

# ASSET CLASS RETURNS

2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	YTD as of 6.30.17	2007-2016	
											10 Yr	10 Yr STDV
39.4% MSCI EM	6.7% Short Term Treasury	78.5% MSCI EM	26.2% S&P MidCap	9.1% Corporate Bonds	18.2% MSCI EM	41.3% S&P Small-Cap	13.7% S&P 500	1.4% S&P 500	26.6% S&P Small-Cap	18.43% MSCI EM	9.2% S&P MidCap	23.4% MSCI EM
11.2% MSCI EAFE	5.7% Aggregate Bond	37.4% S&P MidCap	26.3% S&P Small-Cap	7.3% Aggregate Bond	17.9% S&P MidCap	33.5% S&P MidCap	9.8% S&P MidCap	0.6% Aggregate Bond	20.7% S&P MidCap	13.81% MSCI EAFE	9.0% S&P Small-Cap	19.5% S&P Small-Cap
8.0% S&P MidCap	1.0% Corporate Bonds	31.8% MSCI EAFE	18.9% MSCI EM	2.1% S&P 500	17.3% MSCI EAFE	32.4% S&P 500	8.7% Corporate Bonds	0.6% Short Term Treasury	12.0% S&P 500	9.34% S&P 500	6.9% S&P 500	18.6% MSCI EAFE
7.4% Pension Benchmark	-21.3% Pension Benchmark	26.5% S&P 500	15.1% S&P 500	1.6% Short Term Treasury	16.3% S&P Small-Cap	22.8% MSCI EAFE	6.8% Pension Benchmark	-0.2% Pension Benchmark	11.2% MSCI EM	6.80% Pension Benchmark	5.9% Corporate Bonds	18.1% S&P MidCap
7.3% Short Term Treasury	-31.1% S&P Small-Cap	25.6% S&P Small-Cap	12.0% Pension Benchmark	1.1% Pension Benchmark	16.0% S&P 500	17.2% Pension Benchmark	5.8% S&P Small-Cap	-0.7% Corporate Bonds	8.3% Pension Benchmark	5.99% S&P MidCap	5.8% Pension Benchmark	15.3% S&P 500
7.1% Aggregate Bond	-36.2% S&P MidCap	21.2% Pension Benchmark	9.4% Corporate Bonds	1.0% S&P Small-Cap	12.1% Pension Benchmark	0.4% Short Term Treasury	5.1% Aggregate Bond	-0.8% MSCI EAFE	6.4% Corporate Bonds	4.33% Corporate Bonds	4.1% Aggregate Bond	9.9% Pension Benchmark
5.5% S&P 500	-37.0% S&P 500	12.8% Corporate Bonds	7.8% MSCI EAFE	-1.7% S&P MidCap	11.8% Corporate Bonds	-1.7% Aggregate Bond	0.6% Short Term Treasury	-2.0% S&P Small-Cap	2.3% Aggregate Bond	2.79% S&P Small-Cap	2.1% Short Term Treasury	7.2% Corporate Bonds
3.9% Corporate Bonds	-43.4% MSCI EAFE	4.8% Aggregate Bond	6.4% Aggregate Bond	-12.1% MSCI EAFE	4.0% Aggregate Bond	-2.4% Corporate Bonds	-2.2% MSCI EM	-2.2% S&P MidCap	1.0% MSCI EAFE	2.11% Aggregate Bond	1.8% MSCI EM	3.4% Aggregate Bond
-0.3% S&P Small-Cap	-53.3% MSCI EM	0.8% Short Term Treasury	2.4% Short Term Treasury	-18.4% MSCI EM	0.4% Short Term Treasury	-2.6% MSCI EM	-4.9% MSCI EAFE	-14.9% MSCI EM	0.9% Short Term Treasury	0.46% Short Term Treasury	0.7% MSCI EAFE	1.3% Short Term Treasury

Analysis provided by Toroso Investments, LLC ("Toroso") utilizing total return data as of June 30, 2017 from Morningstar Direct. All investing involves risk and you may incur a profit or a loss. Past performance is not a guarantee of future results. This material is for informational purposes only and should not be used or construed as a recommendation regarding any security, product or strategy. Indices are unmanaged and cannot accommodate direct investments. An individual who purchases an investment product which attempts to mimic the performance of an index will incur expenses such as management fees and transaction costs which reduce returns. Index returns are cumulative total return for stated period, including reinvestment of dividends unless specified as "NR" or Net Return. Dividends are not guaranteed and a company's future ability to pay dividends may be limited. Performance figures provided by the index provider. For more information, see next page.

## THE DESCRIPTION OF EACH ASSET CLASS IS LISTED BELOW:

- **SMALL-CAP:** Represented by the returns of the S&P SmallCap 600 TR Index
- **SHORTTERM TREASURY:** Represented by the returns of the Bloomberg 1 to 3 Years US Treasury TR Index
- **INTERNATIONAL:** Represented by the returns of the MSCI EAFE NR USD Index
- **EMERGING MARKETS:** Represented by the returns of the MSCI Emerging Market NR USD Index
- **CORPORATE BONDS:** Represented by the returns of the iBoxx Liquid Investment Grade TR Index
- **S&P 500:** Represented by the returns of the S&P 500 TR Index
- **MID-CAP:** Represented by the returns of the S&P 400 TR Index
- **AGGREGATE BOND:** Represented by the returns of the S&P US Aggregate Bond TR Index

**PENSION BENCHMARK** is intended to represent a balanced portfolio and the returns are calculated using Morningstar Direct. The initial weights are rebalanced annually and consist of the following Indexes:

INDEX	WEIGHTING
S&P 500 TR Index	33.75%
S&P MidCap 400 TR Index	6.75%
S&P SmallCap 600 TR Index	4.50%
MSCI EAFE NR USD Index	12.00%
MSCI Emerging Market NR USD Index	3.00%
S&P US Aggregate Bond TR Index	16.00%
iBoxx Liquid Investment Grade TR Index	12.00%
Bloomberg 1-3 Yr US Treasury TR Index	12.00%

## KEY DEFINITIONS:

**ANNUALIZED TRAILING RETURNS:** Expressed as a percentage, the gain or loss of a security or portfolio in the most recent trailing period. Periods longer than 12 months have been annualized to show the average return for each twelve-month period.

**STANDARD DEVIATION (STD DEV):** A measure of the dispersion of a set of data from its mean. The more spread apart the data, the higher the deviation. Standard deviation is calculated as the square root of variance. Standard deviation is applied to the rate of return of an investment to measure the investment's volatility.