.38	(45)
IM All Balanced (MF) Median	6.73		-1.66		4.73		15.17		12.12		-1.48		12.29		25.96		-29.53		6.00	
WCAB 2060 Retirement	N/A		N/A		N/A															
The WCAB 2060 Retirement Portfolio Policy	N/A		N/A		N/A															
IM Mixed-Asset Target 2055+ (MF) Median	8.11		-1.64		5.45		23.24		15.58		-4.66		14.78		30.80		-40.69		N/A	
WCAB 2055 Retirement	N/A		N/A		N/A															
The WCAB 2055 Retirement Portfolio Policy	N/A		N/A		N/A															
IM Mixed-Asset Target 2055+ (MF) Median	8.11		-1.64		5.45		23.24		15.58		-4.66		14.78		30.80		-40.69		N/A	
WCAB 2050 Retirement	11.88	(5)	-1.95	(56)	6.64	(25)	25.10	(23)	16.28	(25)	-4.13	(44)	17.93	(1)	33.46	(34)	-34.84	(6)	N/A	
The WCAB 2050 Retirement Portfolio Policy	9.74	(14)	-0.34	(14)	8.81	(3)	24.71	(26)	14.68	(72)	-0.69	(7)	14.29	(58)	26.79	(99)	-33.35	(1)	7.29	(28)
IM Mixed-Asset Target 2050 (MF) Median	8.16		-1.76		5.61		23.08		15.47		-4.38		14.80		31.42		-39.08		6.62	
WCAB 2045 Retirement	N/A		N/A		N/A															
The WCAB 2045 Retirement Portfolio Policy	N/A		N/A		N/A															
IM Mixed-Asset Target 2045 (MF) Median	8.18		-1.76		5.55		23.07		15.47		-4.03		15.03		31.12		-38.51		6.84	
WCAB 2040 Retirement	11.43	(5)	-1.44	(41)	6.39	(26)	22.17	(46)	15.41	(37)	-2.67	(24)	16.48	(9)	31.03	(49)	-31.07	(1)	N/A	
The WCAB 2040 Retirement Portfolio Policy	9.17	(18)	-0.24	(12)	8.23	(3)	21.96	(48)	13.52	(79)	-0.23	(6)	13.31	(70)	24.59	(95)	-30.38	(1)	7.27	(37)
IM Mixed-Asset Target 2040 (MF) Median	7.98		-1.75		5.38		21.61		14.92		-3.93		14.63		30.70		-38.09		6.55	
WCAB 2035 Retirement	N/A		N/A		N/A															
The WCAB 2035 Retirement Portfolio Policy	N/A		N/A		N/A															
IM Mixed-Asset Target 2035 (MF) Median	7.75		-1.66		5.40		20.78		14.75		-3.34		14.57		30.99		-36.09		7.49	
WCAB 2030 Retirement	11.11	(5)	-1.35	(40)	6.36	(20)	19.21	(40)	14.56	(36)	-1.71	(30)	15.53	(11)	29.56	(43)	-28.65	(1)	N/A	
The WCAB 2030 Retirement Portfolio Policy	8.41	(17)	-0.08	(6)	7.93	(1)	19.45	(38)	12.40	(76)	0.41	(8)	12.40	(79)	22.29	(94)	-27.19	(1)	7.13	(46)
IM Mixed-Asset Target 2030 (MF) Median	7.31		-1.61		5.18		17.87		13.71		-2.56		13.63		28.81		-36.38		6.48	

Returns for periods greater than one year are annualized.  
Returns are expressed as percentages.



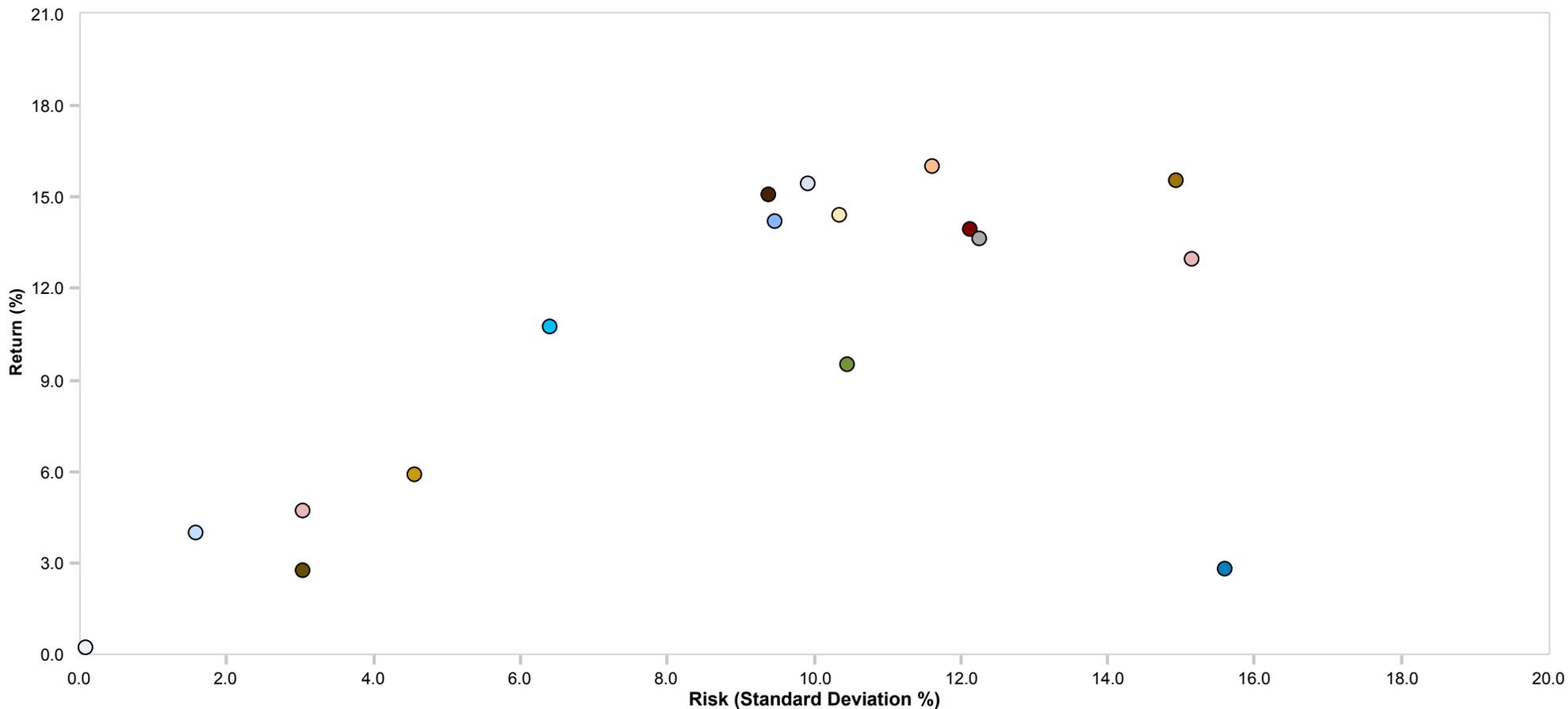
**Comparative Performance**  
**401(a) Calendar Returns**  
As of September 30, 2017

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
WCAB 2025 Retirement	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
The WCAB 2025 Retirement Portfolio Policy	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
IM Mixed-Asset Target 2025 (MF) Median	6.87	-1.44	5.19	15.85	13.00	-2.03	13.42	28.95	-35.04	7.17
WCAB 2020 Retirement	9.56 (1)	-0.71 (24)	6.09 (12)	14.86 (27)	12.96 (28)	-0.23 (46)	13.65 (24)	25.92 (51)	-23.68 (13)	N/A
The WCAB 2020 Retirement Portfolio Policy	7.02 (27)	0.07 (6)	7.07 (1)	14.96 (26)	10.45 (72)	1.18 (21)	10.65 (82)	18.43 (93)	-21.50 (8)	7.02 (41)
IM Mixed-Asset Target 2020 (MF) Median	6.31	-1.44	4.72	11.84	11.53	-0.43	12.31	26.02	-31.77	6.26
WCAB 2015 Retirement	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
The WCAB 2015 Retirement Portfolio Policy	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
IM Mixed-Asset Target 2015 (MF) Median	6.37	-1.30	4.47	10.42	10.81	-0.11	11.49	25.34	-29.31	6.10
WCAB 2010 Retirement	7.81 (6)	0.11 (3)	6.28 (2)	11.00 (2)	11.16 (8)	1.67 (79)	11.59 (9)	N/A	N/A	N/A
The WCAB Income Retirement Portfolio Policy	5.19 (48)	0.26 (1)	6.08 (4)	10.51 (5)	8.08 (69)	2.13 (71)	8.66 (70)	13.73 (82)	-14.85 (37)	6.70 (7)
IM Mixed-Asset Target Today (MF) Median	5.16	-1.42	3.86	5.37	8.90	2.84	9.52	18.14	-16.02	4.93
<b>Fixed Income</b>										
PIMCO High Yield (PHIYX)	12.68 (63)	-1.88 (22)	3.31 (12)	5.77 (70)	14.57 (53)	4.00 (37)	14.28 (45)	44.09 (64)	-23.62 (38)	3.67 (9)
BofA Merrill Lynch High Yield Master II	17.49 (4)	-4.64 (62)	2.50 (22)	7.42 (30)	15.58 (33)	4.38 (27)	15.19 (28)	57.51 (11)	-26.39 (61)	2.19 (40)
IM U.S. High Yield Bonds (MF) Median	13.39	-3.90	1.48	6.61	14.72	3.32	14.04	47.53	-24.93	1.85
PIMCO Foreign Bond USD-Hedged (PFORX)	7.03 (6)	0.40 (9)	11.16 (3)	0.90 (17)	11.19 (22)	6.77 (8)	9.19 (30)	19.04 (17)	-2.36 (80)	3.98 (83)
Bloomberg Barclays Global Aggregate	2.09 (57)	-3.15 (26)	0.59 (52)	-2.60 (37)	4.32 (79)	5.64 (17)	5.54 (69)	6.93 (66)	4.79 (33)	9.48 (41)
IM International Fixed Income (MF) Median	2.77	-6.00	0.63	-3.74	7.43	2.56	7.26	10.01	2.41	9.27
Hartford Total Return Bond (HIABX)	4.49 (9)	-0.59 (72)	5.89 (31)	-1.36 (27)	7.54 (20)	6.99 (37)	7.51 (41)	15.01 (31)	-7.62 (71)	4.67 (65)
Bloomberg Barclays U.S. Aggregate Index	2.65 (60)	0.55 (18)	5.97 (26)	-2.02 (53)	4.21 (80)	7.84 (11)	6.54 (69)	5.93 (90)	5.24 (10)	6.97 (9)
IM U.S. Broad Market Core Fixed Income (MF) Median	2.85	-0.01	5.55	-1.99	5.98	6.65	7.24	12.10	-3.43	5.28
<b>Cash</b>										
MassMutual Guaranteed Interest Account	3.94 (1)	4.00 (1)	4.00 (1)	4.00 (1)	4.00 (2)	4.00 (5)	N/A	N/A	N/A	N/A
Ryan 3 Yr GIC Master Index	1.39 (94)	1.16 (95)	1.03 (95)	1.06 (93)	1.48 (99)	2.44 (63)	3.53 (40)	4.49 (11)	4.79 (26)	4.52 (98)
IM U.S. GIC/Stable Value (SA+CF) Median	1.83	1.81	1.74	1.74	2.41	2.92	3.39	3.65	4.65	4.91

Returns for periods greater than one year are annualized.  
Returns are expressed as percentages.



Risk and Return



- Lazard Emerging Markets Equity (LZOEX)
- Wells Fargo Small Co Growth (WSCRX)
- Hartford Mid Cap (HIMCX)
- American Funds Growth Fund of America (RGAGX)
- American Century Equity Income (AEUDX)
- PIMCO Foreign Bond USD-Hedged (PFORX)
- 90 Day U.S. Treasury Bill
- DFA International Small Cap Value (DISVX)
- Vanguard Small Cap Index (VSMAX)
- Vanguard Mid Cap Index (VIMAX)
- Wells Fargo Disciplined US Core (EVSIX)
- American Funds American Balanced (RLBGX)
- Hartford Total Return Bond (HIABX)
- American Funds EuroPacific Growth (RERGX)
- AMG Managers Skyline Special Equities (SKSEX)
- Hotchkis & Wiley Mid Cap Value (HWMIX)
- Vanguard Institutional Index (VINIX)
- PIMCO High Yield (PHIYX)
- MassMutual Guaranteed Interest Account

Calculation based on monthly periodicity.



Age Based Strategy Model Allocation by Broad Asset Class

Investment Name	Stocks	Bonds	Cash	Other	Total
Washoe County Age Based Strategy Model 2050	80.4%	13.2%	4.4%	1.9%	100.0%
Washoe County Age Based Strategy Model 2040	72.5%	16.9%	8.5%	2.1%	100.0%
Washoe County Age Based Strategy Model 2030	64.8%	21.6%	11.6%	2.0%	100.0%
Washoe County Age Based Strategy Model 2020	51.5%	29.1%	17.3%	2.1%	100.0%
Washoe County Age Based Strategy Model 2010	37.4%	33.8%	26.8%	1.9%	100.0%

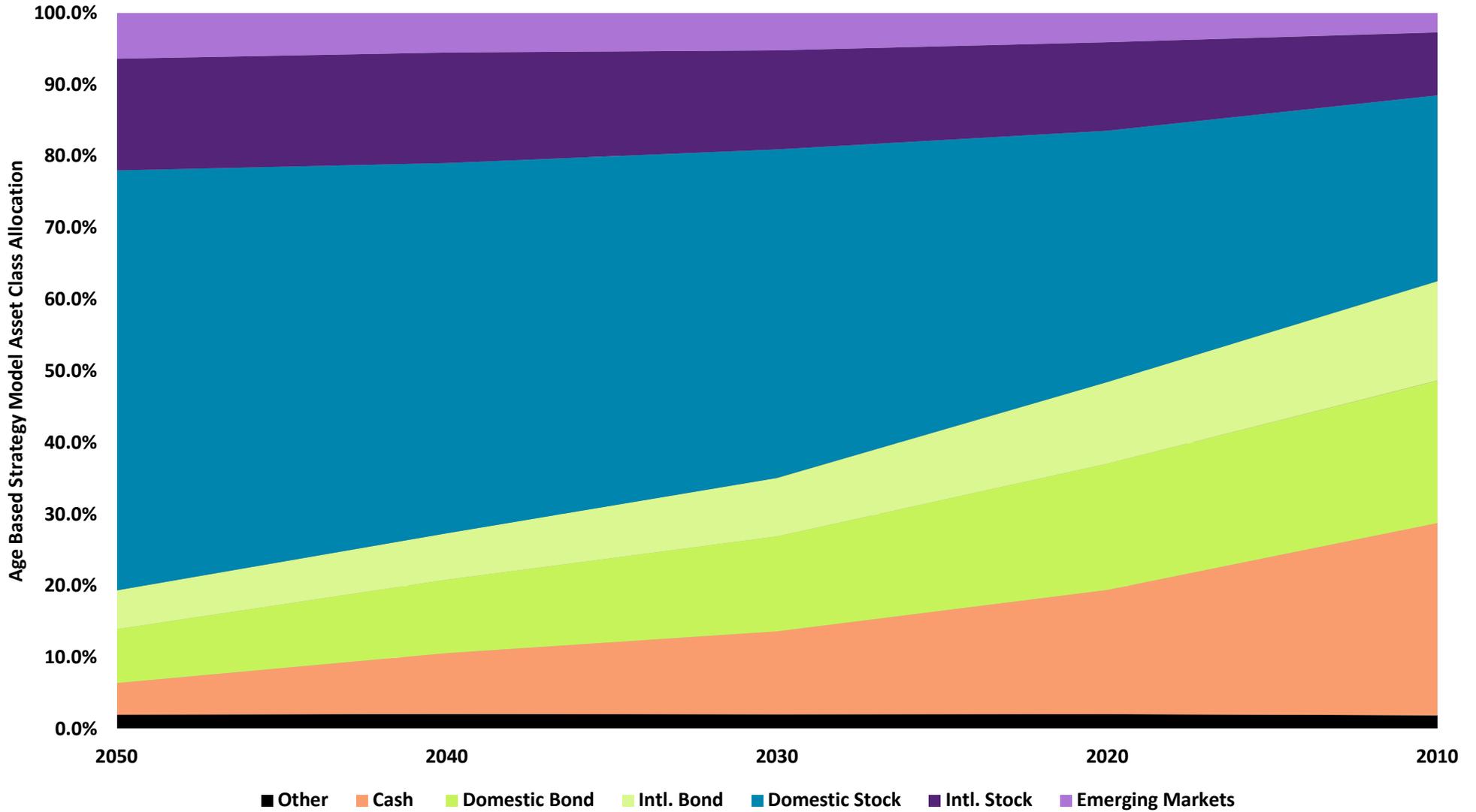


Age Based Strategy Model Allocation by Sub Asset Class

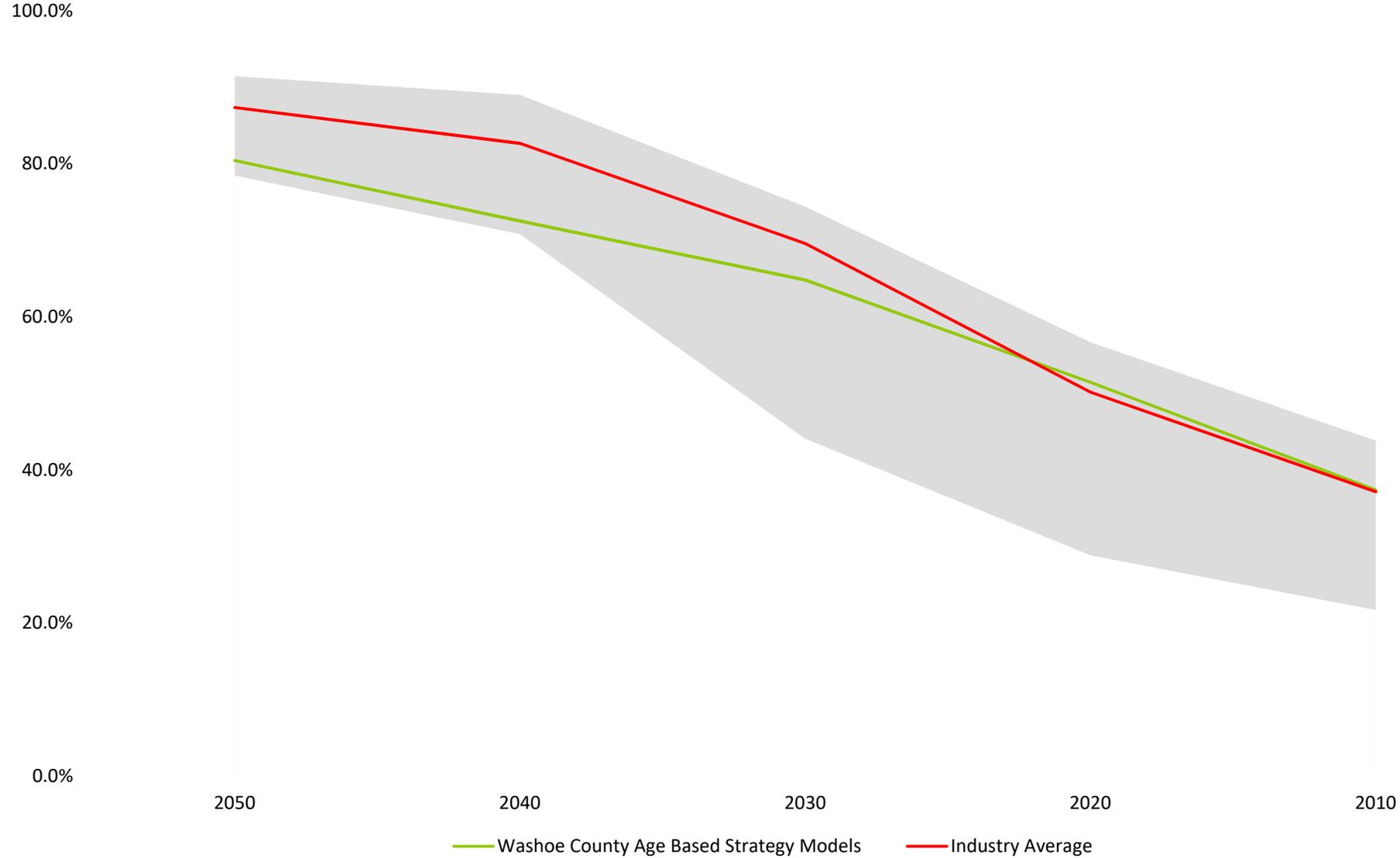
Investment Name	Emerging Markets	Intl. Stock	Domestic Stock	Intl. Bond	Domestic Bond	Cash	Other	Total
Washoe County Age Based Strategy Model 2050	6.4%	15.6%	58.6%	5.4%	7.5%	4.4%	2.0%	100.0%
Washoe County Age Based Strategy Model 2040	5.5%	15.4%	51.7%	6.5%	10.3%	8.5%	2.1%	100.0%
Washoe County Age Based Strategy Model 2030	5.2%	13.8%	45.9%	8.1%	13.3%	11.6%	2.1%	100.0%
Washoe County Age Based Strategy Model 2020	4.1%	12.4%	35.1%	11.4%	17.6%	17.3%	2.1%	100.0%
Washoe County Age Based Strategy Model 2010	2.7%	8.8%	25.9%	13.9%	19.9%	26.8%	2.0%	100.0%



Age Based Strategy Model Allocation Graph by Sub Asset Class



Age Based Strategy Model Equity Glide Path Ranges



**Fee and Expense Summary**

Mass Mutual requires 0.08% in revenue from the plan assets annually, 0.02% per quarter.

AndCo Consulting bills quarterly. The fee structure is 0.03% per annum, paid in quarterly cash payments excluding the WCAB Assets.

The WCAB Assets are billed at 0.10% per annum on invested assets, capped at \$10,000 per year.

**Plan Demographics**

Total Assets*	\$165,769,473
Number of Participants with a Balance (active and terminated)	2,410

**Expense Type Estimates (annual)**

	<b>Percent of Assets</b>	<b>Dollar Cost</b>	<b>% Cost</b>
MassMutual Recordkeeping fees	0.08%	<b>\$132,616</b>	0.08%
AndCo Consulting fees	0.03%	\$47,240	
AndCo Consulting fees WCAB	0.10%	\$8,302	
Total AndCo Consulting fees		<b>\$ 55,542</b>	0.03%
<b>Total plan expenses</b>		<b>\$ 188,158</b>	<b>0.11%</b>

**Revenue Sharing Estimates (annual)**

Revenue sharing from investment options	0.09%	\$155,138
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**Net billable to the plan (annual)**

**\$33,019      0.02%**

**Annual average total plan recordkeeping and administrative cost per participant (gross)**

**\$78**

**Annual average total plan recordkeeping and administrative cost per participant (net)**

**\$14**

\*Does not include outstanding loan values



**Weighted Fee and Revenue Sharing Evaluation**

	Market Value	Expense Ratio	Expense Ratio Weighted Fee	Revenue Sharing	Administrative Fee \$
Lazard Emerging Markets Equity (LZOEX)	\$1,567,674	1.35%	\$21,164	0.40%	\$6,271
DFA International Small Cap Value (DISVX)	\$1,820,658	0.68%	\$12,380	0.00%	\$0
American Funds EuroPacific Growth (RERGX)	\$5,267,481	0.50%	\$26,337	0.00%	\$0
Wells Fargo Small Co Growth (WSCRX)	\$2,692,949	0.90%	\$24,237	0.00%	\$0
Vanguard Small Cap Index (VSMAX)	\$2,825,346	0.05%	\$1,413	0.00%	\$0
AMG Managers Skyline Special Equities (SKSEX)	\$3,382,153	1.32%	\$44,644	0.25%	\$8,455
Hartford Mid Cap (HIMCX)	\$8,822,314	0.71%	\$62,638	0.25%	\$22,056
Vanguard Mid Cap Index (VIMAX)	\$2,545,131	0.06%	\$1,527	0.00%	\$0
Hotchkis & Wiley Mid Cap Value (HWMIX)	\$3,704,860	1.03%	\$38,160	0.40%	\$14,819
AF Growth Fund of America (RGAGX)	\$13,182,184	0.33%	\$43,501	0.00%	\$0
Wells Fargo Disciplined US Core (EVSIX)	\$13,464,419	0.48%	\$64,629	0.15%	\$20,197
Vanguard Institutional Index (VINIX)	\$11,707,154	0.04%	\$4,683	0.00%	\$0
American Century Equity Income (AEUDX)	\$8,508,757	0.56%	\$47,649	0.00%	\$0
American Funds American Balanced (RLBGX)	\$5,693,987	0.29%	\$16,513	0.00%	\$0
PIMCO High Yield (PHIYX)	\$2,509,712	0.55%	\$13,803	0.00%	\$0
PIMCO Foreign Bond USD-Hedged (PFORX)	\$954,757	0.50%	\$4,774	0.00%	\$0
Hartford Total Return Bond (HIABX)	\$4,147,003	0.52%	\$21,564	0.25%	\$10,368
MassMutual Guaranteed Interest Account	\$72,972,934	0.00%	\$0	0.10%	\$72,973
<b>TOTAL</b>	<b>\$165,769,473</b>	<b>0.27%</b>	<b>\$449,617</b>	<b>0.09%</b>	<b>\$155,138</b>



# Principal Preservation Options

Product Type	Type of Investments	Asset Ownership	Rate of Return	Duration	Fees
Money Market	Short-term, low-risk securities such as gov't securities, CDs, & commercial paper of companies.	Directly owned by participating plans	Minimal	Less than 1 year	Low. Expressed as an expense ratio.
Pooled Stable Value	High quality bonds & one or more wrap contracts issued by banks or insurance companies	Directly owned by the participating plans.	Rate of return based on the performance of the underlying assets held in an external trust.	Typically 2-4 years	Higher than money market funds due to complexity. Expressed as an expense ratio.
General Accounts	Managed by an insurance company & held in insurer's general account or separate account	Owned by the insurance company	Guaranteed rate regardless of the performance of the underlying assets.	Varies by insurer typically between 3-8 years	Fees not generally disclosed. Insurer collects money from the spread (difference between investment returns & guaranteed rate).



# Stable Value vs. Money Market

Several recent court cases have alleged that a prudent fiduciary would have utilized a stable value fund instead of money market fund in their plan menus given the higher returns from stable value funds over time.

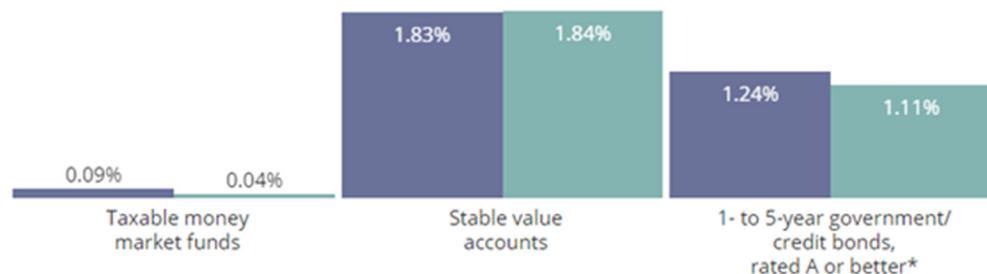
In the *Tibble v. Edison* court case, the district court ruled (and appellate court upheld) in favor of the defendants, commenting that the fiduciaries considered using stable value, but decided in favor of a money market fund because it would “provide more consistent returns and have lower risk.”

While stable value funds typically outperform money market funds, fiduciaries may find stable value overly complex due to the need to understand and vet additional layers such as the guarantees involved. Some also consider stable value funds to be riskier than money market funds, and the funds contain restrictions of transfers and withdrawals.

## Money Market Funds vs. Stable Value Accounts

Returns for periods ended December 31, 2016

■ 1 year ■ 5 years (annualized)



Source: Morningstar, eVestment.

\*Bloomberg Barclays Index



# Things To Consider

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- What happens during a rising rate environment?
  - Money Market Funds: most interest rate sensitive; returns will rise
  - Pooled Stable Value: will lag slightly based on duration of underlying assets
  - General Accounts: no immediate change to guaranteed rate; generally slow to change
- Does the current plan option provide appropriate value to participants in a rising rate environment?
  - If not, what are other options that would provide improved value to participants?
- When changing a stable value fund:
  - What impact is there on recordkeeping fees?
  - What are the exit restrictions (MVAs, puts, etc.)?
- Are participants currently being defaulted into this fund?
- Has the plan documented why they chose the current option?

# 2017 Fiduciary Documentation

Quarterly	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
Review of plan investments and compliance with investment policy statement	✓	✓	✓	✓
Follow required procedures, including documentation of all meetings and decisions	✓	✓	✓	✓
Review performance of providers	✓	✓	✓	✓
Annually				
Review QDIA selection	✓			
Allocation fund (Target Date or Risk-based) analysis	✓	✓	✓	✓
Investment policy statement review			✓	
Employee education review	✓	✓	✓	✓
Plan recordkeeping & administration services review				✓
Fee analysis	✓	✓	✓	✓
Other Projects				



Fund Information			Fund Investment Policy	
Portfolio Manager : Team Managed	Ticker : LZOEX		The Fund seeks long term capital appreciation by investing primarily in equity securities, principally common stocks of non -U.S. companies whose principal activities are located in emerging market countries and that Lazard believes are undervalued based on their earning, cash flow or asset values.	
PM Tenure :	Inception Date : 01/08/1997			
Fund Assets : \$1,492 Million	Portfolio Turnover : 12%			

Comparative Performance - Trailing								
	QTR	YTD	1 YR	3 YR	5 YR	7 YR	10 YR	
Lazard Emerging Markets Equity (LZOEX)	6.80 (65)	20.27 (83)	16.84 (74)	2.39 (76)	2.81 (77)	1.96 (66)	1.94 (32)	
MSCI Emerging Markets (Net) Index	7.89 (48)	27.78 (49)	22.46 (38)	4.90 (44)	3.99 (54)	2.54 (51)	1.32 (45)	
IM Emerging Markets Equity (MF) 1st Quartile	9.25	31.30	24.21	5.91	5.76	3.90	2.35	
IM Emerging Markets Equity (MF) Median	7.79	27.57	21.05	4.65	4.10	2.57	1.05	
IM Emerging Markets Equity (MF) 3rd Quartile	5.56	22.44	16.63	2.46	2.93	1.53	0.19	

Comparative Performance - Calendar							
	2016	2015	2014	2013	2012	2011	2010
Lazard Emerging Markets Equity (LZOEX)	20.17 (6)	-20.33 (90)	-4.39 (69)	-1.14 (48)	22.03 (18)	-18.02 (32)	22.43 (22)
MSCI Emerging Markets (Net) Index	11.19 (30)	-14.92 (58)	-2.19 (43)	-2.60 (58)	18.23 (56)	-18.42 (36)	18.88 (44)
IM Emerging Markets Equity (MF) 1st Quartile	11.80	-10.18	-0.17	2.78	20.70	-17.42	21.85
IM Emerging Markets Equity (MF) Median	8.26	-14.07	-2.95	-1.42	18.78	-19.51	18.32
IM Emerging Markets Equity (MF) 3rd Quartile	4.00	-17.14	-5.07	-4.73	15.35	-23.06	16.42

Comparative Performance - Quarterly							
	Jun-2017	Mar-2017	Dec-2016	Sep-2016	Jun-2016	Mar-2016	Dec-2015
Lazard Emerging Markets Equity (LZOEX)	2.04 (94)	10.36 (73)	-2.85 (18)	8.74 (37)	4.73 (7)	8.61 (1)	-0.32 (62)
MSCI Emerging Markets (Net) Index	6.27 (40)	11.44 (56)	-4.16 (34)	9.03 (28)	0.66 (83)	5.71 (4)	0.66 (48)
IM Emerging Markets Equity (MF) 1st Quartile	7.08	13.01	-3.83	9.13	3.26	2.41	2.41
IM Emerging Markets Equity (MF) Median	5.95	11.83	-5.19	7.85	2.06	3.58	0.32
IM Emerging Markets Equity (MF) 3rd Quartile	4.59	10.21	-7.21	6.07	1.04	1.65	-1.10

MPT Stats	Ranking vs. IM Emerging Markets Equity (MF) 4 Quarters Rolling Periods		
	1 YR	3 YR	5 YR
Standard Deviation	9.56	16.17	15.62
Downside Risk	5.69	10.49	10.38

vs. MSCI Emerging Markets (Net) Index			
Alpha	-3.91	-2.25	-1.15
Beta	0.96	0.99	1.04
Down Market Capture	127.42	112.49	112.30
Information Ratio	-1.38	-0.47	-0.20
Tracking Error	3.43	4.99	4.75
Up Market Capture	87.00	99.72	105.25

vs. 90 Day U.S. Treasury Bill			
Sharpe Ratio	1.62	0.21	0.24

Ranking vs. IM Emerging Markets Equity (MF) 4 Quarters Rolling Periods					
	Periods	5-25	25-Median	Median-75	75-95
Lazard Emerging Markets Equity (LZOEX)	28	9 (32%)	6 (21%)	9 (32%)	4 (14%)
MSCI Emerging Markets (Net) Index	28	0 (0%)	19 (68%)	9 (32%)	0 (0%)

Ranking vs. IM Emerging Markets Equity (MF) 12 Quarters Rolling Periods					
	Periods	5-25	25-Median	Median-75	75-95
Lazard Emerging Markets Equity (LZOEX)	28	8 (29%)	10 (36%)	6 (21%)	4 (14%)
MSCI Emerging Markets (Net) Index	28	1 (4%)	16 (57%)	11 (39%)	0 (0%)

Ranking vs. IM Emerging Markets Equity (MF) 20 Quarters Rolling Periods					
	Periods	5-25	25-Median	Median-75	75-95
Lazard Emerging Markets Equity (LZOEX)	28	12 (43%)	8 (29%)	7 (25%)	1 (4%)
MSCI Emerging Markets (Net) Index	28	6 (21%)	14 (50%)	8 (29%)	0 (0%)



**Portfolio Characteristics**

	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$)	59,950,416,624	81,291,879,279
Median Mkt. Cap (\$)	11,536,528,079	5,880,706,523
Price/Earnings ratio	12.0	14.4
Price/Book ratio	2.7	2.5
5 Yr. EPS Growth Rate (%)	6.4	10.7
Current Yield (%)	3.2	2.5
Beta (5 Years, Monthly)	1.04	1.00
Number of Stocks	72	839

**Top Ten Equity Holdings**

	Port. Wt	Bench. Wt	Qtr Rtrn	Contr. Rtrn
Taiwan Semiconductor	4.6	3.5	4.0	0.2
SAMSUNG ELECTRONICS CO LTD	4.3	0.0	N/A	N/A
China Construction Bank Corp	4.3	1.4	7.0	0.3
Baidu Inc	3.6	1.4	38.5	1.4
Sberbank of Russia OJSC	3.4	0.7	35.9	1.2
China Mobile Ltd	3.1	1.2	0.7	0.0
Tata Consultancy Serv	3.0	0.3	2.3	0.1
Banco Do Brasil SA Bb Brasil	2.8	0.2	37.4	1.0
SK Hynix Inc	2.6	0.8	23.1	0.6
Netease Inc	2.4	0.4	-12.0	-0.3

**Buy and Hold Sector Attribution - 1 Qtr**

	Allocation		Performance		Attribution		
	Portfolio	Benchmark	Portfolio	Benchmark	Sector	Stock	Total
Consumer Discretionary	8.7	10.4	-1.19	5.02	0.06	-0.60	-0.54
Consumer Staples	6.3	6.6	6.79	2.79	0.00	0.26	0.26
Energy	8.1	6.6	11.64	13.26	0.07	-0.14	-0.07
Financials	28.8	23.7	7.47	7.40	-0.02	0.03	0.01
Health Care	0.7	2.3	-10.33	3.28	0.08	-0.11	-0.03
Industrials	6.3	5.6	14.76	1.76	-0.03	0.79	0.76
Information Technology	25.0	26.8	7.91	11.06	-0.07	-0.85	-0.91
Materials	3.1	7.3	6.32	10.24	-0.08	-0.13	-0.21
Real Estate	0.0	2.8	0.00	18.26	-0.27	0.00	-0.27
Telecommunication Services	12.2	5.3	6.58	3.65	-0.31	0.37	0.06
Utilities	0.6	2.6	20.10	6.56	0.03	0.09	0.12
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>7.25</b>	<b>8.05</b>	<b>-0.53</b>	<b>-0.30</b>	<b>-0.83</b>

**Ten Best Performers**

	Port. Wt	Bench. Wt	Qtr. Rtrn	Contr. Rtrn
Baidu Inc	3.6	1.4	38.5	1.4
Banco Do Brasil SA Bb Brasil	2.8	0.2	37.4	1.0
Sberbank of Russia OJSC	3.4	0.7	35.9	1.2
AAC Technologies Holdings Inc	0.9	0.2	34.7	0.3
Localiza Rent A Car SA	1.0	0.1	34.7	0.3
Mobile TeleSystems PJSC	1.7	0.1	32.7	0.5
Weichai Power Co Ltd	1.3	0.0	27.7	0.4
Hengan International	0.1	0.1	27.5	0.0
SK Hynix Inc	2.6	0.8	23.1	0.6
Magnit	0.6	0.3	21.6	0.1

**Buy and Hold Region Attribution- 1 Qtr**

	Allocation		Performance		Attribution		
	Portfolio	Benchmark	Portfolio	Benchmark	Stock	Region	Total
EM Asia	50.0	61.0	3.89	5.24	-0.70	0.31	-0.39
EM Europe	16.0	6.6	15.04	10.69	0.68	0.23	0.91
EM Latin America	15.1	12.3	13.63	15.05	-0.19	0.20	0.01
EM Mid East+Africa	10.3	8.2	2.77	3.11	-0.04	-0.11	-0.15
Frontier Markets	3.5	0.1	-0.28	-16.34	0.62	-0.90	-0.28
North America	0.0	0.3	0.00	14.47	0.00	-0.02	-0.02
Pacific ex Japan	5.1	11.5	13.01	18.15	-0.23	-0.63	-0.86
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>7.25</b>	<b>8.05</b>	<b>0.14</b>	<b>-0.93</b>	<b>-0.79</b>

**Ten Worst Performers**

	Port. Wt	Bench. Wt	Qtr. Rtrn	Contr. Rtrn
Habib Bank Ltd	0.4	0.0	-32.1	-0.1
PT Astra International TBK	1.2	0.2	-12.2	-0.1
Netease Inc	2.4	0.4	-12.0	-0.3
Life Healthcare	0.6	0.0	-10.3	-0.1
Turkiye Is Bankasi AS	0.9	0.1	-9.9	-0.1
Kt&G Corp	0.6	0.2	-9.7	-0.1
COWAY Co Ltd	1.3	0.1	-9.5	-0.1
Bharat Heavy Electricals Ltd	0.3	0.0	-7.4	0.0
PLDT Inc	0.8	0.1	-7.1	-0.1
Punjab National Bank	0.9	0.0	-7.0	-0.1



**Fund Information**

Portfolio Manager : Majcher/Davis, Jr./Miles      Ticker : HWMIX  
PM Tenure : 1997--1997--1997      Inception Date : 01/02/1997  
Fund Assets : \$1,618 Million      Portfolio Turnover : 37%

**Fund Investment Policy**

The Fund seeks capital appreciation by normally investing at least 80% of its net assets plus borrowings for investment purposes in common stocks of mid capitalization U.S. companies. The Advisor currently considers mid-cap companies to be those with market capitalizations like those found in the Russell Midcap Index.

**Comparative Performance - Trailing**

	QTR	YTD	1 YR	3 YR	5 YR	7 YR	10 YR
Hotchkis & Wiley Mid Cap Value (HWMIX)	3.53 (30)	3.06 (95)	15.48 (43)	4.55 (95)	12.95 (53)	13.66 (14)	8.40 (14)
<a href="#">Russell Midcap Value Index</a>	2.14 (66)	7.43 (48)	13.37 (69)	9.19 (27)	14.33 (17)	13.76 (11)	7.85 (30)
IM U.S. Mid Cap Value Equity (MF) 1st Quartile	3.63	9.27	17.41	9.23	14.04	13.29	7.96
IM U.S. Mid Cap Value Equity (MF) Median	2.90	7.21	14.79	8.15	13.06	12.53	7.11
IM U.S. Mid Cap Value Equity (MF) 3rd Quartile	1.66	5.49	12.55	7.12	12.18	11.39	5.99

**Comparative Performance - Calendar**

	2016	2015	2014	2013	2012	2011	2010
Hotchkis & Wiley Mid Cap Value (HWMIX)	21.00 (19)	-12.53 (95)	12.18 (25)	42.55 (4)	31.09 (1)	-8.60 (96)	34.41 (1)
<a href="#">Russell Midcap Value Index</a>	20.00 (34)	-4.78 (47)	14.75 (9)	33.46 (74)	18.51 (20)	-1.38 (35)	24.75 (29)
IM U.S. Mid Cap Value Equity (MF) 1st Quartile	20.67	-3.36	12.18	37.47	17.91	-0.54	25.43
IM U.S. Mid Cap Value Equity (MF) Median	17.42	-5.61	10.33	35.91	16.45	-3.67	21.98
IM U.S. Mid Cap Value Equity (MF) 3rd Quartile	15.42	-7.72	8.15	33.18	14.84	-6.52	20.33

**Comparative Performance - Quarterly**

	Jun-2017	Mar-2017	Dec-2016	Sep-2016	Jun-2016	Mar-2016	Dec-2015
Hotchkis & Wiley Mid Cap Value (HWMIX)	-1.33 (97)	0.88 (97)	12.05 (3)	10.61 (2)	-3.63 (96)	1.31 (68)	0.12 (88)
<a href="#">Russell Midcap Value Index</a>	1.37 (53)	3.76 (38)	5.52 (76)	4.45 (65)	4.77 (3)	3.92 (19)	3.12 (30)
IM U.S. Mid Cap Value Equity (MF) 1st Quartile	1.98	4.32	8.58	6.09	3.39	3.57	3.35
IM U.S. Mid Cap Value Equity (MF) Median	1.39	3.43	6.47	4.99	2.06	2.16	2.78
IM U.S. Mid Cap Value Equity (MF) 3rd Quartile	0.05	2.63	5.54	4.25	0.99	1.14	1.94

**MPT Stats**

	1 YR	3 YR	5 YR
Standard Deviation	16.57	16.88	15.17
Downside Risk	6.51	9.85	8.23
<a href="#">vs. Russell Midcap Value Index</a>			
Alpha	-9.75	-7.34	-4.67
Beta	2.01	1.44	1.30
Down Market Capture	207.51	155.68	135.60
Information Ratio	0.30	-0.38	-0.08
Tracking Error	9.57	9.18	7.79
Up Market Capture	147.15	108.79	110.27
<a href="#">vs. 90 Day U.S. Treasury Bill</a>			
Sharpe Ratio	0.91	0.33	0.87

**Ranking vs. IM U.S. Mid Cap Value Equity (MF) 4 Quarters Rolling Periods**

	Periods	5-25	25-Median	Median-75	75-95
Hotchkis & Wiley Mid Cap Value (HWMIX)	28	16 (57%)	3 (11%)	0 (0%)	9 (32%)
Russell Midcap Value Index	28	7 (25%)	14 (50%)	7 (25%)	0 (0%)

**Ranking vs. IM U.S. Mid Cap Value Equity (MF) 12 Quarters Rolling Periods**

	Periods	5-25	25-Median	Median-75	75-95
Hotchkis & Wiley Mid Cap Value (HWMIX)	28	20 (71%)	0 (0%)	2 (7%)	6 (21%)
Russell Midcap Value Index	28	18 (64%)	8 (29%)	2 (7%)	0 (0%)

**Ranking vs. IM U.S. Mid Cap Value Equity (MF) 20 Quarters Rolling Periods**

	Periods	5-25	25-Median	Median-75	75-95
Hotchkis & Wiley Mid Cap Value (HWMIX)	28	15 (54%)	6 (21%)	5 (18%)	2 (7%)
Russell Midcap Value Index	28	15 (54%)	12 (43%)	1 (4%)	0 (0%)



Portfolio Characteristics			Top Ten Equity Holdings				
	Portfolio	Benchmark		Port. Wt	Bench. Wt	Qtr Rtrn	Contr. Rtrn
Wtd. Avg. Mkt. Cap (\$)	8,435,662,198	13,554,516,292	Calpine Corp	4.3	0.1	9.0	0.4
Median Mkt. Cap (\$)	5,331,155,570	7,047,862,400	ARRIS International plc	4.1	0.1	1.7	0.1
Price/Earnings ratio	14.2	19.8	Kosmos Energy Ltd	4.1	0.0	24.2	1.0
Price/Book ratio	1.7	2.1	Popular Inc	4.0	0.1	-13.3	-0.5
5 Yr. EPS Growth Rate (%)	7.5	9.0	Hewlett Packard Enterprise Co	3.7	0.0	14.4	0.5
Current Yield (%)	1.3	2.2	Citizens Financial Group Inc	3.5	0.5	6.7	0.2
Beta (5 Years, Monthly)	1.30	1.00	Navistar International Corp	3.5	0.0	68.0	2.4
Number of Stocks	61	587	Goodyear Tire & Rubber Co	3.3	0.2	-4.6	-0.2
			CIT Group Inc	3.0	0.2	1.0	0.0
			Cairn Energy PLC, Edinburgh	2.9	0.0	14.9	0.4

Buy and Hold Sector Attribution - 1 Qtr								Ten Best Performers				
	Allocation		Performance		Sector	Attribution		Port. Wt	Bench. Wt	Qtr. Rtrn	Contr. Rtrn	
	Portfolio	Benchmark	Portfolio	Benchmark		Stock	Total					
Consumer Discretionary	19.2	12.0	-4.92	0.27	-0.14	-1.05	-1.19	Navistar International Corp	3.5	0.0	68.0	2.4
Consumer Staples	1.6	4.1	-6.32	-1.68	0.10	-0.06	0.04	NRG Energy Inc	2.5	0.2	48.8	1.2
Energy	19.1	7.7	4.88	6.57	0.48	-0.19	0.29	Avis Budget Group Inc	0.9	0.0	39.6	0.4
Financials	22.8	19.7	2.95	4.22	0.07	-0.29	-0.22	Adient Plc	1.0	0.2	29.0	0.3
Health Care	1.8	6.9	-13.96	-5.69	0.41	-0.16	0.25	Embraer SA	1.3	0.0	24.3	0.3
Industrials	9.0	11.3	20.83	4.69	-0.03	1.36	1.33	Kosmos Energy Ltd	4.1	0.0	24.2	1.0
Information Technology	18.9	6.4	1.14	3.94	0.20	-0.59	-0.39	Santander Consumer	1.6	0.1	20.5	0.3
Materials	0.0	5.2	0.00	7.23	-0.26	0.00	-0.26	Kohl's Corp	1.8	0.2	19.7	0.4
Real Estate	0.8	14.8	-7.60	-0.11	0.32	-0.07	0.25	Weatherford Intl	1.4	0.1	18.3	0.3
Telecommunication Services	0.0	0.8	0.00	-12.47	0.13	0.00	0.13	Ally Financial Inc	1.6	0.3	16.7	0.3
Utilities	6.9	10.9	24.74	2.50	-0.02	1.49	1.47					
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>3.91</b>	<b>2.20</b>	<b>1.27</b>	<b>0.44</b>	<b>1.71</b>					

Buy and Hold Style Attribution - 1 Qtr								Ten Worst Performers				
	Allocation		Performance		Style	Attribution		Port. Wt	Bench. Wt	Qtr. Rtrn	Contr. Rtrn	
	Portfolio	Benchmark	Portfolio	Benchmark		Stock	Total					
Large Growth	0.0	0.1	0.00	-0.72	0.00	0.00	0.00	Cobalt International Energy Inc	0.1	0.0	-42.1	0.0
Large Neutral	1.6	3.4	1.41	-2.92	0.08	0.06	0.14	Sanchez Energy Corp	0.6	0.0	-32.9	-0.2
Large Value	6.5	6.3	6.87	-0.46	-0.01	0.49	0.48	Bed Bath & Beyond Inc.	2.2	0.1	-22.4	-0.5
Mid Growth	4.0	3.3	5.41	1.59	0.02	0.15	0.17	Telefonaktiebolaget LM Ericsson	2.8	0.0	-19.8	-0.6
Mid Neutral	2.2	29.1	11.96	2.59	-0.13	1.42	1.30	Discovery Communications Inc	0.4	0.1	-19.6	-0.1
Mid Value	63.2	54.0	-0.95	3.08	0.09	-2.64	-2.55	Office Depot Inc	1.9	0.0	-19.0	-0.4
Small Growth	0.5	0.0	32.86	17.56	0.05	0.17	0.22	Discovery Communications	1.9	0.1	-17.6	-0.3
Small Neutral	1.4	0.3	2.48	4.92	0.11	0.23	0.34	Mallinckrodt Plc	0.8	0.1	-16.6	-0.1
Small Value	14.4	1.3	4.01	-2.64	-0.71	1.06	0.34	LifePoint Health Inc	0.3	0.0	-13.8	0.0
Unclassified	6.3	2.1	23.74	-5.80	-0.42	1.71	1.29	Popular Inc	4.0	0.1	-13.3	-0.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>3.91</b>	<b>2.20</b>	<b>-0.93</b>	<b>2.64</b>	<b>1.71</b>					



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## Historical Activity

### Jul-2017

The Hartford Small Company Fund (HIASX) was replaced by Wells Fargo Small Company Growth Fund (WSCRX).

### Nov-2016

The Hartford Capital Appreciation Fund (HIACX) was replaced by the Wells Fargo Disciplined US Core Fund (EVSIX).

The Deutsche Real Assets Fund (AAAVX) was removed from the Plans. The remaining balances were mapped into the American Funds American Balanced Fund (RLBGX).

The Plan added WCAB Models 2015, 2025, 2035, 2045, 2055, and 2060. The 2010 Model was replaced by the Income Model.

### Dec-2015

The Plan was converted to the Mass Mutual platform. The following funds were changed:

The SSGA Index Fund were replaced by Vanguard Index Funds.

The Hartford Balanced was replaced by American Funds Balanced.

American Century Equity Income shares changed from ACIX to AEUDX.

Deutsche Alternative Asset Allocation shares changed from AAAAX to AAAVX.

### Sep-2014

Lord Abbett Mid Cap Value closes 9/3/14. Assets will map to the Hotchkis & Wiley Mid Cap Value Fund on September 5, 2014.

### Oct-2013

Pimco Foreign Bond (US Hedged) (PFORZ) was added to the fund lineup.

### Apr-2011

The LifePath Funds were removed from the fund line-up.

### Mar-2011

The Barclays LifePath Target Date Funds will be mapped to the Hartford Advisors HLS Fund.

### Oct-2010

The following funds were moved to new share classes as follows:

American Funds EuroPacific Growth to R6 shares

SSgA Russell Small Cap to A shares

Lord Abbett Mid Cap Value to I shares

SSgA S&P Mid Cap Index to A shares

American Funds Growth Fund of America to R6 shares

SSgA S&P 500 Index to A shares

Pimco High Yield to Institutional shares.

### Dec-2009

The LifePath 2010 fund was wrapped in with the Life Path Retirement Fund.



**Sep-2009**

Barclays merged with BlackRock. The LifePath funds took the BlackRock name.

**Feb-2009**

The Following new investment choices were added to the Plans:

American Century Capital, DFA Intl. Small Cap Value, DWS Alternative Asset Allocation, Lazard Emerging Markets, Lord Abbett Mid Cap Value.

**Sep-2007**

The Hartford Index HLS was replaced by the SSgA S&P 500 Flagship fund in the third quarter 2007. The TCW Opportunity Fund was renamed to the TCW Relative Value Small Cap Fund.

**Jun-2007**

The American Century Ultra Fund was removed from the fund lineup during the second quarter 2007.

**Mar-2005**

Changes to the fund lineup started on March 1, 2005 and concluded on March 31, 2005. Below is a list of the funds that were retained and a list of funds that were added to the lineup.

Retained Funds:

Hartford Small Company HLS  
Skyline Special Equities Portfolio, Hartford Mid-Cap HLS  
American Century Ultra, Hartford Capital Appreciation  
Hartford Index HLS  
American Century Equity Income  
Hartford Advisors HLS  
Hartford Total Return Bond HLS  
General "Declared Interest"

Introduced Funds:

American Funds EuroPacific  
TCW Opportunity  
Artisan Mid-Cap  
Hotchkis & Wiley Mid-Cap Value  
American Funds Growth Fund  
PIMCO High Yield  
General Account (Declared)  
Barclays Global Investors LifePath.



### Common Index Definitions

**The S&P 500® Index** is a broad based unmanaged index of 500 stocks, which is widely recognized as representative of the equity market in general.

**The Russell 1000® Index** measures the performance of those 1,000 largest companies in the Russell 3000® Index, which represents approximately 92% of the total market capitalization of the Russell 3000® Index.

**The Russell 1000® Value Index** measures the performance of those Russell 1000® Index companies with lower price-to-book ratios and lower forecasted growth values.

**The Russell 1000® Growth Index** measures the performance of those Russell 1000® Index companies with higher price-to-book ratios and higher forecasted growth values.

**The Russell 2000® Index**, an unmanaged index, measures the performance of the 2,000 smallest companies in the Russell 3000® Index.

**The Russell 2000® Value Index** measures the performance of those Russell 2000® Index companies with lower price-to-book ratios and lower forecasted growth values.

**The Russell 2000® Growth Index** measures the performance of those Russell 2000® Index companies higher price-to-book ratios and higher forecasted growth values.

**The Russell 3000® Index** includes the 3,000 largest U.S.-traded stocks.

**The Russell 3000® Value Index** includes stocks from the Russell 3000® Index with lower price-to-book ratios and lower expected growth rates.

**The Russell 3000® Growth Index** includes companies that display signs of above average growth. The index is used to provide a gauge of the performance of growth stocks in the U.S.

**The Russell Midcap® Index**, an unmanaged index, measures the performance of the 800 smallest companies in the Russell 1000® Index.

**The Russell Midcap® Value Index** measures the performance of those Russell Midcap® Index companies with lower price-to book value ratios and lower forecasted growth values.

**The Russell Midcap® Growth Index** measures the performance of those Russell Midcap® Index companies with higher price-to book ratios and higher forecasted growth values.

**The Russell Developed® Index** measures the performance of the investable securities in developed countries globally across all market capitalization ranges.

**The Bloomberg Barclays Intermediate Treasury Index** includes Treasuries with maturities between 1 and 10 years.

**The Bloomberg Barclays Aggregate Bond Index**, is a market capitalization-weighted intermediate term index, meaning the securities in the index are weighted according to the market size of each bond type. Most U.S. traded investment grade bonds are represented. Municipal bonds, and Treasury Inflation-Protected Securities are excluded, due to tax treatment issues. The index includes Treasury securities, Government agency bonds, Mortgage-backed bonds, Corporate bonds, and a small amount of foreign bonds traded in U.S. The Bloomberg Barclays US Aggregate Bond Index is an index.

**The BofA Merrill Lynch U.S. High Yield Index** tracks the performance of below investment grade, but not in default, US dollardenominated corporate bonds publicly issued in the US domestic market, and includes issues with a credit rating of BBB or below, as rated by Moody's and S&P.



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<b>Active Return</b>	- Arithmetic difference between the manager's performance and the designated benchmark return over a specified time period.
<b>Alpha</b>	- A measure of the difference between a portfolio's actual performance and its expected return based on its level of risk as determined by beta. It determines the portfolio's non-systemic return, or its historical performance not explained by movements of the market.
<b>Beta</b>	- A measure of the sensitivity of a portfolio to the movements in the market. It is a measure of the portfolio's systematic risk.
<b>Consistency</b>	- The percentage of quarters that a product achieved a rate of return higher than that of its benchmark. Higher consistency indicates the manager has contributed more to the product's performance.
<b>Distributed to Paid In (DPI)</b>	- The ratio of money distributed to Limited Partners by the fund, relative to contributions. It is calculated by dividing cumulative distributions by paid in capital. This multiple shows the investor how much money they got back. It is a good measure for evaluating a fund later in its life because there are more distributions to measure against.
<b>Down Market Capture</b>	- The ratio of average portfolio performance over the designated benchmark during periods of negative returns. A lower value indicates better product performance
<b>Downside Risk</b>	- A measure similar to standard deviation that utilizes only the negative movements of the return series. It is calculated by taking the standard deviation of the negative quarterly set of returns. A higher factor is indicative of a riskier product.
<b>Excess Return</b>	- Arithmetic difference between the manager's performance and the risk-free return over a specified time period.
<b>Excess Risk</b>	- A measure of the standard deviation of a portfolio's performance relative to the risk free return.
<b>Information Ratio</b>	- This calculates the value-added contribution of the manager and is derived by dividing the active rate of return of the portfolio by the tracking error. The higher the Information Ratio, the more the manager has added value to the portfolio.
<b>Public Market Equivalent (PME)</b>	- Designs a set of analyses used in the Private Equity Industry to evaluate the performance of a Private Equity Fund against a public benchmark or index.
<b>R-Squared</b>	- The percentage of a portfolio's performance that can be explained by the behavior of the appropriate benchmark. A high R-Squared means the portfolio's performance has historically moved in the same direction as the appropriate benchmark.
<b>Return</b>	- Compounded rate of return for the period.
<b>Sharpe Ratio</b>	- Represents the excess rate of return over the risk free return divided by the standard deviation of the excess return. The result is an absolute rate of return per unit of risk. A higher value demonstrates better historical risk-adjusted performance.
<b>Standard Deviation</b>	- A statistical measure of the range of a portfolio's performance. It represents the variability of returns around the average return over a specified time period.
<b>Total Value to Paid In (TVPI)</b>	- The ratio of the current value of remaining investments within a fund, plus the total value of all distributions to date, relative to the total amount of capital paid into the fund to date. It is a good measure of performance before the end of a fund's life
<b>Tracking Error</b>	- This is a measure of the standard deviation of a portfolio's returns in relation to the performance of its designated market benchmark.
<b>Treynor Ratio</b>	- Similar to Sharpe ratio but utilizes beta rather than excess risk as determined by standard deviation. It is calculated by taking the excess rate of return above the risk free rate divided by beta to derive the absolute rate of return per unit of risk. A higher value indicates a product has achieved better historical risk-adjusted performance.
<b>Up Market Capture</b>	- The ratio of average portfolio performance over the designated benchmark during periods of positive returns. A higher value indicates better product performance.



AndCo compiled this report for the sole use of the client for which it was prepared. AndCo is responsible for evaluating the performance results of the Total Fund along with the investment advisors by comparing their performance with indices and other related peer universe data that is deemed appropriate. AndCo uses the results from this evaluation to make observations and recommendations to the client.

AndCo uses time-weighted calculations which are founded on standards recommended by the CFA Institute. The calculations and values shown are based on information that is received from custodians. AndCo analyzes transactions as indicated on the custodian statements and reviews the custodial market values of the portfolio. As a result, this provides AndCo with a reasonable basis that the investment information presented is free from material misstatement. This methodology of evaluating and measuring performance provides AndCo with a practical foundation for our observations and recommendations. Nothing came to our attention that would cause AndCo to believe that the information presented is significantly misstated.

This performance report is based on data obtained by the client's custodian(s), investment fund administrator, or other sources believed to be reliable. While these sources are believed to be reliable, the data providers are responsible for the accuracy and completeness of their statements. Clients are encouraged to compare the records of their custodian(s) to ensure this report fairly and accurately reflects their various asset positions.

The strategies listed may not be suitable for all investors. We believe the information provided here is reliable, but do not warrant its accuracy or completeness. Past performance is not an indication of future performance. Any information contained in this report is for informational purposes only and should not be construed to be an offer to buy or sell any securities, investment consulting, or investment management services.

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